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## Science, Technology, and the “Special Relationship”: A Re-examination of Britain’s Support for the Strategic Defense Initiative

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In March 1983, President Ronald Reagan called upon the American scientific community to use its talents to develop a capability that would render nuclear weapons obsolete. The president’s vision for a nuclear-free world became the basis for his Strategic Defense Initiative (SDI), a concept for a multi-layered missile defense system with interceptors on land and in space. However, even though SDI had the potential to fundamentally change NATO’s nuclear strategy and the balance of power between the United States and the USSR, the U.S.’s European allies were not consulted prior to President Reagan’s speech. Now, due to the declassification of British national security documents from Margaret Thatcher’s tenure as prime minister, it is possible to begin investigating the British motivations for participating in SDI. Publicly, the British supported SDI and its political objectives, but formerly top-secret documents from the British Ministry of Defense (MoD), Foreign and Commonwealth Office (FCO), and the senior British scientific advisor to the prime minister reveal a more complicated British attitude toward SDI.

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In March 1983, President Ronald Reagan called upon the American scientific community to use its talents to develop a capability that would render nuclear weapons obsolete. The president's vision for a nuclear-free world became the basis for his Strategic Defense Initiative (SDI), a concept for a multi-layered missile defense system with interceptors on land and in space. However, even though SDI had the potential to fundamentally change NATO's nuclear strategy and the balance of power between the United States and the USSR, the U.S.'s European allies were not consulted prior to President Reagan's speech. Now, due to the declassification of British national security documents from Margaret Thatcher's tenure as prime minister, it is possible to begin investigating the British motivations for participating in SDI. Publicly, the British supported SDI and its political objectives, but formerly top-secret documents from the British Ministry of Defense (MoD), Foreign and Commonwealth Office (FCO), and the senior British scientific advisor to the prime minister reveal a more complicated British attitude toward SDI.

Senior British defense officials seriously doubted the feasibility of SDI.<sup>28</sup> Nevertheless, Thatcher's science and national security advisors recognized that even if SDI did not come to fruition, there could still be breakthroughs in optical, information, and computing technologies that would be of great value to the MoD and British industry. The prime minister's advisors urged her to establish a bilateral cooperative agreement with the United States so that the UK could take a more prominent role in SDI research than its European peers. Senior British officials hoped that granting the United States access to their best scientists would lead to more political equality in their relationship.

Since the end of the Second World War, the UK had been increasingly concerned with the United States using science and technology as tools of political coercion. The cooperative nature of Anglo-American technology-sharing established through the Manhattan Project had come to an abrupt end after the conclusion of the war. Although the United States and the UK ultimately resumed their close cooperation in nuclear weapons, the relationship was not without difficulties.<sup>29</sup> Senior British officials hoped that granting the United States access to the best British scientists for this research program would lead to more political equality in the U.S.-UK relationship.

Perhaps most importantly, Britain wanted to ensure that SDI would not negatively affect the future of its own nuclear deterrent. Thatcher believed that Britain's political relevance was intrinsically linked to its maintenance of a credible nuclear capability. The UK was in the process of upgrading its nuclear arsenal when SDI was announced, and the potential shift from offensive to defensive technologies was unsettling to the prime minister and her cabinet.<sup>30</sup> The British government believed that intimate involvement with SDI research and development would enable the UK to influence the program and could preserve the role of offensive

nuclear weapons.

This paper argues that the UK believed that contributing to SDI research was a national security and scientific imperative. Through direct involvement with the program, London hoped to increase its ability to shape U.S. arms control policy and thus preserve the future of the UK’s nuclear deterrent. The British also hoped that close cooperation with the United States on SDI-related research would advance the UK’s scientific and technological standing in the world.

## **Science, Technology, and the Special Relationship**

Since the Second World War, the term “special relationship” has been used to describe the close relations between the United States and the UK. According to researcher Theodore Bromund, “it applies particularly to the government realms of foreign, defense, security, and intelligence policy ... [and] captures a broader sense that both public and private relations between the United States and Great Britain are particularly deep and close.”<sup>31</sup>

More recently, historians of science and technology have begun to devote greater attention to the relationship between science, technology, and international relations. John Krige has firmly placed the concept of hegemony (i.e., dominance by a particular country of the international system) within the historiography of science and technology.<sup>32</sup> Peter Westwick has applied Krige’s observations on the connections between diplomacy and science to the context of SDI, arguing that “decades of exposure to American political, military, and economic dominance in the Cold War conditioned the international response to SDI.”<sup>33</sup>

Exploring Anglo-American relations through the lens of the history of science and technology provides a new paradigm for examining the nature of the special relationship during the Cold War. In 1958, the United States and the UK signed the U.S.-UK Mutual Defense Agreement that allowed the transfer of classified information regarding atomic weapons and nuclear technology.<sup>34</sup> This agreement represents the most comprehensive American scientific and technology transfer contract in the field of national security and underlines the special status accorded to the UK in American foreign relations.<sup>35</sup>

Thatcher herself directly connected science and diplomacy when she stated in her memoirs that “[SDI] was one of those areas in which only a firm grasp of the scientific concepts involved allows the right policy decisions to be made” and that she “kept tight personal control over decisions relating to SDI” because of its importance for Anglo-American relations.”<sup>36</sup> The UK sought to use its best scientific talent as a mechanism for securing greater access to sensitive U.S. defense research and to shape American foreign policy with regard to arms control.

## **Seizing Opportunity: Britain’s Support for SDI**

The British recognized that the United States would need their scientific talent for SDI. And they did not want to suffer a scientific “brain drain” from their best scientists leaving the UK to be involved in SDI research.<sup>37</sup> Thus, participating in SDI became a scientific – in addition to national security and economic – imperative to prevent the United States from expanding its scientific hegemony on the European side of the Atlantic. Britain also saw the potential for establishing a bilateral technology-sharing agreement that would prevent its European partners from receiving equal benefits from SDI-related research. The implications of SDI for Britain’s nuclear deterrent were also a central imperative for London’s involvement with the program. SDI thus provided the UK an opportunity to increase its importance to the United States as a defense partner, while maintaining control over its human scientific capital. It also would allow Britain to advance its scientific and technological standing in Europe.

The British made a fundamental distinction that was the foundation of their approach to SDI. That is, they separated the benefits derived from cooperating on SDI research from the strategic and geopolitical consequences of a fully operational SDI capability. Many of Thatcher’s advisors never viewed the latter as technologically feasible. They did, however, believe that the scientific and technical requirements for SDI would directly benefit UK defense and industrial interests. The American government viewed allied support as a necessity for establishing the political legitimacy of the program. Thus, the UK believed that it could trade access to its best scientists for a greater role in shaping American foreign policy.

After U.S. Secretary of Defense Caspar Weinberger sent a formal offer to the U.S.’s allies to participate in SDI in March 1985, the British government carefully began to consider its defense, scientific, industrial, and economic interests in relation to the program. Sir Robin Nicholson, the prime minister’s scientific advisor, stated that “whether or not SDI succeeds in its strategic aims, the very large U.S. spend [sic] will produce substantial technical advances in areas of importance to conventional defense and to civil industry.”<sup>38</sup> He highlighted the fact that some of the 40,000 scientists the United States required for SDI research would have to come from Britain. He said that the scientific resources for the program would come from the UK and other countries “either through hijacking of individuals and groups under U.S. initiative and U.S. terms or in a way in which the foreign country retains some control and bargaining power.”<sup>39</sup>

Nicholson was opposed to the idea of a multilateral approach to SDI participation – advocated by the British Secretary of State for Defence Michael Heseltine – that would include sharing research and scientific advancements with European allies. Heseltine’s rationale was that such a multilateral arrangement would involve the Europeans and create “an alternative pool of information” which would

"increase our knowledge of SDI as a whole."<sup>40</sup> But Nicholson stated that "we have a unique and hard-won position of being the only country with a respected and trusted position on defense science and technology with both the United States and Europe" and "we should exploit this position ruthlessly."<sup>41</sup> Nicholson recommended securing most-favored status with the United States regarding funding and access to sensitive technologies developed as a result of SDI.

Nicholas Owen, policy advisor to Thatcher, expressed the opinion that British "participation [in SDI] is worth a high price and the Americans expect to pay one."<sup>42</sup> He, like Cabinet Secretary Sir Robert Armstrong, strongly advocated a bilateral approach to cooperation because he believed that a multi-lateral cooperative agreement would be a disincentive to U.S. technology transfer and sensitive scientific collaboration. Owen stated that the prime minister should use UK participation to gain not only technological benefits, but also to increase Britain's political capital with the United States. He saw this as an opportunity to create an arrangement whereby the UK would be able to influence U.S. policy on nuclear weapons and future arms control agreements with the Soviet Union.<sup>43</sup> The potential political benefits, thus, were of at least equal value to the expected technological advancements from SDI research and development.

On July 22, 1985, Secretary of State for Defence Heseltine met with U.S. Secretary of Defense Weinberger to commence discussions about establishing a framework for the UK's involvement in SDI. Heseltine proposed that the UK receive 5% (\$1.5 billion) of SDI's budget for research and development over a 5-year period.<sup>44</sup> He argued that the UK was incurring significant political risk by involving itself in the program and was opening itself to the criticism that "Trident [Britain's upgraded nuclear delivery vehicle] could not be afforded and that SDI was against our interests."<sup>45</sup> Heseltine also requested that SDI-related information must flow unrestricted between the United States and Britain.

Weinberger was not enthusiastic about the idea of setting aside a specific percentage of SDI's budget for the British. He explained to Heseltine that American law dictated that defense contracts be awarded to the lowest bidder. The UK was forced to accept the reality that even though it had shown more support for SDI than any other American ally, U.S. financial interests codified in its laws could not be easily surmounted.

Heseltine also emphasized the necessity for equality between U.S. and British organizations involved in research. He was dissatisfied with what he perceived to be American reluctance to establish an equitable partnership. Just before the United States and the UK formally signed an SDI participation memorandum of understanding in December 1985, Thatcher's private secretary stated that the agreement was not "watertight ... [but] is generally satisfactory."<sup>46</sup> Nevertheless, the UK was never able to secure its desired financial commitments and information-sharing

reciprocity from the United States.

### **What did the UK gain from supporting SDI?**

In addition to the UK, by 1987, West Germany, Israel, Italy, the Netherlands, and Japan had signed formal agreements with the United States regarding their participation in SDI research.<sup>47</sup> That same year, West Germany was outpacing the UK in securing SDI contracts; West Germany received over \$49 million in contracts compared with \$30 million for the UK. By 1990, the UK had only received 19% of all foreign SDI-related direct contracts worth a total of \$56.7 million, a paltry sum compared to the \$1.5 billion that Britain originally requested.<sup>48</sup> Furthermore, by the end of the 1980s, the U.S. Congress was slashing SDI’s budget, given the collapse of the Soviet Union and the changing strategic environment.

In 1987, the British Parliament issued a special report called “The Implications for the United Kingdom of Ballistic-Missile Defense,” which blamed U.S. bureaucratic procedures for the limited number of SDI contracts awarded to the UK.<sup>49</sup> The report also stated that restrictions on technology transfer made it difficult for Britain to secure contracts related to “operationally sensitive” areas of SDI.<sup>50</sup> Due to the still-classified nature of a significant portion of SDI research, it is not yet possible to fully investigate whether or not participation in SDI gave the British a technological and scientific edge over their European peers. This is, however, unlikely, given the stringent nature of U.S. technology transfer limitations in place at the time.

The UK was also not able to use its political support for SDI to achieve its goal of establishing significantly greater influence over U.S. foreign policy, especially with regard to arms control. The U.S.-Soviet negotiations at Reykjavik are a case in point. At this forum, Reagan pushed for the total elimination of all ballistic missiles over a 10-year period.<sup>51</sup> Such a move would have had a detrimental effect on Britain’s future as a nuclear power.<sup>52</sup> Fortunately for the UK, then Soviet General Secretary Mikhail Gorbachev predicated the deal on Reagan’s abandonment of his full SDI vision, which he refused. Shortly thereafter, Thatcher travelled to Washington to meet with Reagan regarding nuclear strategy. She expressed her deep concerns over what had transpired at Reykjavik and emphasized the necessity for NATO to maintain a credible nuclear deterrent.<sup>53</sup> Reagan understood her concerns and they agreed that SDI research would stay within the confines of the 1972 Anti-Ballistic Missile Treaty, which significantly limited the ability of the United States and the USSR to pursue strategic defense systems and solidified the preeminence of national defense based on nuclear deterrence and mutually assured destruction. Additionally, Reagan confirmed (to Thatcher’s relief) that NATO’s strategy would “continue to require [for the foreseeable future] effective nuclear deterrence, based

on a mix of systems.”<sup>54</sup> Thus, SDI did not significantly impede the close relations that both leaders had worked so diligently to cultivate.

## Conclusion

British support for SDI during the final chapter of the Cold War, in contrast to the reaction of other European allies, could easily be mistaken for yet another sign of the special relationship between the United States and the UK. Margaret Thatcher’s public support for SDI stood in marked contrast to the vociferous criticisms of many of her European colleagues. To date, the UK’s support for SDI has been attributed to the potential economic benefits of participation and the ideological similarities of Reagan and Thatcher regarding the struggle against communism. However, as in so many other areas of politics and human affairs, the real motivations for London’s participation in SDI were more complex and nuanced.

While publicly supporting the initiative, several senior British national security officials privately insisted that the program was not scientifically feasible in the near term. The UK did, however, view SDI as an opportunity to expand its scientific, technological, and geopolitical resources; trade political support for unfettered access to American technology; and achieve a greater role in shaping U.S. foreign policy. It also saw an opportunity to use the program to gain a technological and scientific edge over its European peers.

Ultimately, Britain failed to fully realize these scientific, political, and technological goals. Britain did not secure most-favored status when competing for SDI research contracts, it failed to persuade the United States to share fully the most sensitive aspects of the program, and it did not give the UK a significantly greater role in influencing American foreign policy. This episode reveals, nonetheless, that scientific and technological concerns can have a significant impact on international relations and diplomacy. The British viewed their scientific capital as a political tool, and saw SDI as an opportunity to further their scientific and foreign policy goals. Even though London and Washington had divergent views on SDI, the U.S.-UK special relationship endured through the tumultuous end of the Cold War. **SD**

## Endnotes

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