The Courage of Galileo: Joseph Needham and the 'Germ Warfare' Allegations in the Korean War

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Abstract

In 1952, during the Korean War, it was claimed that United States forces were using bacteriological warfare against China and North Korea. The allegation was dismissed by western governments, but a six-strong international scientific commission (ISC) visited China and concluded that bacteriological warfare had taken place. On their return, the scientists, of whom the best known was the British biochemist Joseph Needham, were depicted as dupes or fellow-travellers. Interest in this subject was revived in 1998 with revelations from Moscow archives which seemed to prove that the commission was hoaxed, although a monograph published in the same year was more sympathetic to the ISC's conclusions. To date, however, Needham's own papers have not been consulted, and full use has not been made of the foreign office papers. On the basis of these archival sources, this article shows how Needham was drawn reluctantly into the limited and flawed work of the ISC. It also shows how the British government, concerned at the possible impact of the ISC report, sought to mobilize politicians, journalists and academics to refute it. The article concludes that Needham's personal courage is not in doubt, but that his role in the ISC – and the defence of its conclusions – exacted a high personal cost.

In early 1952, during the second year of the Korean War, disconcerting stories began to emanate from North Korea and north-east China about mysterious outbreaks of disease, inappropriate to the region and season. Unusual insects, said to be infected with a variety of bacilli, were being found on patches of snow, and their appearance seemed to coincide with bombing raids by American warplanes. A variety of other allegedly infected organisms and objects, from voles to kitchen utensils, feathers to pancakes, were also being deposited on Chinese and Korean hillsides. On 21 February the New China News agency claimed that United States forces were waging bateriological¹ warfare in Korea and

¹ The term 'germ' warfare was widely used in Britain at the time. Joseph Needham objected on the grounds that this was inaccurate and preferred either the term 'bacterial' or 'bacteriological' warfare; Imperial War Museum, Joseph Needham Papers, [hereafter IWM, JNP], file 82, Needham to Hector Hawton, 15 Nov. 1952.

China, and on 24 February the Chinese foreign minister Chou En-lai branded the US guilty of war crimes. The charge was immediately denied by US Secretary of State Dean Acheson, who called, fruitlessly, on the Chinese to accept an impartial investigation by the International Committee of the Red Cross.

The Chinese allegations, endorsed by visitors from the west and apparently substantiated by the 'confessions' of captured American airmen, became the focus for a vigorous international communist campaign. An exhibition was staged in Beijing where metal containers, said to be the means by which the infected matter had been dropped, were put on display.² The allegations received significant further support from an 'International Scientific Commission for the Investigation of the Facts Concerning Bacterial Warfare in Korea and China' (ISC), established by the World Peace Council following an appeal by Dr Kuo Mo-Jo, president of the Chinese People's Committee for World Peace. The commission was composed of six foreign scientists,³ the best known of whom was Joseph Needham, the Cambridge biochemist and sinologist. The ISC's report (which, with appendices, ran to 665 pages) concluded that US forces had, indeed, engaged in bacteriological warfare against the Korean and Chinese people. However, given Beijing's refusal to submit to an 'impartial' investigation, the charges remained, outside the communist world, unproven. Indeed, to many in the west it seemed absurd that the Chinese should persist in making such bizarre claims once they had been denied by the US government. The allegations lost much of their credibility when many of the American airmen retracted their confessions (under threat of court martial) as soon as they had been repatriated at the end of the Korean War. The subject has since received only intermittent scholarly attention,⁴ and is frequently dismissed in histories of the Korean War as a mere propaganda ploy (although often seen as a model of its kind).⁵

² See Desmond Donnelly, *The March Wind: Explorations behind the Iron Curtain* (1959), pp. 40–1, for an account by a Labour MP who visited the exhibition. For a detailed presentation of the germ warfare allegations *as* a communist propaganda campaign, see John C. Clews, *Communist Propaganda Techniques* (1964), part 4, pp. 179–268.

³ In addition to Needham, the commission was composed of Dr Andrea Andreen (Sweden), Jean Malterre (France), Dr Oliviero Olivo (Italy), Dr Samuel B. Pessoa (Brazil) and Dr N. N. Zhukov-Verezhnikov (USSR). It was joined on 6 August by Dr Franco Graziosi (Italy) as observer-consultant. The ISC worked closely with a Chinese committee of reception.

⁴ See, in particular, two volumes of the Stockholm International Peace Research Institute's, *The Problem of Chemical and Biological Warfare* (Stockholm, 1971), iv. 196–223; v. 238–58 (vol. iv was authored by Jozef Goldblat and the Korean War case study in vol. v by Milton Leitenberg). See also Mark A. Ryan, *Chinese Attitudes towards Nuclear Weapons: China and the United States during the Korean War* (1989) and John Ellis van Courtland Moon, 'Biological Warfare Allegations: The Korean War Case', *Annals of the New York Academy of Science*, vol. 666: *The Microbiologist and Biological Defense Research: Ethics, Politics and National Security*, ed. Raymond A. Zilinskas (New York, 1992), pp. 53–83.

⁵ See, for instance, David Rees, *Korea: The Limited War* (1964) [hereafter Rees, *Korea*], pp. 347–63, and Michael Hickey, *The Korean War: The West Confronts Communism, 1950–1953* (1999), p. 268. The subject is treated with a more open mind in Jon Halliday and Bruce Cumings, *Korea: The Unknown War* (1988), pp. 182–6, and in Callum A MacDonald, *Korea: The War before Vietnam* (Basingstoke, 1986), pp. 161–3.

In 1998 the case was reopened with two significant developments. First, Russian documents from 1953 were published in Japan which appeared to demonstrate that the Soviet leadership was fully aware of the fabrication of evidence of germ warfare. Many scholars have taken these documents as conclusive proof that the allegations were fraudulent.⁶ Secondly, 1998 also saw the publication of a monograph by Stephen Endicott and Edward Hagerman which, although the product of many years of research, benefited from the opening of Chinese archives in response to these Russian revelations.⁷ Endicott had been interested in the topic since the mid-1970s when researching a biography of his father, a Canadian missionary in China and one of the first westerners to support the Chinese 'germ warfare' allegations.⁸ Endicott and Hagerman assembled compelling circumstantial evidence of American bacteriological warfare in the Korean War from two principal sources. First, US archives revealed the extent to which the US had developed a capacity for producing and delivering bacteriological weapons during the precise period of the alleged attacks (1951–3), building on expertise acquired secretly from the Japanese army after 1945. Secondly, Chinese archives demonstrated the immense scale and complexity of the public health campaign that was mounted (for whatever reason) in the spring of 1952. This evidence suggested to the authors a 'pattern of disease and delivery systems' consistent with the American capability and 'anomalous with local incidence of disease'.9 When interviewed in the mid-1990s, moreover, Chinese scientists who had investigated the phenomena at the time remained adamant that bacteriological warfare had been waged against their country. Even so, Endicott and Hagerman were forced to conclude that 'clear and identifiable *direct* evidence that the United States experimented with biological weapons in the Korean War is not available in the US archives as they presently exist for public scrutiny'.¹⁰ While failing to find documentary proof, Endicott and Hagerman did feel that they had gone a long way towards vindicating the much-maligned ISC report, which, they argued, 'must be treated with more respect' in the light of the Chinese archival sources. The report was

¹⁰ Ibid., p. 188.

⁶ The new documents, from the Russian presidential archives, show how the 'germ warfare' allegations became bound up with factional infighting in the Soviet leadership after the death of Stalin. It appears that Lavrenti Beria alleged in 1953 that Semen Ignatiev, a Khrushchev supporter, had conspired with the Chinese to concoct evidence of bacteriological warfare with a view to misleading the ISC. The documents are reviewed in two analyses published on the Cold War International History Project website (http://cwihp.si.edu); Kathryn Weathersby, 'Deceiving the Deceivers: Moscow, Beijing, Pyongyang, and the Allegations of Bacteriological Warfare Allegations: Background Leitenberg, 'New Russian Evidence on the Korean War Biological Warfare Allegations: Background and Analysis' (1999). Both authors see the new evidence as, in Weathersby's words, 'laying to rest the longstanding allegations'.

⁷ Stephen Endicott and Edward Hagerman, *The United States and Biological Warfare: Secrets from the Early Cold War and Korea* (Bloomington, Ind., 1998) [hereafter Endicott and Hagerman, *Biological Warfare*], p. 249, n18.

⁸ Endicott to Needham, 20 July 1976, IWM, JNP/137.

⁹ Endicott and Hagerman, *Biological Warfare*, p. x.

'a plausible re-creation of equally plausible data from North Korean and Chinese sources that the United States experimented with insect and other vectors of biological warfare during the Korean War'.¹¹

Given the high esteem in which these authors clearly hold Joseph Needham (the book is partly dedicated to his memory), it is strange that one source that they did not consult is Needham's own papers relating to this episode, which he deposited at the Imperial War Museum. This archive provides significant additional evidence of how Needham became involved with the ISC, how it conducted its work in China and how Needham struggled to establish the validity of its findings on his return to Britain. Although there is nothing in these papers that offers any definitive proof of American culpability, they do shed valuable new light on the reliability of the ISC's findings. They also offer, when read in conjunction with documents in the Public Record Office (similarly overlooked by Endicott and Hagerman), an arresting insight into the impact of the cold war on British public life. In particular, it can be shown that the British government quietly, and not always successfully, sought to mobilize politicians, journalists and academics to refute the 'germ warfare' allegations.

I

In 1952 Joseph Needham (1900–1995) was in something of a transitional phase in his career.¹² His most innovative work as an experimental scientist lay behind him (he had been made a fellow of the Royal Society in 1941) and his renown as an historian of Chinese science and technology lay ahead (the first volume of Science and Civilisation in China was published in 1954). He had made his reputation in the study of chemical embryology at Gowland Hopkins's laboratory in Cambridge, 1920-42, latterly as Sir William Dunn Reader in biochemistry and fellow of Gonville and Caius College. Like a number of scientists of his generation (notably J. B. S. Haldane, J. D. Bernal and Hyman Levy), his scientific interests were located in a political, social and, in Needham's case, religious context. He was a committed socialist and member of the Labour Party, and during the 1930s actively campaigned in support of the Spanish republic and against the threat of war. His was a high church Christian socialism, strongly influenced by the Rev. Conrad Noel at nearby Thaxted, who nurtured his love of the eccentric traditions of English radicalism. Needham was, for instance, a keen Morris dancer and, in 1939 published a book on the Levellers under the pseudonym 'Henry Holorenshaw'.

The great turning-point in Needham's life was the arrival at his laboratory in 1937 of three Chinese postgraduate students, including his

¹¹ Ibid., pp. 189–90.

¹² The following section is based primarily on Maurice Goldsmith, *Joseph Needham: 20th Century Renaissance Man* (Paris, 1995) [hereafter Goldsmith, *Joseph Needham*], and Gary Werskey, *The Visible College: A Collective Biography of British Scientists and Socialists of the 1930s* (1978).

future collaborator and second wife Lu Gwei-Djen. Needham became passionately interested in China and began, with typical determination, to learn Chinese. As early as 1939 he was offering the services of himself and his wife Dorothy (a fellow biochemist) to the China Universities Commission, stating that the arrival of the Chinese scientists had 'awakened in us the desire to visit and help their country'.¹³ Although this approach came to nothing, Needham persisted, and in 1943 accepted an invitation to direct the 'British Scientific Mission to China'. He embarked on an arduous programme of travel through wartorn China to promote scientific co-operation, at the same time beginning to amass a unique collection of source materials on the history of Chinese science. He was soon telling colleagues that his 'great aim' on his return was to write a book that would answer the question of why modern science developed in Europe and not China.¹⁴

These years in China have a considerable bearing on Needham's involvement with the international scientific commission. First, he came away with a profound respect for China's ancient culture which he saw as, at the very least, the equal of the west. He was appalled at the ignorance of that culture in Europe and America, and disgusted at the indifference to human life in Asia symbolized by the use of the atomic bomb in 1945. The west, he felt, treated Asians as 'experimental animals', not as 'equals and brothers',¹⁵ and it seemed eminently plausible to him that live experiments were being conducted in the Korean War with bacteriological weapons. Despite his protestations to the contrary, Needham undoubtedly exhibited a streak of anti-Americanism at this time,¹⁶ and a willingness to believe the worst of American policy. Secondly, Needham had worked closely with Chinese scientists, many of whom had been trained in western universities. He admired their professionalism and regarded the casual dismissal of their allegations of bacteriological warfare as a further example of western ignorance and racism. As he wrote to his wife while serving on the ISC, one of his objectives was to show that 'Chinese scientists are ok.'17 Thirdly, Needham claimed that in 1944 he had personally investigated the Japanese use of bacteriological weapons in China. He had concluded that Japanese forces had dropped containers with 'plague-infected fleas, and that this had led to some cases of mortality in areas where plague is unknown.^{'18} Accordingly, in 1952, he felt 'morally bound'¹⁹ to make sure that the latest allegations

¹⁸ Needham to Kingsley Martin, 22 April 1952, University of Sussex, Kingsley Martin Papers, 14/3.

¹³ Needham to Mr Morkill, 18 Nov. 1939, Cambridge University Library [CUL], Joseph Needham Papers, C1.

¹⁴ Needham to an unidentified professor, 22 Jan. 1946, CUL, Needham Papers, C32.

¹⁵ Memorandum by Needham, 27 April 1952, IWN, JNP/4.

¹⁶ See his comment in defence of Chinese culture: 'The people of this country have seen enough of "gangster films" and "comics" to know by now what North American culture regards as normal', *New Statesman*, xlvi (28 Nov. 1953), 675.

¹⁷ Needham to Dorothy Needham, undated from Beijing, IWM, JNP/12.

¹⁹ Needham's 1967 typescript on 'Chemical and Bacteriological Warfare', IWM, JNP/129.

were fully investigated, believing that what had occurred represented a refinement of these earlier Japanese techniques. Unfortunately, Needham had kept no copy of his 1944 report, nor could one be found in the foreign office, and his critics would use this lapse to attack his credibility. Needham certainly made much – in the circumstances perhaps too much – of this episode.²⁰ Whatever the facts of the 1944 incident, however, it is now clear that Needham was quite right to suspect that Japanese wartime expertise was indeed being used to develop the next generation of bacteriological warfare.

Between 1946 and 1948 Needham worked, by invitation of his old friend Julian Huxley, for the newly established UNESCO as director of its natural sciences department. Returning to Cambridge, Needham resumed an illustrious academic career that culminated in his election as master of Gonville and Caius in 1966. However, he also resumed his prominent role in political and public life. He was a very active president of the communist-backed Britain–China Friendship Association (BCFA), created in 1949, which shared his belief that the 'new China' should be greeted with friendship and dignity, rather than ill-informed aggression. He also became vice-president of the eastern region of the United Nations Association, a relationship that became increasingly fraught when Needham began to denounce UN policy in Korea.

Long before his death Needham had acquired a legendary reputation as a polymath and a builder of bridges between disciplines. For Endicott and Hagerman, he was 'one of the great scientific minds of the twentieth century'.²¹ Professor George Wald, a Nobel laureate from Harvard who had initially rejected the findings of the ISC, later wrote of his embarrassment at doubting a 'great and utterly decent person and a monumental scholar'.²² To one obituarist he was 'one of the greatest Englishmen of the century'.²³ Needham had, indeed, become something of a guru, often described as gentle and somewhat mystical and unworldly. Such a description, however, sits rather uneasily with the man that one discovers in Needham's papers. In debate, he was doggedly, if politely, assertive, unwilling to suffer fools. And, for an unworldly man, he was extremely concerned with his status and reputation, despite his quip to a press conference in 1952 that his 'reputation was lost many years ago'.²⁴ In

²³ Martin Bernal, Guardian, 27 March 1995.

²⁰ For instance, he was reported as stating that the ISC contained the only two scientists in the world with first-hand knowledge of investigating bacteriological warfare: himself and the Russian scientist Dr Zhukov, who had been chief medical expert in the Soviet trial of Japanese soldiers accused of bacteriological war crimes (*Daily Worker*, 22 Sept. 1952). In the absence of any documentation, the facts of Needham's wartime experiences must remain elusive, and Needham was unable even to confirm that his report had been written in 1944. The most likely explanation is that he had been shown Chinese reports on alleged Japanese bacteriological attacks in 1940 and 1941.

²¹ Endicott and Hagerman, *Biological Warfare*, p. 249, n19.

²² Ibid., p. 193, citing a letter of March 1979 from Professor George Wald. Bertrand Russell was another who changed his mind about Needham and the ISC, and by 1963 had become convinced of the justice of the report; *The Autobiography of Bertrand Russell, 1944–1967* (1969), iii. 169.

²⁴ Second transcript of press conference, 26 Sept. 1952, IWM, JNP/55, p. 12.

1947, for instance, he was offered a medal by the nationalist (Kuomintang/ KMT) government for his services to the study of Chinese culture, and was told by the foreign office that, due to protocol, he would have to wait two years to collect it. By 1949 he was becoming agitated at the thought that, with the collapse of the KMT regime, his prospects of ever receiving the award were dwindling and pestered the foreign office for help.²⁵ On another occasion, he learnt that a post of UNESCO assistant director general for science was to be created soon after his departure from the organization, and asked Julian Huxley to appoint him to this post for a token few weeks, lest he should unjustly appear a 'stopgap unworthy of larger responsibility'.²⁶ While such episodes might appear trivial, even comical, it is important to bear in mind Needham's tenacity in defence of his own reputation when one considers his actions on returning from China in 1952. With his own credibility and, in the words of his biographer, his 'face' tied up with that of the ISC's report, it was evident that Needham would fight bitterly against its many detractors.

Π

How did Needham come to stake his reputation on allegations that were so easily dismissed as absurd? It is important to note that while Needham's decision to join the ISC seems, in the light of his political views and his experiences in China during the 1940s, inevitable, it was at the same time a decision that was taken gradually and with marked reluctance. Needham believed that a stand had to be taken by reputable scientists, but did not feel personally qualified to take such a step. It was only when other scientists failed to take up the challenge that Needham became drawn, ineluctably, into the work of the commission.

On 25 April 1952 Needham chaired a joint meeting of the Britain– China Friendship Association and the London Peace Council to hear first-hand reports of 'germ warfare' from two men recently returned from China: Jack Gaster, a member of the International Association of Democratic Lawyers (IADL) and Dr James Endicott of the Canadian Peace Council.²⁷ Needham was quoted in the next day's *Daily Worker* as stating that the use of 'germ' warfare 'seems to be apparent from all the evidence we have', including statements by 'first-rate Chinese bacteriologists – men I personally know'. He called for a commission of bacteriologists and medical entomologists to be sent to establish the facts. Needham's critics would later use this as proof that he had made up his mind long before studying the evidence in person, and he subsequently

²⁵ Needham to Sir John Pratt, 20 April 1949, and Pratt's reply of 27 May 1949, CUL, Needham Papers, C47.

²⁶ Goldsmith, Joseph Needham, pp. 96–7.

²⁷ Papers relating to the meeting, IWM, JNP/1. To complicate matters, Needham noted that Endicott *'claimed* use of radioactive dust, wiped out several villages'. Gaster had formed part of a commission from the IADL investigating the allegations.

attempted to distance himself from the press report. He would claim that his views were better reflected in two documents: a letter that he had written to Kingsley Martin, editor of the New Statesman, on 22 April, and a memorandum that he composed on 27 April. In both documents he argued that the similarities between the latest allegations and his own observations in 1944 meant that there was a case worthy of impartial investigation, and that much of the scepticism was simply due to the fact that the use of 'living insects as vectors is regarded as crude and bizarre'. However, doubt is cast on his disavowal of the Daily Worker report by another letter that he had written on 22 April to Sir John Pratt, a former diplomat and a critic of UN policy in Korea. Here, Needham wrote that 'my personal opinion that the American–Japanese command has been experimenting with insect methods on a large scale is shared, I was interested to find in Paris a few days ago, by high personalities in the international health field who are very well informed.' A scientific mission was desirable, he added, but 'what professional bacteriologists will dare to go?'²⁸

Needham was eager to be involved with the proposed commission, but initially saw his role simply as that of facilitator. On 22 April 1952 he wrote to a contact at the WHO that, while not an expert, he would 'gladly' assist a party of bacteriologists with his knowledge of Chinese language and science. In any case, he had already accepted an invitation from the Academica Sinica to visit China during the summer in connection with his research, and would be well placed to help the ISC in a liaison capacity.²⁹ During May 1952 he asked a number of experts in the relevant fields to join the commission, without success. (In all, seven British scientists were formally invited to join and ten informally.)³⁰ Needham did not finally commit himself to the ISC until mid-June when he was already in Prague, on his way to China. Here Professor Tsien san-Tsiang of the Academica Sinica persuaded him to join on the grounds that, first, it might attract adverse comment if he were to be in Beijing at the same time as the commission and not involved with its work, and, secondly, that if he served as liaison officer at least one member of the ISC would know Chinese. He agreed to serve on the clear understanding that he would not be represented as an expert in the various technical fields.³¹ He also felt compelled to write to the president of the Royal Society to make clear that his would be a strictly liaison role: 'I am not, and could not be, a member of such a body, in whose special fields of expertness my competences do not lie.'32 Even at the first meeting of the commission, on 23 June 1952, Needham made clear his professional misgivings

³¹ Needham to 'Pipit', 16 June 1952, IWM, JNP/11.

²⁸ Needham to Sir John Pratt, 22 April 1952, IWM, JNP/10 (emphasis added). Needham was referring to the Paris-based World Health Organization.

²⁹ Needham to S. S. Sokhey, 22 April 1952, IWM, JNP/10.

³⁰ First transcript of press conference, 26 Sept. 1952, IWM, JNP/55, p. 1. Most of the scientists were identified by Needham in a letter to the Press Association (IWM, JNP/55, 31 Oct. 1952).

³² Needham to Professor Adrian (handwritten notes), 16 June 1952, IWM, JNP/11.

at signing the report, and, despite pressure from his colleagues, reserved his position.³³

Needham's conception both of the commission and of his own role within it soon began to change. He wrote to his wife that, once the original idea of a group of eminent scientists had fallen through, 'I thought that a young group was being constituted. But in fact what came into being was neither distinguished (with certain exceptions) nor young. In particular, the presence of at least one non-medical member put me in a fix so that it has be[en] hard to maintain a purely liaison quality.³⁴ He still felt that the commission lacked expertise, and even when it had started work he continued to put pressure on experts such as the British entomologist, W. H. Thorpe, to join.35 From this point, however, nothing more was heard of a 'liaison' role and Needham signed the final report as a full member of the commission. As one Chinese friend commented to Needham's wife on hearing his latest news, 'It now appears that all the idea of caution is wasted and Joseph is stronger than anyone else. He is making history indeed.'36 Once the commission's work was under way, Needham soon emerged as the pivotal figure (understandably, given his knowledge of Chinese, his reputation amongst Chinese scientists and his fluency in French, the language in which business was conducted). The final report clearly bears Needham's imprint, especially in the emphasis that was placed on the alleged American use of Japanese methods of bacteriological warfare.³⁷ Endicott and Hagerman are not alone in referring to the document as the 'Needham report', although he always insisted that it was a collective endeavour and was careful to deny that he was the 'leader' of the commission.³⁸

After a series of sessions in Beijing (23 June – 9 July), the commission moved to Shenyang (Mukden) in north-east China (12–25 July), and then spent nine days in North Korea (28 July – 5 August) before returning to China on 6 August. The report was signed on 31 August in Beijing. The work went through a number of phases. The first task, in Beijing, was to review the evidence that had already been released (known as the 'Prague documents'). Then the commission moved into the field, including visits

³⁵ Needham to J. D. Bernal, 28 June 1952, IWM, JNP/11 (15 July had been agreed as the last date for joining the ISC).

³⁷ ISC Report, pp. 11–12 and 60.

³³ Minutes of the first session, IWM, JNP/17. Needham had stated that: 'Conscient de sa responsibilité devant la Société Royale de Londres, il se demande s'il aura le droit moral d'apposer su signature au bas d'une rapport qu'il comportera necessairement des faits qui sortent de sa competence.'

³⁴ Needham to Dorothy Needham, n. d., IWM, JNP/12. The 'non-medical' member referred to may have been Malterre, an expert in animal husbandry. The journalist Wilfred Burchett attended at least one of the ISC sessions.

³⁶ Hung Ying Bryan to 'Dophi', 15 Sept. 1952, IWM, JNP/75.

³⁸ See, for instance, Needham's notes of his meeting with A. L. Wirin, 2 May 1957: 'NB disabuse of the impression that I was the "leader" or "spokesman"' (IWM, JNP/116). There is no doubt, however, that after returning from China some of the ISC members looked to Needham for leadership, in particular Andrea Andreen, the only female member of the commission.

to the sites of alleged attacks. Numerous eye-witnesses were questioned, including peasants, a captured spy and, highly controversially, some of the captured airmen. In all, some two hundred scientists and four hundred others were questioned, and Needham always felt confident that such a large group of people could not have been involved in some vast 'patriotic conspiracy'. In practice, however, the commission's work was heavily circumscribed. It was not permitted, for instance, to visit sites of any new alleged bacteriological attacks. This opened the ISC to the criticism that the evidence assembled was, in the words of the foreign office minister, Anthony Nutting, 'third-hand': 'It was received through Chinese interpreters from Chinese scientists working on reports from Chinese peasants.'39 While Needham's presence in the commission weakened this criticism, it does appear that the ISC represented less an independent scientific investigation of the allegations than a validation of the Chinese scientists' work. Indeed, the Swedish member of the commission, Dr Andreen, was reported as telling a press conference in September 1952 that the scientific basis of the commission's work was that the delegates 'implicitly believed the Chinese and North Korean accusations and evidence'.⁴⁰

In these circumstances it seems remarkable that Needham was willing to give such firm support to the Chinese allegations – to the extent that he could tell a press conference in Britain that he was '95–97 per cent' sure of their accuracy.⁴¹ On what did Needham's belief in the truth of the allegations rest? First, he was adamant that the evidence of the captured airmen did not influence his judgement. As proof, he later revealed, after the airmen had made their retractions, that prior to entering the war zone the ISC members had each sent a copy of an interim version of the report home to friends (in his case Rev. J. Putterhill, Conrad Noel's successor at Thaxted), and that this interim report drew conclusions that were 'closely similar' to the final version.⁴² However, these comments on the weight given to the airmen's evidence do not square with comments that Needham made on his return from China. At a press conference on 26 September he had said that meeting the airmen was 'one of the most remarkable experiences of my life': they were 'absolutely normal people' and not acting. He was convinced that there had been no use of torture or truth drugs, but only patient efforts to "de-Gook" the prisoners through conversation with Chinese interrogators. He added that he had not asked to speak to the airmen alone as he had not wanted to hurt the feelings of their captors!⁴³ Subsequently, when Needham attended a New Statesman lunch, Richard Crossman sneeringly recorded that 'he

³⁹ 23 Oct. 1952, Hansard Parliamentary Debates, vol. 505, col. 1440.

⁴⁰ New Statesman, xlvi (5 Dec. 1953), 718.

⁴¹ Second transcript of press conference, 26 Sept. 1952, IWM, JNP/55, p. 5. Needham was later to write to Jeanne McDermott that 'now I am 100 percent sure'; J. McDermott, *The Killing Winds: The Menace of Biological Warfare* (New York, 1986), p. 169.

⁴² New Statesman, xlvi (28 Nov. 1953), 675. There is no copy of this interim report in Needham's papers.
⁴³ Second transcript of press conference, 26 Sept. 1952, IWM, JNP/55, p. 6. Needham was probably correct as to the origin of the confessions; see Endicott and Hagerman, *Biological Warfare*,

explained to us how the Chinese reorientated their prisoners away from American criminality and to an appreciation of true spiritual values.⁴⁴ Thus, Needham does seem to have believed that the airmen's testimony was reliable and proof of a genuine act of contrition. In the light of these earlier assessments, Needham's comment after the airmen had made their retractions that 'my reluctant conviction of the truth of the charges *in no way depended* upon what the airmen affirmed⁴⁵ must be deemed somewhat compromised.

Even so, although the airmen's evidence provided the vital link between the phenomena that were being investigated and the American authorities, it is probably true that their evidence was not vital to Needham's case. In part, he appears to have been convinced by his experiences in the field, as he later wrote that his sense of certainty only crystallized after the commission left Beijing in July 1952.⁴⁶ Above all, he placed his trust in the judgement of the Chinese scientists. He privately confided that, given that two-thirds of the report's appendices were composed of evidence submitted by Chinese and Korean scholars, the conclusions did depend 'to some extent in confidence in their integrity'.⁴⁷ He was unwilling to believe that the advent of a communist regime might have affected their working environment or placed them under political pressures. As he told an American scientist in 1953:

If anyone insists on maintaining that a large number of scientists or scholars who were excellent men before, automatically become scoundrels on the same day that a government such as that of Mr Mao Tse-tung comes into power (a government which, by the way, I am convinced has the support of the overwhelming majority of the people) – I do not argue with him.⁴⁸

In the final analysis, therefore, his belief in the veracity of the Chinese allegations was a leap of faith, a personal statement of trust in 'New China', its government and its people of the kind which, he hoped, would be replicated by western governments in their dealings with the People's Republic.

Ш

On his return home, Needham and the ISC were subjected to, in his words, 'violent abuse by the dominant Anglo-American patriotism of the

pp. 155–78. After meeting Needham, Richard Crossman came away with the impression that the meeting with the airmen had been merely 'a public meeting in a school hall', and a 'friendly talk' rather than an 'interrogation'; Richard Crossman, diary entry, 6 Oct. 1952, University of Warwick, Modern Records Centre [hereafter MRC], MSS 154/8/12.

⁴⁴ Richard Crossman, diary entry, 6 Oct. 1952, MRC, MSS 154/8/12.

⁴⁵ New Statesman, xlvi (14 Nov. 1953), 600 (emphasis added).

⁴⁶ Needham to S. O. Davies MP, 25 Oct. 1952, IWM, JNP/57. However, at the seventh session of the ISC, while still in Beijing, the chairman reported that Needham had reviewed the Prague documents and 'déjà il peut répondre sous forme de probabilité à la première question de savoir si le crime de guerre bacteriologique a bien été commis' (IWM, JNP/17).

⁴⁷ Needham to Dr Andreen, 7 Oct. 1952, IWM, JNP/75.

⁴⁸ Needham to Dr Alfred Fisk, 11 Oct. 1953, IWM, JNP/106.

day'.⁴⁹ The only consistent support that he received came from the Communist Party and the Britain–China Friendship Association. The *Daily Worker* described Needham as a scientist and sinologist of 'great authority' who could not be dismissed as a '"fellow traveller"'. It hailed the report as a 'model of objective scientific investigation' and headlined a report of Needham's epic 2¹/₂-hour press conference as: 'Germ War Doubters Routed'.⁵⁰ However, the communists' political point-scoring was often achieved at the expense of accuracy,⁵¹ and this played into the hands of Needham's opponents. He also went on a nationwide lecture tour, addressing public meetings and smaller scientific audiences, and was pleased by the generally sympathetic response that he received.⁵² However, the pressure began to tell on him, and in late December he refused to speak to any more student groups, saving himself for more 'opinionforming' audiences. In April 1953 he refused to face any further public 'interrogation' from those he deemed lacking scientific qualifications.⁵³

The report was sceptically received by the non-communist left, and this reflected the fact that the outbreak of the Korean War in June 1950 (while the Labour Party was still in power) had served to widen the cold war divide between Labour and the Communist Party. The Britain-China Friendship Association had opposed the UN intervention in the war and supported Sir John Pratt's highly controversial claim that the war had started with an attack by South Korea on the North. Few on the Labour left were willing to go this far and many settled for the midway position represented by the 'Peace with China Campaign': hence, they supported a UN intervention to restore the status quo, but opposed any widening of the limited conflict into a full-scale war with China. This solidarity with the UN forces meant that Needham could not expect a warm reception even amongst fellow radicals, and a number of those who met him at a *New Statesman* lunch felt far from satisfied with his performance. Richard Crossman noted in his diary that Needham was a 'nice man' but 'obviously neurotic' and defensive about the report. He had 'seldom heard a worse witness', and concluded that Needham 'didn't go in any way prepared to test the evidence' provided by the Chinese government.⁵⁴ Sir Percy Selwyn-Clarke wrote to Kingsley Martin that the report was 'childish', and hoped that Needham would have 'a quiet holiday for his nerves were all on edge'. Martin replied that Needham had been 'overwrought', and suspected that 'the academic mind finds it difficult to face the kind

⁴⁹ Needham's 1967 typescript for the BBC on 'Chemical and Bacteriological Warfare', IWM, JNP/ 129, p. 8. Dr Andreen also faced strong criticism from Swedish scientists. She wrote regularly to Needham, describing how lonely she had been made to feel on her return and what a 'hard three months' she had since endured; A. Andreen to Needham, 29 Sept. and 3 Dec. 1952, IWM, JNP/75, 76. ⁵⁰ Daily Worker, 16, 20 and 27 Sept. 1952.

⁵¹ Arthur Clegg to Needham, 24 Sept. 1952, IWM, JNP/85.

⁵² Needham to J. Dribbon, 19 Dec. 1952, IWM, JNP/81.

⁵³ Needham to J. Dribbon, 24 Dec. 1952, IWM, JNP/62; Needham to Simon Yudkin, 7 April 1953, IWM, JNP/68.

⁵⁴ Richard Crossman, diary entry, 6 Oct. 1952, MRC, MSS 154/8/12.

of hostility that Joe must now be meeting'.⁵⁵ At least such critics on the left generally expressed their deepest misgivings in private. Needham was treated with far more respect than, say, the 'Red' Dean of Canterbury, whose claim that Chinese children were picking up infected insects with chopsticks was the subject of a satirical poem in the New Statesman.⁵⁶ The New Statesman struggled to keep an open mind on the Chinese allegations, although after the airmen had retracted their confessions it concluded that the 'germ warfare' story was indeed a 'myth'.⁵⁷ Richard Crossman confided to Hugh Gaitskell, prior to the lunchtime meeting, that 'Joe Needham . . . though of course he is a Communist [sic], is also a serious-minded scientist, and the fact that he has signed this report and was permitted to interview the four American airmen, makes me think we cannot dismiss it like that.'58 Far greater public hostility came from a range of critics, some of whom seemed to think that the best way of challenging the commission's findings was by undermining Needham's credibility. Aside from opposition from predictable sections of the press. Needham's principal adversaries fell into three main groups.

First, there were fellow scientists. The two surviving former presidents of the Royal Society, Sir Henry Dale and Sir Robert Robinson, wrote to The Times that Needham's election as an FRS for his work on biochemistry had 'no significant bearing' on the question of bacteriological warfare. They also cast doubts on the 'competence and impartiality' of the members of the commission.⁵⁹ A group of radical scientists, including Bernal and Haldane, drafted a defence of Needham. Interestingly, however, his Cambridge colleague and fellow sinophile, Bill Pirie, refused to sign on the grounds that he did not think that the ISC report would 'stand investigation' and contained a 'lot of nonsense'.60 Sir George Thomson, master of Corpus Christi, Cambridge, wrote to the New Statesman that Needham's involvement with the ISC merely proved that 'it is not always easy even for an experienced scientist to discard a favourite hypothesis when the evidence fails to support it.' He shared the repugnance of an earlier correspondent, Professor A. V. Hill of the British Association for the Advancement of Science, for 'the prostitution of science for purposes of propaganda'.⁶¹ Hill also wrote that Needham was 'one of the most

⁵⁶ New Statesman, xliv (12 July 1952), 34.

- ⁵⁹ The Times, 17 Oct. 1952.
- ⁶⁰ J. D. Bernal to Needham, 21 Oct. 1952, IWM, JNP/87.
- ⁶¹ New Statesman, xlvi (21 Nov. 1953), 635; xlvi (5 Dec. 1953), 718. Needham commented that Thomson must have been 'put up' in the spurious hope that the 'dignity of a Head of House would

⁵⁵ P. Selwyn-Clarke to K. Martin, 6 Oct. 1952, and Martin's reply, 7 Oct. 1952, University of Sussex, Kingsley Martin Papers, correspondence file 1948–52. Sir Percy had been the director of medical services in Hong Kong, and was the husband of Hilda Selwyn-Clarke, a leading figure in the China Campaign Committee and the Fabian Colonial Bureau.

⁵⁷ Ibid. (12 Dec. 1953), 748–9. John Freeman, deputy editor of the *New Statesman* wrote on 3 Dec. 1953 to tell Needham that the debate was to be wound up as it had become an 'affirmation of faith' on both sides, but that Needham would be allowed the last word (IWM, JNP/108).

⁵⁸ Richard Crossman, diary entry, 24 Sept. 1952, MRC, MSS 154/8/11. Gaitskell had responded with a 'wave of icy disapproval'.

innocent people in the world', and that, with respect to his allegations, 'laughter is the best solvent of nonsense'.⁶² The organization Science for Peace commissioned its own critical review of the ISC report, which was found to contain 'obvious gaps and defects', and concluded that no 'complete scientific proof' had been offered.⁶³

Secondly, Needham was attacked by supporters of the United Nations. In early October 1952 a number of leading figures in the United Nations Association and the English Speaking Union wrote to The Times calling for scientific scrutiny of the ISC report, noting that the commission had taken evidence only on the 'Communist side of the line'.⁶⁴ When Needham replied he, perhaps misguidedly, did so under his title as vicepresident of the UNA's eastern region. He was promptly criticized by the regional council for abusing his position and was asked not to use his title in this connection. Needham considered resignation, but was advised against by Jack Dribbon, the communist secretary of the BCFA, on the grounds that 'the question of b[acteriological] w[arfare] is not finished'. He was also advised by Victor Purcell, the Cambridge far eastern expert, that it would be difficult to obtain 'sufficient publicity for a resignation or expulsion'.⁶⁵ Although agreeing not to use his title again in this context, Needham took the attack back to the UNA. He said that the organization's leaders were acquiescing in a conception of the UN that would lead to a third world war. The UNA should direct its energies at protesting against American domination of the UN, and he would not give up his belief in the need of its 'thorough reformation'.⁶⁶ The national political committee of the UNA decided not to accept Needham's offer to meet them, on the grounds that the UNA should 'do nothing that would secure publicity for Dr Needham or appear to suggest that his views had value'.67

Finally, Needham had to face two particularly dogged and difficult opponents. One was John Clews, a 31-year-old former vice-president of the National Union of Students who had travelled extensively in the Soviet Union and China. Clews, who was currently secretary of the British Society for Cultural Freedom, appears to have devoted himself to rebutting the ISC's findings. He bombarded Needham with lists of detailed questions, and published a pamphlet, *The Communists' New Weapon: Germ Warfare*, in 1953. He also spoke at Chatham House in

overwhelm me'; Needham to Sydney Hilton, 8 Dec. 1953, IWM, JNP/108. Needham had already been attacked by the master of St Catharine's, Cambridge, Donald Portway, as a chemist who would 'believe anything anyone would tell them as long as it agreed with their Leftish leanings'; 'Francis' to Needham, 3 Nov. 1952, IWM, JNP/91.

⁶² A. V. Hill, foreword to John Clews, The Communists' New Weapon: Germ Warfare (1953).

⁶³ New Statesman, xlvi (5 Dec. 1953), 718.

⁶⁴ The Times, 3 Oct. 1952; signatories included Gilbert Murray and Lord Halifax.

⁶⁵ Needham to J. Dribbon, 16 Nov. 1952, and J. Dribbon to Needham, 25 Nov. 1952, IWM, JNP/ 61.

⁶⁶ Needham to A. Fuller, 20 Nov. 1952, IWM, JNP/56. On 13 Dec. 1952 Needham met the UNA's eastern regional council; see CUL, Add. 8950, 1/1/1, minutes.

⁶⁷ L. O. Lyne to Needham, enclosing minute dated 4 Nov. 1952, IWM, JNP/86.

November 1952 where he sought to undermine Needham's credentials as an expert on bacteriological warfare. (Sir John Pratt privately denounced this speech as evidence of a 'smear campaign.')⁶⁸ Needham's other principal tormentor, the Conservative MP for Canterbury John Baker White, also saw the scientist's wartime experiences as his Achilles' heel. He used a parliamentary question to elicit from the foreign office a statement that no reports of bacteriological warfare had been received from Needham in 1944. He also wrote letters to *The Daily Telegraph* and conducted a long and surprisingly detailed correspondence with Needham, seeking to cast aspersions on his status in the British diplomatic mission in China during the war.⁶⁹

The rigorous and detailed questioning that Needham's allegations were subjected to by Clews and Baker White would have been impossible without government assistance. Clews admitted that he had been allowed by the foreign office to study Needham's wartime dispatches, and Needham was also convinced that Baker White was receiving official assistance with his correspondence. As Hewlett Johnson, the dean of Canterbury and one of Baker White's constituents, observed, the MP was second-rate and there was clearly 'an abler hand behind what he writes'.⁷⁰ However, it was only with the opening of the public records that the full extent to which the foreign office sought to orchestrate the campaign against the 'germ warfare' allegations in general, and against Needham in particular, becomes apparent.

IV

The foreign office response to the Chinese allegations was initially somewhat relaxed, partly because they were directed specifically against the US and did not seem to be damaging British interests elsewhere in Asia. A paper issued in June 1952 claimed that the allegations were 'completely and utterly false', although some 'ignorant peasant or low-grade army officer [may have] genuinely thought that the Americans were in some way responsible for epidemics or unusual insect life which he observed on the spot . . .'. The allegations were presented as part of the 'long-term [communist] strategy of political warfare', forming the latest stage of a campaign to blacken the image of the western powers in the eyes of world opinion. The foreign office believed that the campaign would culminate in a show trial of the captured airmen as war criminals.⁷¹ The document reflected the judgement of the foreign office's anti-communist propaganda wing, the Information Research Department (IRD), that it would be wrong to give too much credence to the Chinese allegations, and that 'no

⁶⁸ Sir John Pratt to Victor Purcell, 23 Nov. 1952, School of Oriental and African Studies, Pratt Papers, PP MS 5/16.

⁶⁹ 8 Dec. 1952, Hansard Parliamentary Debates, vol. 509, col. 2; The Daily Telegraph, 11 Dec. 1952.

⁷⁰ H. Johnson to Needham, 19 Feb. 1953, IWM, JNP/67.

⁷¹ 'The Communist Germ Warfare Campaign', Public Record Office, Kew [hereafter PRO], FO 975/62.

special measures seem to be required'.⁷² The strategy was set out in a message to commonwealth governments in May 1952, in which it was stated that policy objectives included: 'To expose the absurdity of the evidence – among the vectors recently mentioned in Communist propaganda are pancakes, domestic utensils, various small live animals and birds, to quote only the more obviously improbable examples.' And:

To expose the servile nature of the so-called investigators who are all members of Communist organisations, fellow-travellers or obvious Communist dupes like Brandweiner, leader of the delegation of the International Association of Democratic Lawyers, who although not a known Communist is a member of the World Peace Council and has made the pilgrimage to Moscow.⁷³

By the summer, however, concern was beginning to grow that the communist campaign might be succeeding. Opinion polls showed that, on average, 18 per cent of people in western Europe responded 'don't know' when asked about the allegations, and this rose to 29 per cent in France. Dean Acheson told Sir Pierson Dixon in late May that the US government was worried by the 'intensity and volume' of the campaign, and feared that it might portend 'something sinister'. Unlike most communist propaganda campaigns, he added, this channelling of hatred at the west - and in particular at America - could not be turned off at will.⁷⁴ In this environment, the presence of the ISC scientists in China caused some alarm. On 13 August T. S. Tull of the IRD wrote that, 'if new and more rational scientific "evidence" were to be concocted', the Chinese allegations may well receive wider acceptance, and that it seemed likely that the scientists would 'present a new and more convincing body of scientific evidence' on their return. 'The presentation of "foolproof" evidence of biological warfare', he continued:

need not be a very difficult task. Biochemists of the quality of Dr. Needham, moreover, are most unlikely to give their imprimatur to evidence which can easily be proved false. It may be difficult, then, to provide an effective answer to any such allegations unless the ground has been thoroughly prepared beforehand.

Tull was convinced that any response must come from Needham's peers in the scientific community, but noted that attempts to induce the Medical Research Council and the London School of Tropical Medicine to issue a 'public and systematic refutation of the charges' had been politely rebuffed. Accordingly, he felt that a 'higher level' approach should now

⁷² IRD memorandum circulated on 2 April 1952, PRO, FO 1110/494, PR 41/68. On the IRD response to the germ warfare allegations, see Tony Shaw, 'The Information Research Department of the British Foreign Office and the Korean War, 1950–53', *Journal of Contemporary History*, xxxiv (1999), 278–9.

⁷³ Document circulated by Commonwealth Relations Office, 6 May 1952, PRO, FO 1110/494, PR 41/68.

⁷⁴ Memorandum by Sir Pierson Dixon, 27 May 1952, PRO, FO 1110/494, PR 41/125/G.

be made to the Royal Society. His colleague J. W. Nicholls supported this strategy as one that would 'go a long way to protect us against the risk (which I think is quite a serious one) that some scientifically plausible evidence has been concocted for the benefit of Dr. Needham'.⁷⁵

The approach to the Royal Society was initially unsuccessful, as Tull regretfully reported on 22 August 1952. However, he favoured an alternative plan whereby an official 'with many years experience in the academic world at Cambridge' (whose name has been deleted from the record) should make a 'strictly informal' approach to Professor Adrian, the Royal Society's president, and Professor C. N. Hinshelwood, its secretary for foreign affairs. While it was accepted that such contacts might not bring immediate benefits on the 'germ warfare issue', it would draw to their attention the 'difficulties which the refusal of reputable scientific bodies in this country to become involved in political matters causes us', and would suggest to them that 'circumstances may arise in which even bodies like the Royal Society cannot indefinitely remain aloof'.⁷⁶ This approach was clearly more fruitful as a foreign office briefing for the prime minister in September 1952 on the response to the 'germ warfare campaign' noted that 'secret and informal contact is now established with the President and officers of the Royal Society. While their constitution precludes them from any corporate pronouncement on such a subject, they are much concerned at the part played by one of their members [i.e. Needham] in this Communist operation."77

The foreign office received assistance in this matter from C. W. Judd, general secretary of the United Nations Association, and from F. O. Darvall of the English Speaking Union. In addition to writing to *The Times* calling for an enquiry into Needham's allegations, both men had also 'unsuccessfully pressed' the Royal Society to 'issue a denunciation of the Needham report' and had 'very kindly kept I.R.D. informed'. The two men came to see Anthony Nutting at the foreign office on 5 December 1952 to ask the government to make its own rebuttal of the report. They were fully briefed before their visit. They were sent foreign office memoranda relating to allegations of Japanese bacteriological warfare in China dating from 1941, which had been officially classed as 'not proven'. They were also sent a copy of an IRD paper on 'germ warfare propaganda', which would argue that Russia was really behind the campaign.

⁷⁵ T. S. Tull to J. W. Nicholls, 13 Aug. 1952, and Nicholls's reply of 14 Aug. 1952, PRO, FO 1110/ 494, PR 41/247.

⁷⁶ Tull's note on his meeting with Dr A. King (Department of Scientific and Industrial Research) and two others whose names have been deleted from the record, 22 Aug. 1952, PRO, FO 1110/494, PR 41/247.

⁷⁷ Note sent to prime minister's office by J. H. Peck, 27 Sept. 1952, PRO, FO 1110/494, PR 41/273. The archives of the Royal Society are largely silent on this issue. However, the minutes of the officers' meeting of 26 Sept. 1952 do confirm that an appointment had been made to discuss the bacterial warfare allegations with a foreign office official. At a subsequent officers' meeting on 16 Oct. '[i]nformation concerning the proposal by individual Fellows to write to the newspapers in the United Kingdom and the U.S.A. regarding the report signed by Dr J. Needham was noted'.

This paper had already been studied by Geoffrey Hudson, a fellow of All Souls, who was intending to attack Needham in *The Economist*.⁷⁸ The visitors were also forewarned of Baker White's parliamentary question about Needham's 1944 report, and were tipped off that no such report existed. However, this body of documentation merely sugared the pill of Darvall and Judd's failure to persuade the foreign office to launch its own enquiry. Nutting stated that all he could do was pour 'as much ridicule upon [the ISC report] as possible' and, in his phrase, the visitors 'went sadly away'.⁷⁹

These contacts formed part of a wider pattern of activity by the foreign office intended to prevent the Chinese allegations from gaining credence. The tactic adopted, as set out by the IRD, was that counterpublicity 'should originate in non-governmental circles, and especially among scientists. The official machinery can then be discreetly used to publicise their comments.³⁰ A number of journalists, such as W. N. Ewer, were given material for articles, and the diplomatic correspondent of the BBC was 'specially briefed'. A pamphlet by Baker White attacking the dean of Canterbury's role in the 'germ warfare' campaign was described as being 'based on material prepared in the Foreign Office'. The IRD prepared briefings for a number of newspapers such as The Daily Telegraph, and even for a letter circulated by Transport House to local Labour parties in June 1952.⁸¹ In the circumstances, John Clews's pamphlet attacking Needham must be seen, as Endicott and Hagerman surmised, as 'official propaganda'.⁸² The British Society for Cultural Freedom, of which Clews was secretary, was the British branch of the CIA-funded Congress for Cultural Freedom, and, according to one recent account, Clews had been inserted into this post by the IRD as 'their man'.⁸³

V

The 'germ warfare' affair illustrates clearly the reality of what the *New Statesman* in 1953 termed 'the propaganda war, in which we live'.⁸⁴ Both sides in the cold war had too much at stake and too much to hide to be genuinely interested in proving or disproving the Chinese allegations.

 78 A foreign office note of 10 Dec. 1952 reported that 'unfortunately the *Economist* has decided not to pursue this.'

⁷⁹ Memorandum briefing Nutting prior to his meeting with Judd and Darvall; Nutting's memorandum for the IRD after the meeting, 5 Dec. 1952, PRO, FO 1110/494, PR 41/366.

⁸³ Frances Stonor Saunders, *Who Paid the Piper? The CIA and the Cultural Cold War* (1999), p. 111. Clews's pamphlet was undoubtedly influential; see Rees, *Korea*, p. 359.

⁸⁴ New Statesman, xlvi (12 Dec. 1953), 748.

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⁸⁰ Undated memorandum by the IRD on 'The Germ Warfare Campaign', PRO, FO 1110/494, PR 41/273.

⁸¹ Note from J. H. Peck to prime minister's office, 27 Sept. 1952, PRO, FO 1110/494, PR 41/273. ⁸² Endicott and Hagerman, *Biological Warfare*, p. 142. It is notable that Clews's pamphlet closely followed the IRD line in blaming the fabrication of evidence of germ warfare allegations on Soviet 'special units', rather than on the Chinese (*The Communists' New Weapon: Germ Warfare*, pp. 29– 30).

Accordingly, in place of rational debate there arose a politics of absurdity: it was simpler to ridicule an opponent and seek to destroy a reputation than to face uncomfortable facts. In this 'propaganda war' the donnish figure of Joseph Needham appeared as a threat precisely because, unlike the dean of Canterbury, he was not a figure of fun. He does not seem to have been influenced by political motivations but rather by humanistic feelings for the peoples of Asia, given focus by his own experiences in China during the war. He was also lucid, persuasive, and, as a respected academic, difficult to dismiss as a crank. However, this does not mean that he was right. As we have seen, Needham's private papers expose the shortcomings in the work of the ISC far more effectively than his contemporary critics were able to do. Needham joined the commission against his own better judgement, and it was surely irresponsible of him to claim '95–97 per cent' certainty in a field in which he was not an expert. Moreover, the work of the commission was heavily restricted by the Chinese and Korean authorities, and in many respects simply verified the evidence that they supplied. The meetings with the captured airmen bordered on farce. Ultimately, Needham's belief that bacteriological warfare had occurred owed much to his noble, but perhaps quixotic, willingness to accept the word of the Chinese scientists.

Despite these qualifications, and despite Endicott and Hagerman's failure to find a 'smoking gun' in the archives, it is important to note that Needham (who stood by the ISC's findings for the rest of his life)⁸⁵ has been vindicated on a number of points. The extent of American use of Japanese bacteriological expertise was finally revealed in 1980, and there is also now abundant evidence that America did develop a germ warfare capability (for 'defensive' uses) during the Korean War.⁸⁶ No final verdict can be reached until all of the relevant archives are opened for scholarly investigation. Although recent revelations make it highly improbable that Needham will be vindicated on his central allegation, there is no doubt that he showed tremendous courage in standing by his convictions in the face of organized public hostility. Indeed, one admirer went as far as to insist that Needham had shown 'the courage of Galileo' in speaking 'the truth' during these dark days.⁸⁷

However, Needham's reserves of courage had been sapped by these experiences. The degree to which he had been scarred by his sustained defence of the ISC report was cruelly exposed by a strange footnote to the 'germ warfare' story. In 1956, the editors of *China Monthly Review*, John and Sylvia Powell, and Julian Schuman, were charged on their return

⁸⁵ It is notable that Needham subsequently drew back from the harsh language of the ISC report. For instance, in later years he emphasized that the bacteriological warfare in Korea was experimental and that it did not do much harm; see, for instance, Needham to Robert Simmons, 25 Nov. 1970, IWM, JNP/130.

⁸⁶ See Endicott and Hagerman, *Biological Warfare*, pp. 43-87.

⁸⁷ Hung Ying Bryan to Needham, reporting the comments of a Chinese scientist, 30 Oct. 1952, IWM, JNP/75.

to the US with sedition and conspiracy. (After a five-year ordeal, all charges against them were finally dropped in 1961.) Part of the indictment related to the publicity that the editors had given to the ISC report, and their lawyers asked members of the commission to come and give evidence for the defence at the trial. Needham declined, citing shortage of time, expense, the lack of a visa, and his antipathy to the US administration.⁸⁸ When the more practical of these obstacles had been removed. he was forced to offer a more personal reason. He did not, he told a friend, wish to 'go again through the storm of abuse' of 1952. With the thaw in the cold war his position in his college was improving, and he was now on its consilium after thirty-two years of 'ostracism'. Moreover, to attend the trial would conflict with his 'primary duty' to finish Science and Civilisation in China⁸⁹ (and might jeopardise funding for the project).⁹⁰ The Powells' lawyers now tried another tack, sending one of their number, A. L. Wirin, to Europe to ask the members of the ISC to sign legal depositions under cross-examination. Wirin already had agreement from two ISC members when he met Needham on 2 May 1957. Needham stood his ground, concerned that the proposed action would damage the 'status of the Commission'. According to notes that he jotted down at the meeting:

point out that a trial of this kind might seem to the world public as a trial of the commission's conclusions If it failed that would be bad don't want to be party to that.⁹¹

On 9 May he wrote to all ISC members, successfully urging them not to make the statements. To participate in an American judicial process, he argued, would be to extend the 'witch-hunting methods of American courts to a world level', and open ISC members to questioning of their political affiliations. It would be 'utterly infra dignitatem', he went on, for ISC members to submit to an American court. Despite his sympathy for the Powells' 'dreadful plight', Needham was therefore unwilling, for personal, professional and political reasons, to see the ISC report subjected to any new investigation.⁹² The report was to be set, as it were, in aspic. As he told the Powells' lawyer: 'the matter is as far as I am concerned closed.'⁹³

⁸⁸ Needham to Doris Brin Walker, 22 July 1956, IWM, JNP/115. The defence later offered to pay some of his expenses, and, as James Endicott pointed out, the court could order a visa for Needham; J. Endicott to Needham, 7 Sept. 1956, IWM, JNP/115.

⁸⁹ Needham to Rewi Alley, 21 Oct. 1956, IWM, JNP/115. Alley was a New Zealander, resident for many years in China. He had written on 28 Sept. urging Needham to attend the trial.

⁹⁰ Needham to D. Bryan, 14 Dec. 1956, IWM, JNP/115.

⁹¹ Needham's notes of his meeting with A. L. Wirin, 2 May 1957, IWM, JNP/116.

⁹² Needham to Huan Hsiang, enclosing a copy of the letter to members of the ISC, 9 May 1957, IWM, JNP/116.

⁹³ Needham's notes of his meeting with A. L. Wirin, 2 May 1957, IWM, JNP/116.