

32 American Thinking on Nuclear War

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American attitudes about nuclear warfare – the attitudes not just of élite groups inside and outside the Government but of the society as a whole – have changed dramatically since 1945 and are probably still changing. A study of how views on this set of issues have evolved can thus give us some perspective on where we stand today, and may even suggest how attitudes are likely to change in the future. The aim here, therefore, is to provide a broad sketch of how images of nuclear war have developed since the first atomic bombs were exploded in the summer of 1945. This analysis is based essentially on two sources: mass circulation magazines and public opinion polls. As such, it assumes that the attitudes expressed in the mass media and the sort of questions popular periodicals paid attention to roughly mirrored public beliefs and concerns.

The history of public attitudes on the nuclear question breaks down into a series of clearly defined although somewhat overlapping phases. In the immediate post-war period, it was assumed that even the primitive fission bomb was an absolute weapon. People were acutely conscious of the enormous historical importance of the nuclear revolution. This was followed by a second phase that lasted from about 1949 to around 1953 or 1954. During this period, an atomic war was no longer viewed as simply a theoretical possibility, but rather was seen as something that could easily occur in the near future. In this phase, the earlier apocalyptic image was revised: a nuclear war was fightable, and was thus a reality that people would simply have to accept and society would have to adjust to.

Overlapping with this period was a third phase, the period of adjustment to the thermonuclear revolution. This began in 1950 with the public discussion about whether to proceed with the development of the hydrogen bomb, and was largely complete by 1955, when the basic facts about fallout became an established part of the public discussion. It was in this period that fundamental views about the nature of general war took shape. The views themselves were quite simple. Such a war would run its course quickly. Once it broke out, it could not be controlled, and the level of devastation would, for all intents and purposes, be virtually absolute.

This was not, however, taken to mean that the nation could no longer accept the risk of such a conflict. The period that began in the early 1950s and continued at least until the early 1960s can in fact be viewed as the 'heroic' phase in American attitudes toward nuclear war. During this period, the fact that a strategy might well lead to the destruction of the whole

civilized world was by no means an adequate reason for ruling it out. This was followed by a long period of withdrawal from such attitudes, a shift toward what amounted to a *de facto* no first-use position – toward the idea that the only legitimate purpose of nuclear weapons was to prevent others from using them.

THE EARLY ATOMIC AGE

It was immediately understood in 1945 that the development of the atomic bomb was an event of extraordinary historical importance. There had been a dramatic rupture with the past, and it was clear that a new age had begun. But the full meaning of the nuclear revolution was hard to fathom. The initial tendency in the immediate post-war period was to view the bomb itself as an 'absolute weapon'. The pictures from Hiroshima and Nagasaki carried a clear message: a single bomb could wipe out an entire city, and whole nations – perhaps eventually even mankind itself – might be destroyed in a full-scale nuclear war.¹

By the end of the decade, however, and especially by 1950 and 1951, a reaction had set in. Nuclear warfare was no longer viewed in apocalyptic terms. The bomb was not an 'absolute weapon', the well-known scientist Vannevar Bush announced. 'We need not be terrified.'² 'The reality', *Newsweek* noted in late 1949, 'didn't measure up to the propaganda', and indeed 'some of the biggest raids of the last war were as devastating as any foreseeable atomic attack.'³

In the mass media, the focus during this phase was on the limited power of the bomb. It was not that people tended to write off its significance, or assume that the coming of nuclear weapons marked no dramatic break with the past. It was recognized that by any previous standard, a new world war would certainly be extraordinarily destructive. But the key point now was that an all-out atomic war was actually fightable, and indeed might have to be fought soon. A country could absorb a considerable number of these bombs – say, a thousand or even ten thousand – and still survive as a society.

It followed that it made sense to consider measures that might blunt the impact of an enemy attack. A certain number of bombers would always get through: it was universally recognized that there could be no perfect or even near-perfect defence. But given the limits on the bomb's destructive power, defensive measures could still be meaningful. Industrial facilities and the whole apparatus of government might be dispersed; shelters could be built, and new constructions might be made stronger and more bomb-resistant. The warning system could be improved, and a stronger fighter or even missile force might be able to shoot down a large proportion of the attacking bomber fleet. There were visionaries who went

much further and thought in terms of a recasting of the whole society to enable it to hold up under an atomic onslaught and thus to adapt to the new realities of the nuclear age.⁴

Why had views shifted so strikingly? In part, these changes should be interpreted in terms of the specific disputes that dominated the discussion of strategic issues at the time – the controversy in 1949, for example, over the B-36 bomber, and especially the debate in 1950 over whether the hydrogen bomb should be developed. The B-36 controversy boiled down to an argument over how powerful an instrument the air-atomic offensive would be: could the bombing campaign essentially win the war on its own? It was clear that there was at least some question among those presumably expert on this issue about whether the atomic bomb was in any sense an 'absolute weapon'. This impression was supported not just by occasional reports from apparently impartial groups, like the Compton Commission in 1947, that in spite of the nuclear monopoly, American military air power was a 'hollow shell' and that the 'U.S. might well lose' a new war, but also by what seemed to be the increasingly aggressive thrust of Soviet foreign policy in this period – by the Berlin Blockade and especially by the Korean War. For if the bomb were really all-powerful, this Soviet behaviour would appear extraordinarily reckless. It perhaps followed that atomic weapons were not quite as decisive, or even as destructive, as people had been told.⁵

But if, in the late 1940s, people had begun to doubt the power of the fission bomb, the discussion in 1950 of thermonuclear weapons took the process a step further. To demonstrate the significance of the new weapon, the leading magazines contrasted it with the fission bombs of the late 1940s. The difference in destructive power was often graphically illustrated by maps of major cities with areas of total destruction superimposed for the two weapons. The message was inescapable: with the new thermonuclear explosive, the area of destruction would be a hundred times as great. A hydrogen bomb could destroy even the largest city, and not just its central core. The effect of a fission bomb thus appeared quite limited in comparison.⁶

Until thermonuclear weapons entered the stockpile, a war would have to be fought with fission bombs. It was assumed that such a war would be long. The atomic blitz would not, in itself, lead to a rapid Soviet surrender. As *Time* put it in November 1950, Russia 'would hold together under U.S. atomic bombing'.⁷ Similarly, a Soviet air attack on the United States would not knock America out of the war. Millions might die in the raids, but industry as such would not be so completely devastated that a major military effort would be impossible. The conflict would become a long war of attrition, a gigantic intercontinental slugging match that could go on for years.⁸

This was the picture given in the mass media. It was surprisingly close to the best thinking at the time within the Government, both among civilian officials close to the subject and among the most objective military officers. This view, moreover, was widely accepted by the public as a whole, and especially the

better-educated segment of the public, if the Gallup polls from this period are an accurate guide. The most common view in a November 1950 poll, for example, was that 'atom bomb attacks would do a lot of damage to Russia and would help the U.S. greatly to win the war, but it would still be a hard struggle'. Only about one-fifth of the sample, and one-eighth of the college-educated segment of the sample, believed that the bombing campaign would by itself knock Russia out of the war.⁹

The shift from 1945–6 to 1949–50 is to some degree more apparent than real. In the immediate post-war period, the tendency was to speculate in rather long-range terms about the ultimate significance of the new weapon. But by 1950, the threat of war was immediate. In February of that year, *Life* published a special issue: 'War Can Come: Will We Be Ready?'¹⁰ *Time* began to carry a regular feature, 'Background for War', reviewing some of the basic factors affecting the US–Soviet strategic relationship. On 14 August, a few weeks after the outbreak of fighting in Korea, *Time* reviewed the mood around the country: there was a feeling that "the real war" had not come yet, but was probably coming'. There was a sense, 'for the first time in living memory, that much of the United States might be devastated in an all-out war. This didn't put people in a cold sweat; it did put them in a mood to buckle down'. The magazine's correspondents even reported 'impatience at the prospect of fighting a succession of small "brush fires", with an impulse to drop the atom bomb on Moscow. "Let's end it before it starts" was a phrase frequently heard.'¹¹

A small but not insignificant segment of the American body politic was indeed thinking along such aggressive lines during this period. In July 1950, for example, 15 per cent of the respondents in a Gallup poll thought the United States 'should declare war on Russia now'.¹² The mainstream attitude was more passive and more fatalistic. It was as though people felt they were caught in the throes of a revolution, that events were being driven by forces beyond the control of statecraft. *Time*'s account of the hydrogen bomb decision typifies this mood: 'Driven by inexorable forces, the U.S. was setting out to make a weapon that would pale the deadliness of the atomic-fission bomb'.¹³ Articles in the leading magazines reported the extraordinary changes taking place in military technology in impressive detail, but there was little discussion – at least after hopes for international control of atomic energy faded around 1947 – of what if anything could be done about the developing problem.

As for war itself, it was largely taken for granted that the risk of armed conflict was essentially not something that the United States could control. But if war did break out, the country would simply have to accept the situation and deal with it as best it could. There was intense interest in how to survive an atomic attack.¹⁴ It was in this atmosphere that the Atomic Energy Commission originally published its important – and, at the time, widely noticed – manual on nuclear weapons effects.¹⁵

The adequacy of America's active defences – of its early warning system and of its interceptor forces – was also a central concern in 1950 and 1951. The more politically active scientists concerned with these issues pressed vigorously for an effective policy in this area.¹⁶ The same theme was reflected in the mass media. A 'See It Now' television programme on 29 June 1952, showed a simulated atomic bomber attack on New York. Edward R. Murrow's commentary stressed the weakness of America's defences: ground observer stations were unmanned, the bomber was getting a free ride.¹⁷

It is important to note that no one assumed at this time that an active defence was hopeless or pointless. A perfect defence might never be possible, but a serious programme in this area could have a meaningful impact on the level of devastation. It was only later, in the mid-1950s, that people would begin to give up on the defence of urban areas and start to focus more on protecting strategic forces. As for the idea that defence was worse than pointless – that it could actually be destabilizing – this somewhat counter-intuitive idea became prominent only at the very end of the decade, and even then was more or less limited to the specialized literature.¹⁸

THE THERMONUCLEAR REVOLUTION

The period in which an atomic war was viewed as actually fightable, and as something that the nation might have no alternative but to brace itself for, lasted until about 1953 or 1954 at the latest. It was then overtaken by a new revolution in military technology, the most striking feature of which was the advent of thermonuclear weapons. It was quite clear from the outset that the hydrogen bomb represented a completely new order of destructiveness, dwarfing in comparison the fission bombs of the late 1940s. The nation could not withstand an attack mounted with even a relatively small number – say forty or fifty – of these bombs. The defence of cities came to be seen as relatively hopeless, since even a shield that was 80 or 90 per cent effective – an extremely high level of effectiveness by traditional standards – would not in the long run be enough to prevent an unbearable degree of devastation.

This shift in thinking was intensified by the new information about fallout, which gradually began to sink into the public consciousness in 1954.¹⁹ Fallout had not been a serious problem in the early atomic age. The bombs dropped on Japan did not generate a significant amount of fallout: radiation disease had been caused by the prompt radiation released in the initial explosion, and had only affected those relatively close to the centre of the blast. The fallout produced by the great thermonuclear explosives first tested in 1952 was completely different. The area affected was enormous, and the contamination could last for a prolonged period.

How did people deal with this developing situation? Once again, a certain

segment of the policy élite, and indeed of the nation as a whole, was attracted to the idea of a preventive war.²⁰ The proportion in 1954 was about the same as it had been in 1950. In September of that year, 13 per cent of the Gallup sample thought the United States 'should go to war against Russia now while we still have the advantage in atomic and hydrogen bombs'.²¹

The mainstream attitude, however, was that war was rapidly becoming unthinkable as an instrument of policy. This was the central theme of President Truman's final State of the Union address in January 1953, what *Time* called his 'valedictory'.

From now on [its lead article quoted him as saying], man moves into a new era of destructive power, capable of creating explosions of a new order of magnitude, dwarfing the mushroom clouds of Hiroshima and Nagasaki. ... The war of the future would be one in which man could extinguish millions of lives at one blow, demolish the great cities of the world, wipe out the cultural achievements of the past – and destroy the very structure of civilization. ... Such a war is not a possible policy for rational men.²²

These quickly became common themes in the early thermonuclear era. The inference was frequently drawn that this new revolution in military technology might result in a more stable peace. In April 1954, for example, *Newsweek* made the point that the world's statesmen understood that with the H-bomb 'every nation involved in an atomic war would lose everything', but it was this fact that 'might save us' – such a suicidal war might well never happen.²³ A year later, Winston Churchill, in a widely publicized speech, gave classic expression to the idea. With the hydrogen bomb, he said, 'it may be that we shall by a process of sublime irony have reached a stage in this story where safety will be the sturdy child of terror, and survival the twin brother of annihilation'.²⁴ This view had, by and large, already been broadly accepted by the public, and particularly by the well-educated public.²⁵

The assumption behind this whole way of thinking was *not* that nuclear forces simply neutralized each other, that the world had entered into a kind of nuclear stalemate and was therefore once again safe for conventional conflict. This argument was sometimes made, both in the late 1940s and even more in the 1950s, and was commonly supported by the analogy with the non-use of poison gas in World War II. But the prevailing belief was that if general war came, it could not be limited. Indeed, according to the opinion polls, large majorities in the early period were in favour of nuclear weapon use in the event of war with the Soviet Union, and the size of these majorities was not much affected by the breaking of the US atomic monopoly in late 1949. Thus in 1949, just before it was learned that the USSR had exploded its first nuclear device, 70 per cent of a Gallup sample were opposed to the

idea of no first use; in February 1951, about the same proportion – 66 per cent – still favoured first use.²⁶ In the mid-1950s, and even as late as 1963, very wide majorities in the polls took it for granted that hydrogen weapons would be used in the event of general war.²⁷

There was a much greater reluctance to use nuclear, and especially thermonuclear, weapons in localized conflicts, even though the advent of tactical nuclear weapons, about which the public was very well informed, might have been expected to make such use more attractive. In September 1950, for example, 60 per cent of the Gallup sample were against the use of nuclear weapons in Korea. Only 28 per cent favoured their use.²⁸ In 1955, during the First Taiwan Straits Crisis, 55 per cent of a Gallup sample favoured the use of atom bombs in a war with China. Forty-four per cent favoured the use of hydrogen bombs.²⁹ But the large 22-point margin in favour of the use of atom bombs in a war against China was virtually to disappear during the Second Taiwan Straits Crisis in 1958. Whereas proponents of nuclear use had outnumbered opponents by a 55 to 33 per cent margin in 1955, by 1958 only 42 per cent were in favour of the use of atomic weapons, even against just 'military installations and forces', while 41 per cent were opposed.³⁰

It was assumed, however, that a war with Russia would be all-out. A general nuclear war might not have been a rational instrument of statecraft, but it was clear that the country was willing to go through this ordeal if there was no other alternative to the appeasement of the USSR. These attitudes were very strong and persisted throughout this period. In August 1950, for example, 68 per cent of a Gallup sample felt that stopping Russian expansion was more important than avoiding a major war, and only 25 per cent felt the priority should be reversed.³¹ Even as late as 1961, at a time when only 9 per cent of the sample felt they would probably survive a nuclear war, 81 per cent felt that fighting such a war was better than living under Communism – a striking contrast with the results of a similar poll conducted at the same time in Britain, where only 21 per cent of the population would make a similar choice.³²

By 1954 or so, a simple popular image of nuclear war had taken shape. The basic assumption was that in the event of such a war the level of devastation would soon be close to absolute for all the belligerents. The idea that a great US–Soviet war could be limited did not receive much attention; instead, it was for the most part taken for granted that such a conflict would be uncontrollable, and that the only hope therefore was to keep any armed conflict between these two powers from breaking out.

Similarly, other ideas that were of fundamental importance to those professionally concerned with problems of strategy and military policy received relatively little attention in the mass media. The whole issue of the vulnerability of America's strategic forces was not really a central focus of concern: discussions of the military balance emphasized static comparisons,

especially the relative size of Soviet and American air forces.³³ There were occasional frightening claims about the USSR's ability to destroy the Strategic Air Command in a surprise attack, but these were balanced by many other stories that emphasized America's great strength in this area.³⁴ As far as the public as a whole was concerned, there was little danger at this time of the USSR 'knocking out' the United States with a surprise nuclear attack.³⁵ This was true even during the 'missile gap' agitation at the end of the Eisenhower period. For the public as a whole, it seems that the real concern was that America was falling behind in military technology, and not that its strategic forces were becoming increasingly vulnerable to a surprise attack.

The other side of this coin was the important issue of whether the United States itself might ever strike preemptively, but again this was much more a concern of the élite than of the general public. It was rarely mentioned in the popular literature, and when it was, it was simply alluded to in passing. There was a reference, for example, in one of *Time's* 'Background for War' articles in 1950 to the men in SAC 'fidget[ing] at the notion that they must first be hit before they can hit back'.³⁶ Pre-emption was obviously an issue government officials and military men preferred not to talk about too openly, although one early poll suggested that the public was not in principle opposed to the notion. In March 1946, a slight plurality – 47 per cent of the sample – thought that America 'should try to keep from being the first country to be bombed', even if this meant that America should strike first as soon as it became suspicious that another country was 'planning to make a surprise atomic bomb attack on our country within a few days'. Only 43 per cent were in favour of waiting until we were certain that the attack was imminent, even if this meant 'taking a chance that we'll be bombed first'.³⁷

Issues like pre-emption or even limited war, so important among specialists, were simply not of great concern to the general public. Its views about the way a general war would run its course were rather straightforward, and once set by 1954 or 1955 persisted without much change: there would be a swift and largely unavoidable exchange of massive thermonuclear attacks, and the devastation for both sides would be for all practical purposes total. By the late 1950s, public discussion moved on to issues of secondary importance – for example, the question of the health risk resulting from fallout from nuclear tests, and the possibility of a test ban. But this simply meant that the more basic questions about what a nuclear war would be like had essentially been resolved.

There are two points that should be made about the way the nuclear issue was treated during this formative period prior to 1955. First, one is struck by the extraordinary amount of attention paid to these questions, especially in the early 1950s. Week after week, in *Time* and *Newsweek*, the cover story was on some military theme, and one which was often totally unrelated to the war in Korea. There was a tremendous thirst for information about how

much damage a bomb could do, about developments in weapons technology, about the range of bombers, the nature of the military balance, and the effectiveness of continental defence. There was a certain fascination with what an atomic war would be like, at least during the early atomic age. Especially noteworthy were the visionary accounts in *Life* ('The 36-Hour War', 19 November, 1945) and in *Colliers* ('Preview of the War We Do Not Want', 27 October, 1951), both with striking, full-colour illustrations of nuclear attacks.

The second point – and this was perhaps the most important effect of this high degree of interest in the subject – was that the public was in many ways surprisingly well-informed on issues relating to nuclear warfare. In late 1945, for example, the public, by overwhelming margins, understood that the American nuclear monopoly was temporary, and even guessed correctly that it would be broken in less than five years. In February 1953, an opinion poll sample estimated (on the average) that the H-bomb's radius of destruction was about ten miles, which was not a bad guess at all.³⁸ Even on issues where a more sophisticated level of judgement was called for, one is struck by the close correspondence between popular beliefs and the best expert opinion at the time.

Given this awareness of what a nuclear, and especially a thermonuclear, war would be like, one of the most striking things about this period is the public's willingness to support policies that might lead to the use of nuclear weapons. In the early years, as noted above, both before and after the Soviets developed their own nuclear capabilities, the public decisively rejected a no first use policy. From the very outset, Americans were willing to take great risks. During the Korean War, in late 1950, a two-to-one majority in the polls thought the US was 'actually in World War III', and that the fighting in Korea would not 'stop short of another world war'.³⁹ This was a war that a slight majority of the Gallup sample felt the United States was not well-prepared to wage at the time – a view, incidentally, that reflected mainstream thinking within the Government and the military.⁴⁰ Nevertheless, when confronted with the most pressing policy choice on Korea, 64 per cent of the sample nevertheless opted for total victory on the peninsula, and only 27 per cent thought the UN advance should stop when the North was pushed back across the 38th Parallel.⁴¹

This willingness to face the risk of war with Russia was not based on a belief that victory would be easy or that nuclear attacks on America could be avoided. Even in 1950, a majority of the poll sample felt that there was either a 'good chance' or a 'fair chance' that in the event of a new world war, their community would be attacked with atom bombs. As stockpiles grew in the 1950s, pessimism deepened. When a poll sample was asked in 1958 what proportion of the US population could be expected to survive a nuclear war between America and Russia, the median response was that only three in ten would survive.⁴² In 1961, 43 per cent of the Gallup sample thought they

had a poor chance of living through a general nuclear war, and another 40 per cent rated their prospects of survival as 'just 50-50'; only 9 per cent thought their chances were 'very good'.⁴³

Nor was this willingness to stand up to the Russians based on a conviction that deterrence would almost certainly work – that the Americans could take a tough line because faced with the prospect of nuclear war, the Soviets would draw back, and therefore the real risk of war was very slight. Indeed, one of the most striking things revealed by the polling data is the extraordinarily high level of perceived risk throughout the whole period from 1946 through 1961. There were many polls taken on this general issue, but to take just the most commonly asked question – 'Do you think the United States will find itself in another war within, say, the next five years?' – the percentage answering 'yes' ranged from a low of 24 per cent, in May 1958, to a high of 62 per cent, in May 1950 (which, it should be noted, was before the Korean War broke out). The percentage expecting war – and by this was certainly meant a general nuclear war – was over 50 per cent in August 1951, January 1953 and, during the Berlin Crisis, in October 1961. Even in January 1955 during the post-Stalin 'thaw', nearly half the sample – a full 48 per cent – anticipated war within the next five years.⁴⁴

One of the most striking things about the whole post-war period was that the threat of nuclear devastation evidently did not lead Americans to draw back from policies that involved a very serious risk of all-out thermonuclear war. This attitude came out quite clearly during the Berlin Crisis in 1959 and 1961. In March 1959, a substantial segment of the Gallup sample – 22 per cent, as opposed to only 2 per cent in Britain and 5 per cent in West Germany – expected the crisis to lead to war. In July 1961, only a third of the American sample thought the Soviets would not force the issue, as they had threatened, by the end of the year; most of the people surveyed felt the Soviets would not back down, and by a two-to-one margin, believed that this would lead to war.⁴⁵ Even though few Americans seemed to have any illusions about what a general war would mean, and indeed did not even think it was particularly worthwhile to prepare for one by building a fallout shelter or taking other civil defence measures, public opinion was by an overwhelming margin in favour of a very firm line on Berlin. This represented a much tougher position than British or West German opinion was then willing to take.⁴⁶

This willingness on the part of the American people to engage in what it itself viewed as a suicidal war over Berlin is indeed an extraordinary phenomenon.⁴⁷ It marked the climax of what might be called the 'heroic' period in the history of American attitudes towards nuclear war. It is often taken for granted in the strategic literature that at a time when whole societies can be obliterated through nuclear retaliation, the threat of first use of nuclear weapons is devoid of credibility. The inference is frequently drawn that nuclear forces therefore cannot carry any real political weight,

but instead simply cancel each other out as instruments of statecraft. But here you had essentially an entire nation willing to accept what was in its own mind a very substantial risk of nuclear devastation rather than back down over Berlin.

TURNING AWAY FROM NUCLEAR WEAPONS

This 'heroic' attitude proved difficult to sustain. The twenty-five years or so that have passed since the great nuclear crises of the early 1960s have been marked by a drawing back to a much more cautious approach to nuclear warfare. By the early 1980s, the dominant American attitude was that nuclear weapons should be used 'only if we are attacked with nuclear weapons'. This still was a much more 'pro-nuclear' attitude, however, than that which prevailed in Japan and Western Europe, where large minorities and occasionally majorities were against the use of nuclear weapons by the West even if their countries were attacked with such weapons first.⁴⁸ By this time, the mainstream approach in America was to favour balance and parity with the Soviets in the nuclear area; in the polls, only about a fifth of the United States sample wanted to reach for nuclear superiority. Again, allied opinion on this issue was more 'anti-nuclear', with large minorities – in the case of Spain even a majority – in favour of the West giving up nuclear weapons 'regardless of whether the Soviet Union does'.⁴⁹

By this point also, the nuclear question had become increasingly divorced from international politics as a whole; it instead emerged as a full-fledged problem in its own right. The earlier concerns about whether America's atomic might could hold off the Soviets were now replaced by a kind of free-floating anxiety about the nuclear arsenal itself – an attitude which was particularly striking during the anti-nuclear agitation of the early 1980s. There was a complete change in popular imagery. The early images of atomic power were gone forever. On 16 November 1953, the cover of *Newsweek* showed some American warplanes with the caption: 'Can We Rule the Air?' The magazine's cover on 3 January 1955, showed a number of huge 280 mm atomic cannon, and the caption read: 'Atom Guns: We Won't Pull Our Punches'. But in 1983 a *Newsweek* cover would portray the nuclear stockpile as a time bomb ticking away, at just four minutes to midnight. The caption now was: 'Arms Control: Now or Never?'⁵⁰

The odd thing about the current period is that in spite of this drawing back from nuclear weapons, and in spite also of the impressive long-term improvement in US-Soviet relations that has taken place over the last thirty-five years, the sense of a risk of nuclear war remains amazingly high. In the early 1980s, nearly one-fifth of the Gallup sample thought we were 'very likely' to get into a nuclear war within the next ten years, and another quarter or so of the sample thought this was 'fairly likely'.⁵¹ Even in 1986,

well after the anti-nuclear agitation had passed its peak, half of the US sample thought there was a better than even chance of a 'world war breaking out in the next ten years', a much higher percentage than was the case in the major Allied countries.⁵²

The author thinks that there is an air of artificiality about such assumptions. The peace that now exists is clearly the most stable peace in the history of great power politics. In the most important areas of the world, American power balances Soviet power in such a way that neither of these two great nations has either the ability or the inclination to manoeuvre for basic change in the political *status quo*. Nor can any of the smaller powers hope to develop enough strength to alter this situation in any fundamental way. If fears persist, it is not because they are warranted by the political situation. It is instead because they have been artificially sustained: both by the left, which has an interest in frightening people so as to generate pressure for arms control, and by the right, in order to make credible those scenarios which provide the basis for large military budgets.

But if this interpretation is correct, and the existing level of nuclear anxiety has been artificially maintained, then there is a good chance that the situation may eventually change dramatically. For how long can the clock keep ticking away at four minutes to midnight without people coming to the conclusion that there might be something radically wrong with the whole metaphor, and without realizing that the world of great power politics is a good deal more stable than they had been led to think? If attitudes do shift along these lines, the results could be far-reaching. It is hard to predict at this point what the impact will be, but given the role that assumptions about the risk of war play in shaping people's attitudes about nuclear warfare in general, the long-term impact could be enormous.

Notes

1. See, for example, 'Birth of an Era', *Time*, 13 August 1945, p. 17; *Newsweek*, 17 December 1945, p. 37, and 19 April 1948, pp. 97-8. Note also Paul Boyer, *By the Bomb's Early Light*, New York, Pantheon, 1985, ch 1.
2. *Time*, 21 November 1949, pp. 75-6.
3. *Newsweek*, 3 October 1949, pp. 17, 21.
4. See, for example, Rep. Claire Boothe Luce's remarks quoted in *Life*, 29 October 1945, p. 36; and Joseph and Stewart Alsop, 'Your Flesh Should Creep', *Saturday Evening Post*, 13 July 1946. 'Every citizen', the Alsops declared, 'must be ready for the time when all our great cities will be reduced to radioactive shards' (p. 49).
5. On the Compton Commission: *Newsweek*, 30 June 1947, p. 25.
6. See, for example, William Laurence, 'The Truth about the Hydrogen Bomb', *Saturday Evening Post*, 24 June 1950, p. 19; note also the map of Chicago in

- Life*, 30 January 1950, p. 23. The basic facts about the destructiveness of the new weapon were frequently repeated in the mass media. See, for example, *Newsweek*, 14 September 1953, p. 42; *Time*, 12 April 1954, p. 22.
7. *Time*, 27 November 1950.
 8. For typical examples: Joseph and Stewart Alsop, 'If War Comes', *Saturday Evening Post*, 11 September 1948, p. 16; Hanson Baldwin, 'The Price of War', *Harper's*, July 1948, p. 25.
 9. Hazel Gaudet Erskine, 'The Polls: Atomic Weapons and Nuclear Energy', *Public Opinion Quarterly*, vol. 27 (1963), p. 177. 'AIPO' refers to the American Institute of Public Opinion, the official name for the Gallup organization.
 10. 27 February 1950.
 11. *Time*, 14 August 1950, p. 7.
 12. George Gallup, *The Gallup Poll: Public Opinion 1935-1971*, New York, Random House, 1972, vol. II, p. 930.
 13. *Time*, 13 February 1950, p. 15.
 14. For some typical articles in this genre, see Richard Gerstell, 'How You Can Survive an Atomic Attack', *Saturday Evening Post*, 7 January 1950; Stewart Alsop and Ralph Lapp, 'The Grim Talk about Civil Defense', *Saturday Evening Post*, 14 April 1951; 'How U.S. Cities Can Prepare for Atomic War', *Life*, 18 December 1950, p. 77; 'Civil Defense: The City under the Bomb', *Time*, 2 October 1950, p. 12.
 15. Samuel Glasstone *et al.*, *The Effects of Atomic Weapons*, Washington, DC, US GPO, 1950. On the media reaction, see, for example, *Time*, 21 August 1950, p. 16.
 16. See the *Bulletin of the Atomic Scientists* for this period, and also the 'Project Charles' videotape at the Sloan Foundation in New York.
 17. The programme can be seen on tape at the Museum of Broadcasting in New York.
 18. Harold Martin, 'Could We Beat Back an Air Attack on the U.S.?', *Saturday Evening Post*, 4 November 1950; 'You and Defense: Guarding Our Cities', *Newsweek*, 5 February 1951, pp. 18-19; and 'We Can't Stop 'Em', *Newsweek*, 29 January 1951, p. 21, for Air Force Chief of Staff Vandenberg's views. On the emergence of the 'stability' doctrine and the turning against the idea of city defence in the specialist community, see my 'Strategic Thought in America, 1952-1966', forthcoming in the *Political Science Quarterly*.
 19. For an early reference to 'fall-out', see the Alsops' comment quoted in *Time*, 23 August 1954, p. 23. The general possibility of this sort of effect had been recognized much earlier. In 1950, William Laurence had discussed how the hydrogen bomb could be 'rigged' to produce fallout in 'The Truth about the Hydrogen Bomb', *Saturday Evening Post*, 24 June 1950, p. 90; note also Edward Teller's discussion of the phenomenon in the *Bulletin of the Atomic Scientists* in 1947, an account of which was given in *Time*, 24 February 1947, p. 96. By 1955, fallout was getting much more attention: see, for example, *Time*, 28 February 1955, p. 10. Even so, an April 1955 Gallup poll revealed that only 17 per cent of the sample understood what fallout was. Erskine, 'The Polls', p. 163.
 20. See my article, 'A Wasting Asset? American Strategy and the Shifting Nuclear Balance', *International Security*, Winter 1988-9. On the discussion in the media in 1954, see George Lowe, *The Age of Deterrence*, Boston, Little, Brown, 1964, pp. 50-9. For some typical examples: see *Newsweek*, 9 August 1954, pp. 19, 28 and also the cover of its 30 August 1954 issue.
 21. AIPO, 29 September 1954; Erskine, 'The Polls', p. 177.

22. *Time*, 19 January 1953, p. 13.
23. *Newsweek*, 5 April 1954, p. 28.
24. *Time*, 14 March 1955, p. 33.
25. A Gallup poll conducted in 1954, after both America and Russia had exploded thermonuclear devices, revealed that 54 per cent of the American sample – and 65 per cent of the college-educated segment – thought that the hydrogen bomb had made another world war less likely. Erskine, 'The Polls', p. 183.
26. AIPO, polls of 7 August 1949, and 12 February 1951, in Erskine, 'The Polls', p. 182, and *The Gallup Poll, 1935–1971*, vol. I, p. 965.
27. Erskine, 'The Polls', p. 157.
28. *The Gallup Poll, 1935–1971*, p. 938.
29. Poll of 3 April 1955, *ibid.*, p. 1322.
30. Poll of 26 September 1958, *ibid.*, p. 1569.
31. Poll of 4 August 1950, *ibid.*, p. 929.
32. Polls of 13 September 1961, *ibid.*, p. 1734, and 3 November 1961, *ibid.*, p. 1741.
33. For a typical example, see *Newsweek's* special report, 'Are We Falling Behind Russia in Air Power?', 23 August 1954.
34. Compare, for example, the claims in *Time*, 20 December 1954, p. 15, with a lead story in *Newsweek*, 28 March 1955, pp. 12–13.
35. See the 1953 and 1955 polls cited in Erskine, pp. 176–7. By a greater than three-to-one margin, the samples rejected the idea that a Soviet surprise attack could 'knock out' the United States.
36. 4 September 1950, p. 19.
37. National Opinion Research Center poll, March 1946, in Erskine, 'The Polls', p. 182.
38. See the polls in Erskine, 'The Polls', pp. 172, 163.
39. Polls of 19 August and 6 December 1950, *The Gallup Poll, 1935–1971*, pp. 933, 951.
40. Poll of 2 October 1950, *ibid.*, p. 941. On official thinking, see 'A Wasting Asset'.
41. Poll of 13 October 1950, *The Gallup Poll, 1935–1971*, p. 943.
42. Erskine, 'The Polls', p. 163.
43. *Ibid.*, p. 158.
44. AIPO polls of 29 March 1950, 31 May 1950, 3 August 1951, 2 January 1953, 18 May 1953, 21 January 1955, 30 April 1957, 29 January 1958, 19 June 1960, 8 October 1961. The exact wording of the question varies slightly from poll to poll. See *The Gallup Poll, 1935–1971*, *passim*. This book also summarizes many similar polls with different time horizons, which taken as a whole reflect an extraordinary degree of pessimism about the long-term chances for global peace.
45. Polls of 29 March 1959, 31 July 1961, *The Gallup Poll, 1935–1971*, pp. 1600, 1729.
46. Polls of 29 March 1959, 24 April 1959, 30 July 1961, 15 September 1961, 15 October 1961, 29 October 1961, *ibid.*, pp. 1600, 1604, 1729, 1732, 1735, 1741.
47. A large minority (35 per cent) was willing to risk war in order to liberate the satellites in Eastern Europe. 'U.S. Public Opinion and the Berlin Crisis – 1961', Public Opinion Surveys, 31 July 1961, in President's Office Files, Box 117, John F. Kennedy Library, Boston. Democrats were significantly more hawkish than Republicans on this issue: Republicans opposed this strategy by an 18-point margin, while Democrats were evenly divided.
48. Connie de Boer, 'The Polls: The European Peace Movement and Deployment

- of Nuclear Missiles', *Public Opinion Quarterly*, vol. 49 (1985), 125.
49. *Ibid.*, pp. 125–6.
50. 31 January 1983.
51. *The Gallup Poll, 1983*, pp. 265–6.
52. 11 January 1987 poll, *The Gallup Poll, 1987*, pp. 4–5.