Man’s Peril [1954]

“Man’s Peril” is one of Russell’s best known short essays and the most celebrated of his many talks for BBC radio. The title of the present volume has been taken from this paper both because it encapsulates the central preoccupation of Russell’s political writing in the mid-1950s and because the reverberations from its broadcast pushed him back into public life in earnest. Its closing appeal, “as a human being to human beings: remember your humanity, and forget the rest” (89: 18–19), is probably the most frequently quoted of Russell’s many pronouncements on the issue which came to dominate his writing and political activities well into the 1960s. Paper 16 aired on the Home Service on the evening of 23 December 1954, and the first of numerous published versions (see B&R C54.35) appeared shortly afterwards as “Man’s Peril from the Hydrogen Bomb”, in the BBC’s own weekly, The Listener, 52 (30 Dec. 1954): 1,135–6.

Russell regarded the broadcast as “a distilled version of all that I had said therefofore. It was so tight-packed that anything that I have since said on the subject can be found in it at least in essence” (1969, 72). Its main points had been made already in the final chapter of Human Society in Ethics and Politics—on which Russell had at first thought he might base his presentation—and in all his writings on nuclear weapons and international politics of the preceding twelve months. There was certainly nothing new either in the exhortation to mankind to transcend somehow the divisions of the Cold War, or in the concrete proposals urged—for diplomatic intervention by the neutral states and for an expert commission of inquiry into the probable effects of nuclear war. On this occasion, however, Russell was careful to reinforce his most dire predictions with the testimony of the most eminent scientific and military authorities. An undated leaf written in Edith Russell’s hand contains the quotations from Lord Adrian and Sir Philip Joubert that appear below, and the second of the two from Sir John Slessor. The same document also quotes this unused forecast made by the distinguished Cambridge physicist, Otto Frisch, to the effect that “scattered radio-activity may indeed contaminate the atmosphere to the point where it becomes harmful to living organisms, if many hydrogen bombs are exploded, say in a major war” (Frisch 1954).

The background to “Man’s Peril” is almost as familiar as the text itself. On 5 April 1954, a concerned private correspondent called David Lewes had encouraged Russell to speak on the BBC about the “recent thermo-nuclear experiments”. When Russell replied nine days later he mentioned the short commentary on the hydro-
gen bomb that he had delivered on Panorama the previous evening (4a) and indicated that he “should always be glad of an opportunity to broadcast at more length on the subject if the BBC were willing”. The next such “opportunity” led to his presentation of Paper 6 in a ten-part series for the European Service on the hydrogen bomb. But Russell’s sense of urgency was not stilled. Only a few days after this broadcast he asked whether he might again be allowed to expound his views.

In common with everybody else, I am deeply troubled about the prospects for mankind in view of the H-bomb. I have a profound desire to do whatever lies in my power to awaken people to the gravity of the issue. I have stated what I feel as eloquently and as forcefully as I can in the last chapter of my book (just published) Human Society in Ethics and Politics. This chapter is called “Prologue or Epilogue?” I wonder whether it would be possible for me to broadcast this chapter which I enclose. If you think it too short it would be easy to add enough matter at the beginning to make it last thirteen minutes. I do not like suggesting anything that may seem pushing, but I feel that this is the best that I can do on this stupendous issue. (To Ronald Lewin, 17 July 1954)

Lewin, a producer on the BBC’s Third Programme, was more than amenable to Russell’s proposal. He even offered the more mainstream Home Service as a platform, although he did insist upon a postponement of the broadcast until the end of the year. His only other stipulation was that Russell produce something “specially composed for the occasion and perhaps looking back over a year in which the Hydrogen Bomb has evoked so much public concern” (27 July 1954). The talk was originally scheduled for 2 January 1955, then moved forward to 19 December. Russell was notified of this change early in October. He heard nothing further from the BBC until 24 November, when the producer Eileen Molony informed him rather casually that plans for the broadcast had been altered. Russell’s talk would now be followed on separate dates by contributions from the journalist, Sally Graves, and the middle-distance runner, Roger Bannister, so as “to give the views of three generations on the present world situation”. According to Russell’s inaccurate but amusing recollection, he was being obliged to “hold a debate … with a young and cheerful footballer who would offset my grim forebodings” (1969, 72). The proposal was entirely unsuited to the seriousness of his purpose, as Molony was told in no uncertain terms.

I find your letter very disquieting. What I had in mind, as I explained quite clearly, was an exceedingly solemn appeal to mankind to turn back from universal suicide before it is too late. Various foreign countries have allowed me opportunities for such an appeal and I had hoped that my own country might do likewise. Such an appeal would be quite impossible as part of a stunt about three generations and I am not willing to fall
in with the frivolous suggestion conveyed by your letter. I am sure you will have no difficulty in finding some old man who will do. (26 Nov. 1954)

This withering reply achieved the desired result; the “three generations” idea was scrapped and Russell’s original plan was revived, with the broadcast, billed as “The Hydrogen Bomb and the Peril to Mankind”, now being set for 23 December. A text based on the following dictated “Abstract of H-Bomb Talk” was dictated by Russell to Edith on 3 and 4 December, a few days after the arrangements for its broadcast were finally settled.

I Am speaking as human being, not as this or that sort
   Shall say only what should appeal equally to all
II Question is not who shall dominate, but should there be any human beings
   Pronouncements of Scientists
   Great war must be avoided
III Dilemma: If one side reasonable, but not the other, reasonable side worsted
   Analogy of duels in former times
IV Only outside mediation can produce conciliation
V Interest of Neutrals in preserving peace as great as that of combatants
VI What Neutrals can do to save their lives and ours
VII If war renounced, new ways of thinking and feeling become necessary
VIII Peroration (rai 220.020740)

The result, in Ronald Clark’s judgment, was “vintage Russell” (1975, 537). Russell’s earlier admission to Lewin that the concluding chapter of Human Society was likely “the best that I can do on this stupendous issue” (17 July 1954) was patently contradicted by his eloquent script and a “commanding performance” on the radio (Russell 2001, 485). The significance of Paper 16, however, transcends Russell’s stark depiction of the grim prospect that confronted the common humanity to whom he directed his sombre yet, at the same time, hopeful message. Russell was assured a large audience—estimated at between six and seven million listeners—by the time slot that he had been given immediately after the nine o’clock news bulletin. But far more than fortuitous timing was responsible for the extraordinary impact of “Man’s Peril”. The broadcast was delivered at the end of a year during which apprehension about the hydrogen bomb had spread world-wide (see Introduction). Public opinion had been roused by the dramatic test explosion carried out by the United States on Bikini atoll (see A86: 29). In Britain, popular anxieties were even reflected in such unlikely quarters as the editorial pages of The
The vague sense of disquiet had not yet coalesced into a full-fledged movement of anti-nuclear protest, although there were portents of such a development, for example, in the petition promoted by the Hydrogen Bomb–National Campaign (see Missing and Unprinted Papers) and the pro-disarmament resolutions passed by a number of trade unions during the summer conference season.

Although “Man’s Peril” was a resounding success for the BBC as well as for Russell, his standing at the Corporation, somewhat ironically, was adversely affected by the wider repercussions of his Christmas broadcast. Some years previously Russell had light-heartedly boasted to Colette that “The B.B.C. loves me” (26 April 1947; Russell 2001, 422). The esteem in which he was held there did not disappear after “Man’s Peril”. But Britain’s public broadcaster was henceforth more wary about allowing Russell to address such controversial topics as the threatened destruction of civilization, and he was less inclined to supply the kind of content deemed more suitable (see Russell 1997, xv–xvi). In addition to the rapid and widespread reprinting of Russell’s text, Paper 16 stimulated considerable editorial comment in the British and American press in particular. As Russell reported to his cousin Flora, the broadcast had also “brought an avalanche of letters, mostly sympathetic” (22 Jan. 1955). Indeed, the enormous weight of this correspondence inspired Russell to proceed with the peace initiatives which preoccupied him for the remainder of the period covered by Collected Papers 28, leading subsequently to Pugwash and the Campaign for Nuclear Disarmament.

The copy-text is the emended typescript carbon, dated 3 and 4 December 1954 and entitled “The Implications of the H-Bomb” (RAI 220.020740). At the same archival location there is also a clean typescript carbon, which incorporates Russell’s emendations to the copy-text but not the material that was added on 16 December to lengthen his talk (see T87: 26–31). A typescript copy of this later version shows the extensive revisions that were made by Russell as he prepared a first draft of Paper 57d, which is essentially an abridgement of “Man’s Peril”. The earliest extant version of the text is a dictated manuscript in Edith Russell’s hand, although the Autobiography suggests that an “anaemic” prior draft had been made then immediately discarded for “pulling all punches” (1969, 72). There is also a dictated manuscript addition, containing a preliminary version of the passage at 87: 26–31. A sound recording of Paper 16 confirms that the photocopy of the BBC transcript (RA REC. ACQ. 1,021a) corresponds almost exactly to the talk as broadcast.

Three substantive emendations written on this document in another hand indicate where Russell departed slightly from his prepared script. Only one of these possibly impromptu revisions (see T89: 9) did not appear in the version as published by The Listener. At the request of Lord Rothschild, a couple of months after the broadcast Russell also produced a hand-written copy for deposit in Trinity College’s library (photocopy in RA REC. ACQ. 1). Somewhat curiously, there are several substantive differences between this fair copy and all other collated versions of Russell’s text.
I am speaking on this occasion not as a Briton, not as a European, not as a member of a Western democracy, but as a human being, a member of the species Man, whose continued existence is in doubt. The world is full of conflicts: Jews and Arabs; Indians and Pakistanis; White men and Negroes in Africa; and, overshadowing all minor conflicts, the titanic struggle between Communism and anti-Communism. Almost everybody who is politically conscious has strong feelings about one or more of these issues; but I want you, if you can, to set aside such feelings for the moment and consider yourself only as a member of a biological species which has had a remarkable history and whose disappearance none of us can desire. I shall try to say no single word which should appeal to one group rather than to another. All, equally, are in peril, and, if the peril is understood, there is hope that they may collectively avert it. We have to learn to think in a new way. We have to learn to ask ourselves, not what steps can be taken to give military victory to whatever group we prefer, for there no longer are such steps; the question we have to ask ourselves is: What steps can be taken to prevent a military contest of which the issue must be disastrous to all sides?

The general public, and even many men in positions of authority, have not realized what would be involved in a war with hydrogen bombs. The general public still thinks in terms of the obliteration of cities. It is understood that the new bombs are more powerful than the old and that, while one A-bomb could obliterate Hiroshima, one H-bomb could obliterate the largest cities such as London, New York, and Moscow. No doubt in an H-bomb war great cities would be obliterated. But this is one of the minor disasters that would have to be faced. If everybody in London, New York, and Moscow were exterminated, the world might, in the course of a few centuries, recover from the blow. But we now know, especially since the Bikini test, that hydrogen bombs can gradually spread destruction over a much wider area than had been supposed. It is stated on very good authority that a bomb can now be manufactured which will be 25,000 times as powerful as that which destroyed Hiroshima. Such a bomb, if exploded near the ground or under water, sends radio-active particles into the upper air. They sink gradually and reach the surface of the earth in the form of a deadly dust or rain. It was this dust which infected the Japanese fishermen and their catch of fish although they were outside what American experts believed to be the danger zone. No one knows how widely such lethal radio-active particles might be diffused, but the best authorities are unanimous in saying that a war with H-bombs is quite likely to put an end to the human race. It is feared that if many H-bombs are used there will be universal death—sudden only for a fortunate minority, but for the majority a slow torture of disease and disintegration. I will give a few instances out of many. Sir John Slessor, who can speak with unrivalled authority...
from his experiences of air warfare, has said: “A world war in this day and age would be general suicide”; and has gone on to state: “It never has and never will make any sense trying to abolish any particular weapon of war. What we have got to abolish is war.” Lord Adrian, who is the leading English authority on nerve physiology, recently emphasized the same point in his address as President of the British Association. He said: “We must face the possibility that repeated atomic explosions will lead to a degree of general radio-activity which no one can tolerate or escape”; and he added: “Unless we are ready to give up some of our old loyalties, we may be forced into a fight which might end the human race.” Air Chief Marshal Sir Philip Joubert says: “With the advent of the hydrogen bomb, it would appear that the human race has arrived at a point where it must abandon war as a continuation of policy or accept the possibility of total destruction.” I could prolong such quotations indefinitely. Many warnings have been uttered by eminent men of science and by authorities in military strategy. None of them will say that the worst results are certain. What they do say is that these results are possible and no one can be sure that they will not be realized. I have not found that the views of experts on this question depend in any degree upon their politics or prejudices. They depend only, so far as my researches have revealed, upon the extent of the particular expert’s knowledge. I have found that the men who know most are most gloomy.

Here, then, is the problem which I present to you, stark and dreadful and inescapable: Shall we put an end to the human race; or shall mankind renounce war? People will not face this alternative because it is so difficult to abolish war. The abolition of war will demand distasteful limitations of national sovereignty. But what perhaps impedes understanding of the situation more than anything else is that the term “mankind” feels vague and abstract. People scarcely realize in imagination that the danger is to themselves and their children and their grandchildren, and not only to a dimly apprehended humanity. And so they hope that perhaps war may be allowed to continue provided modern weapons are prohibited. I am afraid this hope is illusory. Whatever agreements not to use H-bombs had been reached in time of peace, they would no longer be considered binding in time of war, and both sides would set to work to manufacture H-bombs as soon as war broke out, for, if one side manufactured the bombs and the other did not, the side that manufactured them would inevitably be victorious.

On both sides of the Iron Curtain there are political obstacles to emphasis on the destructive character of future war. If either side were to announce that it would on no account resort to war, it would be diplomatically at the mercy of the other side. Each side, for the sake of self-preservation, must continue to say that there are provocations that it will
not endure. Each side may long for an accommodation, but neither side dare express this longing convincingly. The position is analogous to that of duellists in former times. No doubt it frequently happened that each of the duellists feared death and desired an accommodation, but neither could say so, since, if he did, he would be thought a coward. The only hope in such cases was intervention by friends of both parties suggesting an accommodation to which both could agree at the same moment. This is an exact analogy to the present position of the protagonists on either side of the Iron Curtain. If an agreement making war improbable is to be reached, it will have to be by the friendly offices of neutrals, who can speak of the disastrousness of war without being accused of advocating a policy of “appeasement”. The neutrals have every right, even from the narrowest consideration of self-interest, to do whatever lies in their power to prevent the outbreak of a world war, for, if such a war does break out, it is highly probable that all the inhabitants of neutral countries, along with the rest of mankind, will perish. If I were in control of a neutral Government, I should certainly consider it my paramount duty to see to it that my country would continue to have inhabitants, and the only way by which I could make this probable would be to promote some kind of accommodation between the Powers on opposite sides of the Iron Curtain.

I, personally, am of course not neutral in my feeling and I should not wish to see the danger of war averted by an abject submission of the West. But, as a human being, I have to remember that, if the issues between East and West are to be decided in any manner that can give any possible satisfaction to anybody, whether Communist or anti-Communist, whether Asian or European or American, whether White or Black, then these issues must not be decided by war. I should wish this to be understood on both sides of the Iron Curtain. It is emphatically not enough to have it understood on one side only. I think the neutrals, since they are not caught in our tragic dilemma, can, if they will, bring about this realization on both sides. I should like to see one or more neutral Powers appoint a Commission of experts, who should all be neutrals, to draw up a report on the destructive effects to be expected in a war with H-bombs, not only among the belligerents, but also among neutrals. I should wish this report presented to the Governments of all the Great Powers with an invitation to express their agreement or disagreement with its findings. I think it possible that in this way all the Great Powers could be led to agree that a world war can no longer serve the purposes of any of them, since it is likely to exterminate friend and foe equally and neutrals likewise.

As geological time is reckoned, Man has so far existed only for a very short period—a million years at the most. What he has achieved, especially during the last 6,000 years, is something utterly new in the history of the Cosmos, so far at least as we are acquainted with it. For countless ages the
sun rose and set, the moon waxed and waned, the stars shone in the night, but it was only with the coming of Man that these things were understood. In the great world of astronomy and in the little world of the atom, Man has unveiled secrets which might have been thought undiscoverable. In art and literature and religion, some men have shown a sublimity of feeling which makes the species worth preserving. Is all this to end in trivial horror because so few are able to think of Man rather than of this or that group of men? Is our race so destitute of wisdom, so incapable of impartial love, so blind even to the simplest dictates of self-preservation, that the last proof of its silly cleverness is to be the extermination of all life on our planet?—for it will be not only men who will perish, but also the animals, whom no one can accuse of Communism or anti-Communism. I cannot believe that this is to be the end. I would have men forget their quarrels for a moment and reflect that, if they will allow themselves to survive, there is every reason to expect the triumphs of the future to exceed immeasurably the triumphs of the past. There lies before us, if we choose, continual progress in happiness, knowledge, and wisdom. Shall we, instead, choose death, because we cannot forget our quarrels? I appeal, as a human being to human beings: remember your humanity, and forget the rest. If you can do so, the way lies open to a new Paradise; if you cannot, nothing lies before you but universal death.
Man’s Peril

86: 29 **Bikini test** On 1 March 1954 the United States detonated a fifteen mega-ton hydrogen bomb over Bikini atoll in the western chain of the United Nations-administered Marshall Islands in the Pacific Ocean. The blast, code-named *Bravo*, yielded three times more power than anticipated and was the largest test explosion ever carried out by the United States. It created a fireball measuring four miles in diameter and spread radioactive fallout over a broad expanse of the Pacific east of Bikini. More than 200 Marshallese were exposed to the radiation (which was so extensive, it was later revealed, because of the three-stage, “fission-fusion-fission”, character of the device) and were evacu-
ated from their island homes. Nuclear tests had first been conducted at Bikini in Operation Crossroads of July 1946. A further six explosions took place in the Castle series of 1954 followed by fifteen more before the short-lived moratorium on testing in 1958, after which Bikini ceased to be a test site.

86: 31–2 **25,000 times as powerful ... destroyed Hiroshima** The corresponding passage from Paper 57d uses the figure “2,500” instead. Russell may have been responding to scientific speculation that no theoretical limits restricted the size of a hydrogen bomb since its thermonuclear fuel, unlike the plutonium or uranium 235 of an atomic bomb, never reached “critical mass”—the point at which a chain-reaction in the assembled material started spontaneously. The American physicist and activist, Ralph Lapp had observed in May 1954, however, that the law of diminishing returns would apply to explosive yields higher than fifty megatons, or 2,500 times as powerful as the Hiroshima bomb (see Divine 1978, 17).

86: 35–6 **this dust ... Japanese fishermen and their catch of fish** Although outside the designated danger zone, a Japanese fishing boat, the **Lucky Dragon**, had been exposed to radioactive fallout from the Bikini test explosion. There was an immediate outcry in Japan against the poisoning of its people once more by the “ashes of death” (see A247: 36–8). Not only the crew of twenty-three (one of whom subsequently died), but their catch as well, were irradiated, a discovery which triggered a “tuna scare” in Japan and prompted the Government to order the destruction of tons of fish over the next few months. The United States Atomic Energy Commission, meanwhile, played down the extent of radiation damage and refused to reveal the composition of the fallout in order to guard against the unwitting disclosure of classified technical information about the Bikini bomb. The chairman of the usaec, Lewis S. Strauss, even hinted privately that the **Lucky Dragon** was a “Red spy outfit” (see Wittner 1997, 147).

86: 43 **Sir John Slessor** Sir John Cotesworth Slessor (1897–1979) was a recently retired Marshal of the Royal Air Force whose distinguished career in the service had culminated in a term as Chief of Air Staff from 1950 to 1953. A key figure in the post-war evolution of British nuclear strategy, Slessor was primarily responsible for the emphasis on atomic air power in the landmark Global Strategy Paper of 1952. Unlike some strategic analysts, Slessor believed that hydrogen bombs would definitely be used in another world war and that such a war could not be limited. Nevertheless, to viewers of the Panorama programme in which he had earlier participated with Russell on BBC television, he had claimed that “the existence of these fearful weapons is a reason for real hope and encouragement” (The Manchester Guardian, 14 April 1954, p. 12).

87: 1–2 **“A world war ... would be general suicide”** Slessor 1954, 244. The same quotation had been used by Basil Liddell Hart in an article on nuclear strategy (1954a) which the military historian and strategic analyst had forwarded to Russell in May 1954 (see Introduction, p. xxi).
“It never has ... abolish is war.” Slessor 1954a, 1,081.

Lord Adrian  The 1932 Nobel laureate for physiology and medicine, Edgar Douglas Adrian (1889–1977, 1st Baron Adrian, 1955), was a longstanding acquaintance of Russell’s. In addition to his leadership at this time of the British Association for the Advancement of Science, he was also President of the Royal Society and Master of Trinity College, Cambridge. Adrian had been among those Trinity Fellows who in 1919 urged Russell’s reappointment to the College from which he had been unceremoniously dismissed three years before on account of his anti-war politics. Despite his apprehension of the dangers posed by radioactive fallout, Adrian was later unwilling to sign “The Russell–Einstein Manifesto”, something which Russell recalled as his “most personal disappointment” in connection with this enterprise (1969, 75).

“We must face ... end the human race.” Adrian 1954, from his inaugural address as President to the 116th annual meeting of the British Association, delivered on 1 September.

Sir Philip Joubert ... “With ... total destruction.” Retired Air Chief Marshal Sir Philip Joubert de la Ferté (1887–1965), another noted authority on air power, had aerial command experience dating back to the First World War. Notwithstanding his expression here of an opinion shared by Russell (see A77: 34), Joubert envisaged a distinct tactical role for both atomic and hydrogen bombs. He also emphasized the strategic importance of nuclear deterrence, concluding that the “hydrogen bomb ... may give us peace today, and the chance of perpetual peace in the future”. See Joubert 1954, 955, the second of ten talks on the hydrogen bomb broadcast by the BBC in the summer of 1954. Slessor (1954a) was the fifth speaker, while Paper 6 in the present volume was the penultimate contribution to the series.

“appeasement” Coined in the 1930s as a descriptive term for the British and French policy of negotiation and compromise with the regimes of Mussolini and Hitler, appeasement was transformed by subsequent and savage indictments of its practitioners into a byword for the conduct of foreign affairs without courage, intelligence or principle. Russell was astute in detecting the emotive power of the epithet; during the Suez Crisis of 1956, British Prime Minister, Anthony Eden, would invoke his own country’s record of appeasement before the Second World War in justification of military intervention against Egypt’s Colonel Nasser.
16 Man’s Peril

The seven-leaf typescript carbon ("CT") is foliated 1–3, 3a, 4–6, measures 203 × 254 mm. and was emended by Russell both in ink and, where noted, in red pencil. Although CT is dated 3 and 4 December 1954, fol. 3a was added some time later, since Russell informed Eileen Molony of the BBC only on 16 December that this extra leaf had been prepared to "make the length right". Part of fol. 3 was retyped on 3a in order to accommodate the new material, which originated as the dictated manuscript ("MSe2") that was written and emended in pencil by Edith Russell on a single unfoliated leaf (see T87: 26–31). Also in pencil in the same hand is a seven-leaf dictated manuscript ("MSe"), on which Edith copied in red pencil the emendations to CT recorded at T87: 14, T88: 16 and T88: 17–18. On fol. 2 of the former document she also placed a marginal note—"see typed Page 2"—adjacent to where the insertion on CT recorded at T86: 40–2 begins. CT fos. 2 and 4 were retyped in order to incorporate these four emendations, then a clean copy was made of the entire text—which did not yet include fol. 3a. The six-leaf typescript carbon of this version in T8 shows no further emendations, but a later typescript ("TS" in the textual notes to Paper 57d), incorporating CT fol. 3a, was extensively emended by Russell in drafting "The Russell–Einstein Manifesto". Prior to its emendation, Russell may have used this version to produce in his own hand the manuscript copy ("MS") that was deposited at Trinity College, Cambridge. However, there are some substantive differences between MS and all other versions of this paper. Although these have been reported only as variant readings, MS was the preferred source for several accidental readings used in the present volume. One other unpublished document was consulted: a photocopy of a BBC transcript ("BBC") which shows three substantive emendations noted below. BBC conforms almost exactly to Russell's talk as broadcast, although the sound recording does reveal that, at 87: 22, "most gloomy" was preceded by "the". This minor variant was introduced by Russell to Paper 57d but appears in none of the collated versions of 16. The textual notes provide a collation of CT with MSe, BBC, MS and two of the numerous published versions, its initial publication, in The Listener ("LIS"), and the reprint prepared by Russell for Portraits from Memory ("56"). MSe2 is referred to only at 87: 26–31. 56 was made from a reprint of LIS issued as a leaflet by the Friends Peace Committee. The reading from 56 at T89: 11 is consistent with the deletion made on Russell's "Corrected Copy" of this leaflet as well as on TS in the textual notes for Paper 57d (see T320: 19).
Bomb and the Peril to Mankind BBC
Man’s Peril from the Hydrogen Bomb

Almost everybody LIS, MS, MSe, BBC] *Almost everybody LIS, 56
peril, MS, LIS, 56] peril CT, MSe, BBC

15 military MSe] inserted above deleted a

17 prevent CT, MSe, BBC, LIS, 56] avert MS

18 sides? BBC, LIS, 56] parties. CT, MSe, MS

24 York, MS, LIS, 56] York CT, MSe, BBC

24 No doubt MSe] after deleted Civil
defence in the United States occupies
itself with the problem of evacuating the
whole population of New York in the
course of four hours.

29 Bikini CT] above deleted Eniwetok
30 much LIS, 56] very much CT, MSe, BBC, MS

35 dust or rain LIS, 56, MS] replaced
dust CT, MSe
dust CT, MSe, BBC, LIS, 56]

40–2 It is feared … disease and disinte-
gration. CT] inserted from margin

I will CT, MSe, BBC, MS] ¶I will
LIS, 56

1 experiences MS, BBC, LIS, 56]
experience CT, MSe

1 said: “A MS, LIS, 56] said, “a CT, MSe] said a BBC

4 Lord 56] Professor CT, MSe, BBC, MS, LIS

2 nerve MSe] inserted above deleted the

6 said: MS, LIS, 56] said, CT, MSe]
said BBC

9 added: “Unless MS, LIS, 56] added,
“unless CT, MSe, BBC

11 says: “With MS, LIS, 56] says, “with
CT, MSe, BBC

14 Many BBC, MSe] inserted CT, MSe]

Many 56

17–18 be sure that they will not MSe]
replaced tell whether they will

22 most gloomy MSe] before deleted and
that those who still think in terms of
Hiroshima are clearly not abreast of mod-
ern inventiveness and technique
88: 26 or American MSe inserted
88: 26 White or Black CT, MSe, BBC
white or black MS, LIS, 56
88: 31 neutral MS, LIS, 56] Neutral CT,
MSe, BBC
88: 34 neutrals LIS, 56] Neutrals CT,
MSe, BBC] the neutrals MS
88: 38 them, MS, LIS, 56] them CT, MSe,
BBC
88: 41 a million CT, MSe, BBC, MS]
1,000,000 LIS, 56
88: 41 the most LIS, 56] most CT, MSe,
TS, BBC, MS
89: 9 dictates CT, MSe, MS, LIS, 56] doc-
trine above deleted dictates BBC
89: 11 will be CT, MSe, BBC, LIS, 56] is
MS
89: 11 animals 56] animals and plants, CT,
MSe, BBC, MS, LIS
89: 12 I cannot CT, MSe, BBC, MS] ¶ I
cannot LIS, 56
89: 17 knowledge, MS, LIS, 56] knowledge
CT, MSe, BBC
89: 18–19 human being to human beings:
MSe] replaced man to men,
89: 19 humanity MSe inserted above deleted
manhood
89: 20 cannot MS, LIS, 56] can not CT,
MSe, TS, BBC