

# Institutionalization, path dependence and the persistence of the Anglo-American special relationship

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Admiral William Crowe, US Ambassador to the UK between 1994 and 1997, once said in a BBC interview: 'I have always described the relationship like an iceberg, in that there is a small tip of it sticking out, but beneath the water there is quite a bit of everyday business that goes on between our two governments in a fashion that's unprecedented in the world.'<sup>1</sup> He was accurate in his iceberg metaphor in that the Anglo-American special relationship (AASR) runs deep in the water, and its functioning is facilitated and sustained by the intimate cooperation in everyday business between the UK and the US. The real strength of the AASR lies in the unprecedented and inextricably close daily cooperation on intelligence, nuclear and military issues.

The US also arguably has special relationships with Australia, Canada, France, Israel, Japan, Mexico, the Netherlands and New Zealand.<sup>2</sup> But none of these special relationships involve more special intelligence, nuclear and military cooperation than the AASR does. Anglo-American intelligence, nuclear and military relations have been highly institutionalized. Institutionalization is an important contributing factor in the persistence of the AASR in the post-Cold War era.

Scholars of Anglo-American relations largely ignore the institutionalization factor. Instead, they continue to employ the traditional concepts of 'common sentiments' and 'common interests' to explain the persistence of the AASR. According to Danchev, there are three schools of Anglo-American relations: the evangelical school, the functional school and the terminal school.<sup>3</sup> In a similar vein, Dobson and Marsh categorize scholars of Anglo-American relations into two schools, namely, the school of sentiment and the school of interests.<sup>4</sup> A closer look reveals that the school of sentiment is in fact the evangelical school while the school of interests is in fact the functional school.

<sup>1</sup> Richard Lister, 'US and the UK: special relationship', BBC News, 23 Feb. 2001, <http://news.bbc.co.uk/1/hi/world/americas/1185177.stm>. (Unless otherwise noted at point of citation, all URLs cited in this article were accessible on 2 Aug. 2016.)

<sup>2</sup> David Schoenbaum, 'More special than others', *Diplomatic History* 22: 2, 1998, pp. 273–83; John Dumbrell and Alex R. Schäfer, *America's 'special relationships': foreign and domestic aspects of the politics of alliance* (Abingdon: Taylor & Francis, 2009); Alex Danchev, 'On specialness', *International Affairs* 72: 4, 1996, p. 744.

<sup>3</sup> Since the terminalists are hard-core functionalists, it is more sensible to consider the terminal school as a radical branch of the functional school. See Danchev, 'On specialness', pp. 738–40.

<sup>4</sup> Alan Dobson and Steve Marsh, 'Introduction', in Alan Dobson and Steve Marsh, eds, *Anglo-American relations: contemporary perspectives* (London: Routledge, 2013), p. 3.

Sentimentalists, such as Allen and Turner, typically downplay the importance of common interests and ascribe the longevity of the special relationship to a common language, common history, common culture and common values.<sup>5</sup> In recent decades, increasing numbers of scholars have acknowledged that both common sentiments and common interests are important contributors to the persistence of the AASR, but these scholars continue to diverge over the relative importance of common sentiments and common interests. Some, such as Reynolds, Dumbrell and Burk, argue that common interests play a paramount role and common sentiments a subordinate role.<sup>6</sup> Others, such as Baylis, Dobson and Marsh, argue that common sentiments are as important as common interests in sustaining the special relationship, the former helping to mould the latter.<sup>7</sup>

Few scholars of Anglo-American relations have so far conducted in-depth analyses of the importance of institutionalization as a contributor to the persistence of the AASR. Common sentiments and common interests remain important, but they are inadequate in explaining the persistence of the AASR. This article seeks to reveal the unique role institutionalization plays in sustaining the AASR.

## Why institutionalization matters

Realism and constructivism permeate the literature of Anglo-American relations, as evidenced by the two contending schools, the functional school and the evangelical school. The functional school is rooted in realism and it puts emphasis on interests, utility or instrumentality, whereas the evangelical school is rooted in constructivism and focuses on culture, values and/or identity. These two schools present competing depictions of the motivations prompting the UK and the US to maintain the second-to-none security cooperation underpinning their special relationship.

These two contending schools fail to explain how the UK and the US have managed to maintain effective and efficient cooperation in the face of rapidly changing circumstances over the past six decades. After all, a strong motivation does not necessarily lead to effective and efficient cooperation. Without effective

<sup>5</sup> H. C. Allen, *Great Britain and the United States: a history of Anglo-American relations (1783–1952)* (London: Odhams, 1954); H. C. Allen, 'A special relationship', *Journal of American Studies* 19: 3, 1985, pp. 403–13; Campbell Arthur Turner, *The unique partnership: Britain and the United States* (New York: Pegasus, 1971).

<sup>6</sup> David Reynolds, 'A "special relationship"? America, Britain and the international order since the Second World War', *International Affairs* 62: 1, 1986, pp. 1–20; David Reynolds, 'Rethinking Anglo-American relations', *International Affairs* 65: 1, 1988, pp. 89–111; John Dumbrell, *A special relationship: Anglo-American relations from the Cold War to Iraq* (London: Palgrave Macmillan, 2006); John Dumbrell, 'US–UK relations: structure, agency and the special relationship', in Terrence Casey, ed., *The Blair legacy: politics, policy, governance, and foreign affairs* (London: Palgrave Macmillan, 2009), pp. 273–84; Kathleen Burk, *Old world, new world: Great Britain and America from the beginning* (London: Little Brown, 2007).

<sup>7</sup> John Baylis, *Anglo-American defence relations 1939–1984: the special relationship* (London: Macmillan, 1984); John Baylis, *Anglo-American relations since 1939: the enduring alliance* (Manchester: Manchester University Press, 1997); Alan Dobson, *Anglo-American relations in the twentieth century: of friendship, conflict and the rise and decline of superpowers* (London: Routledge, 1995); Dobson and Marsh, *Anglo-American relations*; Alan Dobson and Steve Marsh, 'Anglo-American relations: end of a special relationship', *International History Review* 36: 4, 2014, pp. 673–97.

and efficient cooperation, especially in dealing with the increasingly complex and globalized security threats of the twenty-first century, the AASR would not have sustained such a strong momentum. That is why institutionalization matters. This article argues that high-level institutionalization has enabled the UK and the US to cooperate effectively and efficiently in the intelligence, nuclear and military domains irrespective of changes in security circumstances, thereby contributing to the persistence of the AASR.

Without a proper understanding of institutions, it is hard to comprehend what institutionalization is. Hence it is crucial to clarify the definition of institutions before embarking on an exploration of the importance of institutionalization. The term ‘institution’ is a hotly debated concept. Scholars adhering to rational choice institutionalism define institutions as ‘persistent and connected sets of rules (formal and informal) that prescribe behavioural roles, constrain activity, and shape expectations’.<sup>8</sup> Scholars adhering to sociological institutionalism define institutions as ‘not just formal rules, procedures or norms, but the symbol systems, cognitive scripts, and moral templates that provide the “frames of meaning” guiding human action’.<sup>9</sup> Scholars adhering to historical institutionalism define institutions as ‘the formal or informal procedures, routines, norms and conventions embedded in the organizational structure of the polity or political economy’.<sup>10</sup>

As these various definitions suggest, institutions not only include formal organizations, but also formal or informal rules, agreements, procedures, routines, norms or conventions (regarded by sociological institutionalists as symbol systems or cognitive scripts). Institutionalization, then, could be defined as the presence of formal organizations, and formal or informal rules or agreements, which formalize norms, routinize practices and differentiate functions of the actors involved.<sup>11</sup>

Rational choice institutionalism follows the logic of consequences and assumes states are rational actors that take an instrumental view of the importance of institutionalization. It argues that institutionalization can help reduce uncertainty and enable ‘states to get more information about the interests, preferences, intentions, and security strategies of other states’, thereby making the behaviour of states more predictable.<sup>12</sup> Constructive institutionalism follows the logic of appropriateness and assumes that states are social actors that are not rational in the sense of rational choice institutionalism. It argues that institutionalization can help formulate and reformulate states’ identities and preferences and therefore shape their outlook on their interests.<sup>13</sup>

<sup>8</sup> Robert Keohane, *International institutions and state of power: essays in international relations theory* (Boulder, CO: Westview Press, 1989), p. 163.

<sup>9</sup> Peter Hall and Rosemary Taylor, ‘Political science and the three new institutionalisms’, *Political Studies* 44: 5, 1996, p. 938.

<sup>10</sup> Hall and Taylor, ‘Political science and the three new institutionalisms’, p. 943.

<sup>11</sup> Robert Keohane, ‘Alliances, threats and the use of neorealism’, *International Security* 13: 1, 1988, p. 174; Robert B. McCalla, ‘NATO’s persistence after the Cold War’, *International Organization* 50: 3, 1996, p. 462; Stephen Walt, ‘Why alliances endure or collapse’, *Survival* 39:1, 1997, p. 166.

<sup>12</sup> Celeste Wallander and Robert Keohane, ‘Risk, threat, and security institutions’, in Celeste Wallander, Helga Haftendorn and Robert Keohane, eds, *Imperfect unions: security institutions over time and space* (Oxford: Oxford University Press, 1999), p. 30.

<sup>13</sup> Hall and Taylor, ‘Political science and the three new institutionalisms’, p. 956.

Historical institutionalism stands between these two views, assuming that states are both self-interested rational actors and rule-following social actors. It takes an eclectic view of the influence of institutionalization and argues that institutionalization not only regularizes the actions of states but also affects their identities.<sup>14</sup> This perspective better captures the reality of state behaviour, because states are ‘constituted both by their interests, by which they evaluate their expected consequences, and by the rules embedded in their identities and political institutions’, and therefore they ‘calculate consequences and follow rules’.<sup>15</sup> This article draws on the concept of path dependence, one of the core concepts of historical institutionalism, to explain the persistence of the AASR in the post-Cold War era.

Institutionalization gives rise to path dependence. According to Pierson, path dependence means that ‘proceeding steps in a particular direction induce further movement in the same direction’.<sup>16</sup> Levi defines path dependence using the metaphor of a tree: ‘From the same trunk, there are many different branches and smaller branches. Although it is possible to turn around or to clamber from one to the other—and essential if the chosen branch dies—the branch on which a climber begins is the one she tends to follow.’<sup>17</sup>

Cooperation within the institutionalized AASR is path dependent, because it is easier and more cost-effective to keep current institutions than to create new ones, especially when the old institutions still have ‘capabilities that are worth keeping even after their original purpose is gone’.<sup>18</sup> In a similar vein, Wallander and Keohane argue that ‘even if the old institution is not optimal for current purposes, it may be sensible to maintain it rather than to try to form a new one—especially if the costs of negotiating such an entity would be very high, or uncertainty about success is great’.<sup>19</sup>

Because of its path-dependent character, institutionalization contributes to the persistence of the AASR. First, institutionalization creates inertia or stickiness, locking states on a particular track of cooperation, driving them towards predictable and credible actions. Hence, it facilitates the formation and maintenance of habits of cooperation within the AASR. Habits are resistant to change. As Hopf argues, they are ‘strong promoters of the status quo’.<sup>20</sup> When challenges arise, officials from the UK and the US instantly know whom to talk to and how to coordinate their activities; they habitually and automatically turn to one another for help in a variety of contingencies. Habits of cooperation also encourage the

<sup>14</sup> John Ikenberry, ‘Institutions, strategic restraint, and the persistence of American postwar order’, *International Security* 23: 3, 1999, p. 52.

<sup>15</sup> James March and Johan Olsen, ‘The institutional dynamics of international political orders’, *International Organization* 52: 4, 1998, p. 952.

<sup>16</sup> Paul Pierson, ‘Increasing returns, path dependence, and the study of politics’, *American Political Science Review* 94: 2, 2000, p. 252.

<sup>17</sup> Margaret Levi, ‘A model, a method, and a map: rational choice in comparative and historical analysis’, in Mark Lichbach and Alan Zuckerman, eds, *Comparative politics: rationality, culture, and structure* (Cambridge: Cambridge University Press, 1997), p. 28.

<sup>18</sup> Walt, ‘Why alliances endure or collapse’, p. 166.

<sup>19</sup> Wallander and Keohane, ‘Risk, threat, and security institutions’, p. 33.

<sup>20</sup> Ted Hopf, ‘The logic of habit in international relations’, *European Journal of International Relations* 16: 4, 2010, p. 543.

UK and the US to forge common threat perceptions, since regular and routinized cooperation cultivates shared concerns about international threats.

Second, institutionalization increases interdependence between the UK and the US. The term ‘interdependence’ has two meanings. One is sensitivity interdependence, which is defined in terms of mutual ‘effects’.<sup>21</sup> Sensitivity involves ‘the degree of responsiveness within a policy framework—how quickly do changes in one country bring costly changes in another, and how great are the costly effects’.<sup>22</sup> If a state is immediately and intensely affected by unexpected changes occurring in another state, this state is sensitive to those changes.<sup>23</sup> If two states each immediately and intensely feel the impact of unexpected change in the other, these two states are in a relationship of sensitivity interdependence. The other meaning is vulnerability interdependence. This is defined in terms of the opportunity costs of disrupting or relinquishing the relationship.<sup>24</sup> According to Keohane and Nye, ‘vulnerability dependence can be measured only by the costliness of making effective adjustments to a changed environment over a period of time’.<sup>25</sup> Vulnerability interdependence involves mutual benefits which are ‘not defined in absolute terms, but rather in terms of likely alternative situations’.<sup>26</sup>

In the increasingly institutionalized AASR, both sensitivity interdependence and vulnerability interdependence exist between the UK and the US, especially in their intelligence, nuclear and military relations. On the one hand, institutionalization enhances interconnectedness between the two states, and therefore they are sensitive to each other’s changes. On the other hand, institutionalization makes interactions between the UK and the US regular and routine, thereby increasing the frequency of cooperation in which they are in need of each other. For the US, institutionalization strengthens its vulnerability interdependence with the UK, increasing the opportunity costs of disrupting or forgoing its intimate relationship with the UK. Institutionalization discourages the US from seeking alternative partners to the UK on intelligence, nuclear and military issues, because it would be costly for the US to disrupt or forgo the close cooperation with the UK which still generates mutual benefits for the two countries. It is hard to build a close partnership from scratch and so it would be hard to find a better alternative to the UK.

Third, institutionalization cultivates mutual trust between the UK and the US. Mutual trust arises from the practical interactions between states which are underpinned by routinized practices and norms.<sup>27</sup> Personnel from the UK and the US are familiar with each other and interact frequently. Therefore, they are more likely to build strong personal relationships; these in turn help to solidify mutual

<sup>21</sup> David Baldwin, ‘Interdependence and power: a conceptual analysis’, *International Organization* 34: 4, 1980, p. 489.

<sup>22</sup> Robert O. Keohane and Joseph S. Nye Jr, *Power and interdependence* (London: Longman, 2011), p. 10.

<sup>23</sup> Mark Crescenzi, *Economic interdependence and conflict in world politics* (Lanham, MD: Lexington, 2005), p. 28.

<sup>24</sup> Baldwin, ‘Interdependence and power’, p. 489.

<sup>25</sup> Keohane and Nye, *Power and interdependence*, p. 11.

<sup>26</sup> Baldwin, ‘Interdependence and power’, pp. 482–3.

<sup>27</sup> John Ikenberry, *After victory: institutions, strategic restraint, and the rebuilding of order after major wars* (Princeton: Princeton University Press, 2001), pp. 16–17.

trust between the UK and the US, enabling the two countries to sustain their close cooperation. It is noteworthy that habits of cooperation and mutual trust reinforce each other. According to Franks:

These habits of working together engendered and were in turn enhanced by a feeling of mutual trust and confidence. The special relationship was not a mystique of the shared inheritance of the English-speaking peoples. It arose out of common aims and mutual need of each other; it was rooted in strong habits of working together on which there supervened the sentiments of mutual trust. Those sentiments were important because they facilitated agreement and the resolution of problems.<sup>28</sup>

Overall, as a result of institutionalization, Anglo-American intelligence, nuclear and military relations have become path dependent, rendering the special relationship resilient and adaptable in the face of post-Cold War challenges. The next three sections focus on Anglo-American institutionalized cooperation in the intelligence, nuclear and military domains and try to illuminate how institutionalization contributes to the persistence of the special relationship.

## The institutionalized intelligence relationship

It is widely acknowledged that the Anglo-American intelligence relationship is genuinely special, with no comparable rival in terms of closeness and depth of cooperation. Most remarkable is the longevity of the special intelligence relationship between the UK and the US. As Krieger observes, 'during the six decades it has existed, more than enough reasons might have been found to terminate this relationship. But it ... persists to this day and shows no sign of weakening.'<sup>29</sup> This section seeks to elucidate how institutionalization plays an important part in helping sustain the Anglo-American special intelligence relationship.

Basically, there are five intelligence collection disciplines or 'INTs': human intelligence (HUMINT), imagery intelligence (IMINT), measurement and signatures intelligence (MASINT), open source intelligence (OSINT) and signals intelligence (SIGINT). Of these, SIGINT cooperation has been the jewel in the crown of Anglo-American intelligence cooperation. This section of the article accordingly focuses on the highly institutionalized SIGINT cooperation between the UK's Government Communications Headquarters (GCHQ) and the US's National Security Agency (NSA). GCHQ and the NSA are 'deeply enmeshed and interlinked'.<sup>30</sup> The relationship between the two organizations embodies the highest degree of institutionalization in Anglo-American intelligence cooperation.

Path dependence is evident in Anglo-American SIGINT cooperation, which is underpinned by the UKUSA Agreement, declassified as recently as 2010. The fore-

<sup>28</sup> Oliver Franks, *Anglo-American relations and the 'special relationship', 1947–1952* (Austin: University of Texas, 1990), p. 22.

<sup>29</sup> Wolfgang Krieger, 'The British–American intelligence alliance: very special indeed', in Ursula Lehmkuhl and Gustav Schmidt, eds, *From enmity to friendship: Anglo-American relations in the 19th and 20th century* (Augsburg: Wissner-Verlag, 2005), p. 153.

<sup>30</sup> Nick Hopkins, 'NSA and GCHQ—too close for comfort', *Guardian*, 1 Aug. 2013, <http://www.theguardian.com/commentisfree/2013/aug/01/nsa-gchq-cooperation-too-close-comfort>.

runners of the UKUSA Agreements were the Holden Agreement of 1942 and the BRUSA Agreement of 1943.<sup>31</sup> The 1943 BRUSA Agreement was the direct forerunner of the following BRUSA Agreement (renamed the UKUSA Agreement in 1954 at the behest of the British) signed on 5 March 1946. Whereas the previous ones were departmental agreements, the UKUSA Agreement is the first national agreement regarding SIGINT cooperation between the UK and the US. It is noteworthy that the UKUSA Agreement is not a treaty, or even a single agreement, but a set of intergovernmental agreements.<sup>32</sup> The UKUSA Agreement carries particular weight with the Americans. In 1973, the then National Security Advisor Henry Kissinger tried to cut off the supply of signals intelligence to the British; but the NSA refused to do so, on the grounds that it could not break the UKUSA Agreement.<sup>33</sup>

Under the UKUSA Agreement, Anglo-American SIGINT cooperation has been highly institutionalized. According to Bamford, ‘by 2001, the UKUSA partners had become an eavesdropping superpower with its own laws, language, and customs’.<sup>34</sup> Appendix I of the declassified UKUSA Agreement contains detailed regulations about liaison and methods of communication. In addition to the regularly assigned liaison officers, there are also liaison officers who work in each other’s agency ‘for short periods of time to deal with special problems’.<sup>35</sup>

As a result of the UKUSA Agreement, habits of cooperation have been embedded in Anglo-American SIGINT cooperation. The regular personnel exchange programmes make the NSA and GCHQ increasingly intertwined with each other. As the former head of MI5 Stephen Lander argues:

Even more importantly for the SIGINT agencies (NSA and GCHQ), the institutional integration that has flowed from the 1946 UKUSA Agreement is so widespread that SIGINT customers in both capitals seldom know which country generated either the access or the product itself.<sup>36</sup>

Therefore, GCHQ and the NSA have to some extent become effectively the same organization.<sup>37</sup> There has been ‘routine “physical” liaison to varying degrees on ... a regularized everyday basis’.<sup>38</sup> The exchange programme dates back to 1946, when the UK and the US agreed to an arrangement ‘under which men from each

<sup>31</sup> Ralph Erskine, ‘The Holden Agreement on Naval Sigint: the first BRUSA?’, *Intelligence and National Security* 14: 2, 1999, p. 192; Richard J. Aldrich, *GCHQ: the uncensored story of Britain’s most secret intelligence agency* (London: Harper, 2010), p. 43.

<sup>32</sup> Author’s interview with David Omand, former head of GCHQ, London, 4 Dec. 2014.

<sup>33</sup> Author’s interview with Michael Herman, former secretary of the Joint Intelligence Committee, 17 Nov. 2014. See also Richard Aldrich, ‘Allied code-breakers co-operate—but not always’, *Guardian*, 24 June 2010, <http://www.theguardian.com/world/2010/jun/24/intelligence-sharing-codebreakers-agreement-ukusa>.

<sup>34</sup> James Bamford, *Body of secrets: how America’s NSA and Britain’s GCHQ eavesdrop on the world* (London: Century, 2001), p. 422.

<sup>35</sup> NSA, ‘New UKUSA Agreement—10 May 1955’, June 2010, [https://www.nsa.gov/news-features/declassified-documents/ukusa/assets/files/new\\_ukusa\\_agree\\_10may55.pdf](https://www.nsa.gov/news-features/declassified-documents/ukusa/assets/files/new_ukusa_agree_10may55.pdf).

<sup>36</sup> Stephen Lander, ‘International intelligence cooperation: an inside perspective’, *Cambridge Review of International Affairs* 17: 3, 2004, p. 487.

<sup>37</sup> Ben Quinn, ‘Another US–UK “special relationship”—between intelligence services’, *Christian Science Monitor*, 14 June 2013, <http://www.csmonitor.com/World/Europe/2013/0614/Another-US-UK-special-relationship-between-intelligence-services>.

<sup>38</sup> Adam D. M. Svendsen, *Intelligence cooperation and the war on terror: Anglo-American security relations after 9/11* (Abingdon: Routledge, 2010), p. 14.

agency would work two or three years at the other'.<sup>39</sup> According to the UKUSA Agreement, 'liaison officers of one party shall normally have unrestricted access to those parts of the other's agencies which are engaged directly in the production of COMINT,<sup>40</sup> except such parts thereof which contain unexchangeable information'.<sup>41</sup> Thus liaison officers from GCHQ usually have unrestricted access to the NSA, and vice versa.

The documents released by Edward Snowden<sup>42</sup> demonstrate the continuing existence of habits of cooperation within the relationship between GCHQ and the NSA on internet surveillance programmes such as PRISM, Tempora and XKeyscore. PRISM and XKeyscore are NSA monitoring programmes through which the agency shares internet data with GCHQ. GCHQ's Tempora programme is able to 'tap into and store huge volumes of data drawn from fibre-optic cables for up to 30 days so that it can be sifted and analysed'.<sup>43</sup> The NSA can gain access to the internet data collected via the Tempora programme. Both PRISM and Tempora have been highly controversial. In February 2015, the UK's Investigatory Powers Tribunal ruled that GCHQ's joint internet surveillance with the NSA was unlawful between 2007 and 2014, because details on how the two intelligence agencies worked were kept secret from the public. The UK-US surveillance regime became legal only in December 2014, when the Cameron government made public how the data sharing was authorized.<sup>44</sup>

Habits of cooperation help the two countries' intelligence agencies to maintain common perceptions on a variety of new threats in the post-Cold War era. The existence of established institutional arrangements made it relatively easy for the UK and the US to swiftly adjust their priorities to counter Al-Qaeda. Their cooperation against Islamist terrorism since 9/11 could be regarded as 'a continuum with expansion rather than a kick-start'.<sup>45</sup> The best evidence of the persistent relevance of habits of cooperation is the fact that, the day after 9/11, the heads of the UK intelligence agencies flew to Washington to meet their counterparts; the aircraft they took was the only flight allowed to enter American airspace on that day.<sup>46</sup>

It is also largely because of strong habits of cooperation underpinned by the UKUSA Agreement that the NSA does not need to spy on the UK government in order to know its stances on certain international issues. However, France and

<sup>39</sup> Ronald W. Clark, *The man who broke Purple: the life of the world's greatest cryptologist, Colonel William F. Friedman* (London: Weidenfeld & Nicolson, 1977), p. 162.

<sup>40</sup> 'COMINT' stands for 'Communications Intelligence'.

<sup>41</sup> NSA, 'New UKUSA Agreement—10 May 1955'.

<sup>42</sup> In early June 2013, Edward Snowden, a former NSA subcontractor, released top-secret NSA documents to journalists. His revelations about Anglo-American surveillance on phone and internet communications put both the NSA and GCHQ at the centre of great controversy. For details, please see news reports from the *Guardian* by using the following link: <https://www.theguardian.com/us-news/edward-snowden>.

<sup>43</sup> Ewen MacAskill, Julian Borger, Nick Hopkins, Nick Davies and James Ball, 'GCHQ taps fibre-optic cables for secret access to world's communications', *Guardian*, 21 June 2013, <http://www.theguardian.com/uk/2013/jun/21/gchq-cables-secret-world-communications-nsa>.

<sup>44</sup> Tom Whitehead, 'GCHQ's internet surveillance with US ruled unlawful', *Telegraph*, 6 Feb. 2015, <http://www.telegraph.co.uk/news/uknews/law-and-order/11394860/GCHQs-mass-Internet-surveillance-ruled-unlawful.html>.

<sup>45</sup> Svendsen, *Intelligence cooperation and the war on terror*, p. 42.

<sup>46</sup> Ferrukh Mir, *Half truth* (Bloomington: iUniverse, 2011), p. 340.

Germany, which are the US's other two important European allies, have both been victims of NSA espionage. According to documents released by WikiLeaks in the summer of 2015, the NSA has spied on senior figures in France (including President François Hollande) and Germany (including Chancellor Angela Merkel) over a long period.<sup>47</sup> Worse still, the US and Israel, widely considered to have a special relationship comparable to the AASR, have reportedly spied on each other over the past decades. According to an NSA document leaked by Edward Snowden in August 2014, the American intelligence community ranked Israel's intelligence service as the third most aggressive against the US, behind only those of China and Russia.<sup>48</sup> Ironically, the US found out about Israel's espionage operation regarding the secret US–Iran nuclear talks by itself spying on Israel.<sup>49</sup>

The fact that the NSA invested at least £100 million in GCHQ between 2011 and 2013 demonstrated the interdependent relationship between the two agencies.<sup>50</sup> This investment by the NSA illustrates that GCHQ is short of money, but not of unique expertise. As David Omand, the former head of GCHQ, argues: 'We have the brains. They have the money. It's a collaboration that's worked very well.'<sup>51</sup> For the NSA, there remains no better alternative to GCHQ with respect to SIGINT cooperation. It would be very costly for the NSA to disrupt or forgo the already highly institutionalized cooperation with GCHQ. In this sense, institutionalization reinforces the NSA's vulnerability interdependence with GCHQ. GCHQ and the NSA are two indispensable parts of Anglo-American SIGINT cooperation. They function very much like an integrated organization, and are mutually in need of each other. Moreover, the Snowden affair demonstrates sensitivity interdependence between GCHQ and the NSA. The NSA documents leaked by Edward Snowden attracted heavy criticism of GCHQ in the UK.

As a result of the longstanding institutionalized cooperation and routinized personnel exchanges, strong personal relationships between British and American military officers have been well cultivated. For instance, the US and UK intelligence chiefs, along with their counterparts in Australia, Canada and New Zealand, assemble irregularly and informally to discuss common concerns. These meetings between the English-speaking countries, held by firm rotation,<sup>52</sup> facilitate the formation of strong personal relationships between intelligence officers of the

<sup>47</sup> Reuters, 'NSA tapped German Chancellery for decades, WikiLeaks claims', *Guardian*, 8 July 2015, <http://www.theguardian.com/us-news/2015/jul/08/nsa-tapped-german-chancellery-decades-wikileaks-claims-merkel>; Kim Willsher, 'Obama calls Hollande to promise NSA is no longer spying on French President', 24 June 2015, <http://www.theguardian.com/world/2015/jun/24/obama-calls-hollande-nsa-no-longer-spying-french-president>.

<sup>48</sup> Glenn Greenwald and Andrew Fishman, 'Netanyahu's spying denials contradicted by secret NSA documents', *The Intercept*, 25 March 2015, <https://firstlook.org/theintercept/2015/03/25/netanyahus-spying-denial-directly-contradicted-secret-nsa-documents/>.

<sup>49</sup> Adam Entous, 'Israel spied on Iran nuclear talks with US', *Wall Street Journal*, 23 March 2015, <http://www.wsj.com/articles/israel-spied-on-iran-talks-1427164201>; Elias Groll, 'Spy vs. spy, America and Israel edition', *Foreign Policy*, 24 March 2015, [http://foreignpolicy.com/2015/03/24/spy\\_vs\\_spy\\_america\\_and\\_israel\\_edition/](http://foreignpolicy.com/2015/03/24/spy_vs_spy_america_and_israel_edition/).

<sup>50</sup> Nick Hopkins and Julian Borger, 'NSA pays £100m in secret funding for GCHQ', *Guardian*, 1 Aug. 2013, <http://www.theguardian.com/uk-news/2013/aug/01/nsa-paid-gchq-spying-edward-snowden>.

<sup>51</sup> 'UK intelligence work defends freedom, say spy chiefs', BBC News, 7 Nov. 2013, <http://www.bbc.co.uk/news/uk-politics-24847399>.

<sup>52</sup> Ron Suskind, *The one percent doctrine: deep inside America's pursuit of its enemies since 9/11* (New York: Simon & Schuster, 2007), p. 83.

UK and the US. Furthermore, in the more technical areas, the British intelligence officers tend to establish and sustain lifelong cooperation with their American counterparts, thereby creating very strong personal relationships.<sup>53</sup> Such close and enduring personal relationships give rise to mutual trust, which in turn facilitates the continuity of remarkably close Anglo-American intelligence cooperation against new challenges in the post-Cold War era.

## The institutionalized nuclear relationship

The US has no more intimate and special nuclear relationship than that with the UK. Like the SIGINT relationship, the nuclear relationship between the UK and the US is underpinned by agreements established in the Cold War. The 1958 Mutual Defence Agreement (MDA) and the 1963 Polaris Sales Agreement (PSA), which remain valid to date, epitomize ‘the strength of an alliance known simply as the “special relationship”’.<sup>54</sup> These two special agreements embody a relationship ‘of reciprocal sharing, or symbiotic kinship’ between the UK and the US in terms of nuclear cooperation.<sup>55</sup> It is noteworthy that the 1958 MDA was renewed in 2014 for a further decade.<sup>56</sup> The 1963 PSA continues to underpin Anglo-American nuclear cooperation, given that both the Cameron government and its successor, the May government, have committed to Trident renewal. In May 2011, the Initial Gate of the Trident replacement programme was passed by the Cameron government, and the Main Gate decision is planned for 2016.<sup>57</sup> On 18 July 2016, the House of Commons took a Main Gate vote and Trident renewal won majority support by 472 votes to 117.<sup>58</sup>

Path dependence is an evident feature of the Anglo-American nuclear relationship. The 1963 PSA enabled Britain’s initial acquisition of the Polaris missiles and the subsequent acquisition of Trident missiles in the 1980s, and has helped it to keep leasing Trident missiles from the US up to the present. More importantly, the established institutional arrangements are indispensable in ensuring continuing US support to assist the UK to maintain its minimalist nuclear deterrent capability in the post-Cold War era.<sup>59</sup>

<sup>53</sup> Author’s interview with Omand.

<sup>54</sup> Eric Ridge, ‘Completing the transatlantic bridge: a US view’, in Jenifer Mackby and Paul Cornish, eds, *US–UK nuclear cooperation after 50 years* (Washington DC: Center for Strategic and International Studies, 2008), p. 60.

<sup>55</sup> John Simpson and Jenifer Mackby, ‘The special nuclear relationship: a historical chronology’, in Mackby and Cornish, eds, *US–UK nuclear cooperation after 50 years*, p. 3.

<sup>56</sup> Claire Mills, ‘UK–US Mutual Defence Agreement’, 20 Oct. 2014, <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN03147#fullreport>.

<sup>57</sup> Initial Gate is an investment approvals point in the procurement process. It assesses the feasibility of the programme going forward in terms of time, cost and performance. Initial Gate approval is required before the Trident replacement programme can move into its assessment phase. Main Gate is the main investment decision on a programme and the point at which a preferred bidder is chosen and contracts placed. After its passage, the Main Gate decision will become irreversible. See Claire Mills and Louisa Holland, ‘The Trident successor programme: an update’, 15 Jan. 2015, <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN06526>, p. 5.

<sup>58</sup> BBC News, ‘MPs vote to renew Trident weapons system’, 19 July 2016, <http://www.bbc.com/news/uk-politics-36830923>.

<sup>59</sup> Hugh Chalmers and Malcolm Chalmers, *The future of the UK’s co-operative nuclear relationship*, RUSI Occasional Paper, 2013, <https://www.rusi.org/publications/occasionalpapers/ref:O51AE2022060F6/>, pp. 4–5.

Under the auspices of the 1958 MDA and 1963 PSA, the Anglo-American nuclear relationship has been highly institutionalized, resulting in a plethora of working arrangements and cooperative mechanisms (see table 1). Habits of cooperation in the Anglo-American nuclear relationship are embedded in these working arrangements and cooperative mechanisms, which make the special nuclear relationship remarkably persistent.

**Table 1: Institutionalization of the Anglo-American nuclear relationship**

<i>Institutions</i>		<i>Functions</i>
Management arrangements	Principals	The principals hold stocktaking meetings approximately every 18 months to review the long-term strategic direction of the enterprise.
	Second level	The second-level participants (government officials one rank below the principals) meet every six to nine months; they mainly manage the daily business of the nuclear collaborations.
Administrative arrangements		These arrangements stipulate administrative procedures to be followed by the UK and the US in the implementation of the 1958 MDA.
Joint Working Groups (JOWOGs)		JOWOGs meet periodically to propose divisions of work between participating laboratories or agencies, which make regular reciprocal visits.
Exchange of Information by Visit and Report (EIVR)		EIVR is an administrative instrument to promote the controlled oral/visual exchange of atomic information. Unlike the JOWOGs, EIVRs are not granted continuous authorization for the exchange of atomic information.
Channels		A channel, such as the US/UK Executive Channel or the Trident Warhead Project Group Channel, is a joint arrangement between the UK and the US to exchange specific project/programme-type information.

*Source:* US Department of Defense, US Military, Nuclear, Chemical, and Biological Defence Programs, National Nuclear Security Administration and World Space-flight News, *Nuclear matters handbook*, expanded edn, 2011, <https://fas.org/man/eprint/NMHB2011.pdf>, pp. 114–18.

Anglo-American nuclear cooperation involves the UK's Atomic Weapons Establishment (AWE) at Aldermaston and the US's three National Laboratories: Lawrence Livermore National Laboratory, Sandia National Laboratory and Los Alamos National Laboratory. As noted in table 1, day-to-day nuclear cooperation is conducted mainly via numerous JOWOGs and EIVRs. In particular, the professionalized JOWOGs and their routinized meetings attest to the persistence of habits of cooperation within Anglo-American nuclear relations.

Under the auspices of the 1963 PSA, as amended for Trident, there are two functioning JOWOGs. One is the Joint Steering Task Group, supported by the Trident Joint Re-Entry Systems Working Group; the other is the Joint Systems Performance and Assessment Group. Under the auspices of the 1958 MDA, there are 17 JOWOGs, plus five sub-JOWOGs within JOWOG 32 (see table 2). In addition to the JOWOGs, there are other specialized working groups underpin-

**Table 2: JOWOGs under the auspices of the 1958 Mutual Defence Agreement**

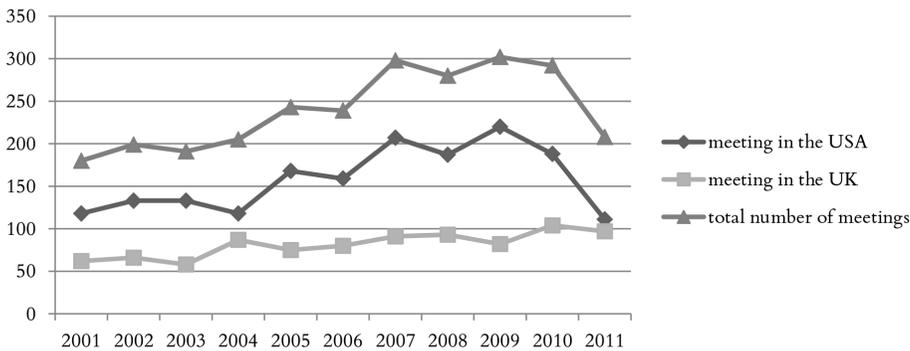
<i>Number</i>	<i>Function</i>
JOWOG 6	Radiation simulation and kinetic effects
JOWOG 9	Energetic materials
JOWOG 22	Nuclear materials
JOWOG 23	Warhead electrical components and technologies
JOWOG 28	Non-nuclear materials
JOWOG 29	Nuclear counterterrorism technology
JOWOG 30	Facilities
JOWOG 31	Nuclear weapons engineering
JOWOG 32	Nuclear warhead physics
	32 Mat
	32 M
	32 P
	32 HDT
	32 S
JOWOG 34	Computational technology
JOWOG 36	Aircraft, missile and space system hardening
JOWOG 37	Laboratory plasma physics
JOWOG 39	Manufacturing practices
JOWOG 41	Nuclear warhead accident response
JOWOG 42	Nuclear weapon code development
JOWOG 43	Nuclear weapon environment and damage effects
JOWOG 44	Methodologies for nuclear weapon safety assurance

Source: House of Commons, *Official Report*, col. 1149 W, 27 Feb. 2009, <http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090227/text/90227wo011.htm>.

ning Anglo-American nuclear cooperation, including twelve Enhanced Collaborations (ECs), ten EIVRs, one Trident Warhead Program Group (TWPG) and one United States Air Force (USAF) Channel.<sup>60</sup>

Each of these JOWOGs has been granted continuous authorization to exchange specific atomic information. For example, JOWOG 41, established in 1985, is responsible for ‘cooperation in the scientific, engineering, safety, and environmental fields associated with effects and potential hazards of an accident or mishap involving nuclear warheads’.<sup>61</sup> Both the UK and the US have been reaping tangible benefits from conducting nuclear weapon accident exercises every three to four years since 1985. The JOWOGs hold meetings regularly and frequently (see figure 1). Apart from frequent JOWOG meetings, there are also regular and frequent visits between the UK’s AWE and the US’s three nuclear laboratories (see figure 2).

**Figure 1: Number of JOWOG meetings under the auspices of the 1958 Mutual Defence Agreement, 2001–2011**



Source: House of Commons, *Official Report*, col. 1149 W, 27 Feb. 2009, <http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090227/text/90227w0011.htm>; House of Commons, *Official Report*, col. 656 W, 21 May 2012, <http://www.publications.parliament.uk/pa/cm201213/cmhansrd/cm120618/text/120618w0002.htm>.

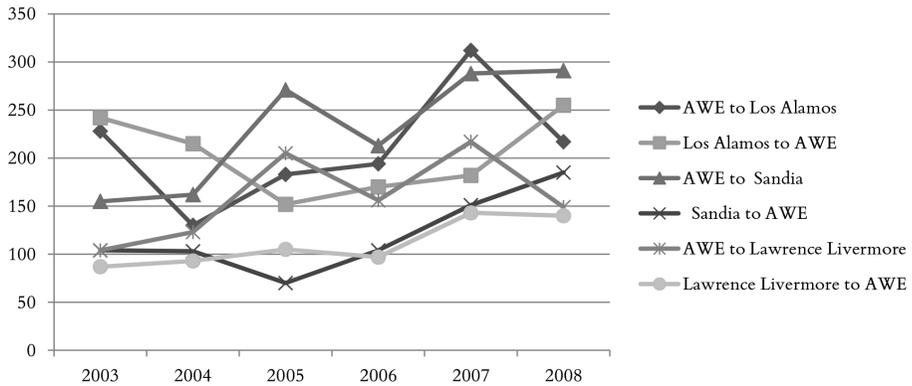
Habits of cooperation have been firmly embedded in the functioning agreements and regular meetings of the JOWOGs, sustaining a vigorous and persistent Anglo-American special nuclear relationship over the past 60 years. As shown in table 2, different JOWOGs have different responsibilities. In each of the JOWOGs, the British and American scientists work together interdependently. Like intelligence cooperation, Anglo-American nuclear cooperation involves a great many technical matters, which make habits of cooperation less susceptible to political fluctuations.<sup>62</sup>

<sup>60</sup> House of Commons, *Official Report*, 27 Feb. 2009, col. 1149 W, <http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090227/text/90227w0011.htm>.

<sup>61</sup> Michael Weaver, ‘Nuclear weapon accident response’, in Mackby and Cornish, eds, *US–UK nuclear cooperation after 50 years*, p. 101.

<sup>62</sup> Linton Brooks, ‘The future of the 1958 Mutual Defence Agreement’, in Mackby and Cornish, eds, *US–UK nuclear cooperation after 50 years*, p. 153.

**Figure 2: Number of visits under the auspices of the 1958 Mutual Defence Agreement, 2003–2008**



Source: House of Commons, *Official Report*, col. 1150 W, 27 Feb. 2009, <http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm090227/text/90227wo012.htm>.

Habits of cooperation promote adaptability in the post-Cold War Anglo-American special nuclear relationship. During the Cold War, the main driving force of Anglo-American nuclear cooperation was to develop and maintain a credible and formidable nuclear deterrent to counter potential nuclear threats from the Soviet Union. To some extent, peace in the Cold War was kept through the balance of terror buttressed by the prospect of mutually assured destruction (MAD) between the US and the Soviet Union.

In the post-Cold War era, with the disappearance of the nuclear threat from the Soviet Union, the priorities of Anglo-American nuclear cooperation have been reorientated to counter nuclear proliferation and nuclear terrorism. The momentum of Anglo-American nuclear cooperation to tackle common threats is still sustained in the twenty-first century. The 2010 US Nuclear Posture Review Report identified nuclear terrorism as the most immediate and extreme threat. It also regarded nuclear proliferation in countries such as North Korea and Iran as a pressing threat to the US.<sup>63</sup> It is no surprise that the UK shares the US perception of these two potential nuclear threats. The UK’s report on the nuclear deterrent in 2006 also listed nuclear proliferation and nuclear terrorism as looming threats to the UK which justified the British government’s continuing commitment to keep its minimum nuclear deterrent capability.<sup>64</sup> The two countries’ rising concern about nuclear terrorism saw their nuclear cooperation under the 1958 MDA expand into ‘new areas such as post-explosion forensics and design and detection of improvised nuclear explosive devices’.<sup>65</sup>

<sup>63</sup> United States Department of Defense, *Nuclear Posture Review Report*, 2010, [http://www.defense.gov/Portals/1/features/defenseReviews/NPR/2010\\_Nuclear\\_Posture\\_Review\\_Report.pdf](http://www.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf), p. 3.

<sup>64</sup> UK Ministry of Defence and Foreign and Commonwealth Office, ‘The future of the United Kingdom’s nuclear deterrent’, policy paper, 1 Dec. 2006, <https://www.gov.uk/government/publications/the-future-of-the-united-kingdoms-nuclear-deterrent-defence-white-paper-2006-cm-6994>, pp. 18–19.

<sup>65</sup> John Simpson, ‘The US–UK special relationship: the nuclear dimension’, in Dobson and Marsh, eds, *Anglo-American relations*, p. 258.

Institutionalization reinforces interdependence between the UK's AWE and the US's three nuclear laboratories. Since they share highly sensitive nuclear information and technologies with each other under the 1958 MDA, one partner's failure to keep such nuclear secrets would immediately incur damage to the other. Thus there exists sensitivity interdependence between the UK's AWE and the US's three nuclear laboratories. In addition, it would be costly for both sides to disrupt or forgo their immensely close cooperation. For the US's three nuclear laboratories, there remains no better alternative to the UK's AWE with respect to nuclear cooperation. In this sense, there exists vulnerability interdependence between the UK's AWE and the US's three nuclear laboratories. As a consequence of habits of cooperation and interdependence, the UK is disinclined to develop a more intimate nuclear relationship with any other country than its nuclear relationship with the US. Likewise, the US is reluctant to replace the UK with another country or countries as its preferential nuclear partner(s).

Anglo-French nuclear cooperation has been constrained by the highly institutionalized Anglo-American nuclear cooperation. Since the 1958 MDA and the 1963 PSA forbid the dissemination of sensitive nuclear information or technologies to third parties, the current Anglo-French nuclear cooperation faces political and legal impediments. Therefore, despite the Anglo-French Lancaster House nuclear treaty of 2010, the intimacy and depth of Anglo-French nuclear cooperation are unlikely to reach levels commensurate with those of the relationship between the UK and the US. For example, given the restrictions imposed by the 1958 MDA and the 1963 PSA, it is difficult for the UK and France to collaborate 'in the development, production and maintenance of joint ballistic-missile or submarine propulsion-reactor systems'.<sup>66</sup>

Anglo-French nuclear cooperation is more feasible in areas such as stockpile stewardship, certification of nuclear warheads and containment of nuclear or radiological terrorism, which are not in collision with areas of Anglo-American nuclear cooperation. The main reason why the Teutates project (pooling X-ray radiography) was so readily agreed upon by the UK and France is that 'it was a relatively new area, in which one of the partners (the United Kingdom) had not yet significantly invested, where there was no known in-depth cooperation with the United States'.<sup>67</sup>

It is worth noting that the development of Anglo-French nuclear cooperation has been facilitated by 'the existence of a longstanding French-American cooperation on ballistic missile technology (in the 1970s), on nuclear safety and security (beginning in the 1980s), and on stockpile stewardship (since the 1990s)'.<sup>68</sup> Nonetheless, given the narrow-scoped trilateral nuclear relationship among the UK, the US and France, it is far too difficult for the UK and the US to expand their respective nuclear cooperation with France, and Anglo-French nuclear

<sup>66</sup> Chalmers and Chalmers, *The future of the UK's co-operative nuclear relationship*, p. 11.

<sup>67</sup> Bruno Tertrais, 'Entente nucléaire: options for UK–French nuclear cooperation', discussion paper 3 of the BASIC Trident Commission, 2012, [http://www.basicint.org/sites/default/files/entente\\_nucleaire\\_basic\\_trident\\_commission.pdf](http://www.basicint.org/sites/default/files/entente_nucleaire_basic_trident_commission.pdf), p. 14.

<sup>68</sup> Tertrais, 'Entente nucléaire', p. 24.

cooperation will continue to be dwarfed by the highly institutionalized Anglo-American nuclear cooperation. Because of this high-level institutionalization, it is very unlikely that the UK would choose 'to purge itself of all remnants of its collaboration with the US purely to pursue new aspects of its nuclear relationship with France'.<sup>69</sup>

Mutual trust is also strengthened by institutionalization. The regularized and routinized interactions via the JOWOGs and mechanisms for site visits help to cultivate strong personal relationships between the British and American personnel in the nuclear domain. According to Miller:

The talks established an enduring web of relationships among key nuclear policy officials (and their successors) on both sides, which proved to be of immense value. As the initial participants became more senior and were promoted to positions of greater responsibility, the relationships previously created became a direct channel to senior players on both sides of the Atlantic who could address or solve nuclear-deterrent and related issues (and indeed sometimes unrelated issues) as they arose.<sup>70</sup>

Strong personal relationships contribute to strong mutual trust within the Anglo-American nuclear relationship, which facilitates the preservation of this special nuclear relationship in the face of new challenges.<sup>71</sup> It is partly because of this strong mutual trust that Anglo-American nuclear cooperation has continued to flourish since the end of the Cold War.<sup>72</sup>

## The institutionalized military relationship

Alongside intelligence cooperation and nuclear cooperation, military cooperation between the UK and the US is also 'at the heart of the special relationship'.<sup>73</sup> In the post-Cold War era, the UK has been the most reliable ally in American-led military operations. The strong momentum of Anglo-American military cooperation can be attributed in part to the high level of institutionalization within the special military relationship. This relationship between the UK and the US dates back to the Second World War, when the two countries' armed forces were integrated to an unprecedented extent in the fight against Nazi Germany.

The institutionalization of Anglo-American military cooperation began after the Arcadia Conference of December 1941 to January 1942. The Combined Chiefs of Staff Committee, established in January 1942, sat at the apex of the overall command structure under which a battery of coordinated institutions was set up, such as the Munitions Assignment Board, the Combined Raw Materials Board,

<sup>69</sup> Chalmers and Chalmers, *The future of the UK's co-operative nuclear relationship*, p. 11.

<sup>70</sup> Franklin Miller, 'Creating a bilateral nuclear policy framework', in Mackby and Cornish, eds, *US-UK nuclear cooperation after 50 years*, p. 176.

<sup>71</sup> James Schlesinger, 'Oral interview with James Schlesinger', in Mackby and Cornish, eds, *US-UK nuclear cooperation after 50 years*, p. 265; Michael Quinlan, 'Oral interview with Michael Quinlan', in Mackby and Cornish, eds, *US-UK nuclear cooperation after 50 years*, pp. 273-4; Tim Hare, 'The MDA: a practitioner's view', in Mackby and Cornish, eds, *US-UK nuclear cooperation after 50 years*, p. 193.

<sup>72</sup> Dobson and Marsh, *Anglo-American relations*, p. 682.

<sup>73</sup> William Wallace and Christopher Phillips, 'Reassessing the special relationship', *International Affairs* 85: 2, March 2009, p. 267.

the Anglo-American Shipping Adjustment Board and the Combined Production and Resources Board.<sup>74</sup> Under the structure of the Combined Chiefs of Staff Committee, the British military leaders, including the three service heads, met regularly with their American counterparts. The Combined Chiefs of Staff Committee was dismantled in 1945, but the British and American chiefs of staff met in emergency during the Berlin blockade of 1948.

After a hiatus of 65 years, the Combined Chiefs of Staff Committee held a meeting in Washington in March 2013 in order to ‘discuss the strategic challenges the UK and US militaries may face in the future’.<sup>75</sup> It held a second meeting in London in June 2014, which was the first time that military leaders of the UK and the US had met in London since the end of the Second World War.<sup>76</sup> The reconvening of the Combined Chiefs of Staff Committee exemplifies the remarkable resilience of habits of cooperation within the highly institutionalized Anglo-American special military relationship in the post-Cold War era.

Like the intelligence and nuclear relationships, the Anglo-American military relationship also boasts a high level of institutionalization. The UK’s and US’s armed forces work together, train together, learn together and fight together. Therefore, habits of cooperation are embedded in the Anglo-American military relationship. The special military relationship envisaged by Churchill in his ‘Iron Curtain’ speech of 1946 has remained vigorous in the post-Cold War era.

Routinized military personnel exchange takes place between the armed forces of the UK and the US, resulting in close-knit military relations. There are permanent arrangements in place for liaison officers from the Royal Navy and the US Navy to serve on each other’s vessels. In addition, the two navies’ warships integrate with each other by cross-decking (i.e. swapping sailors with each other) for the purpose of forging intimate working relationships. For example, the UK’s most advanced warship, HMS *Daring*, once swapped sailors with several American ships, including USS *Cape St George*, *Bunker Hill*, *Carl Vinson* and *Abraham Lincoln*.<sup>77</sup>

The two countries’ air forces also maintain their long-established institutionalized cooperative relationship. They have a sustained tradition of exchanging pilots, and personnel exchange tours have been a staple of this enduringly intimate relationship.<sup>78</sup> Habits of cooperation between the Royal Air Force and the US Air Force have remained robust. There are American pilots in charge of British squadrons and British pilots in charge of American squadrons. Since the end of the Cold War, there have always been American pilots in British squadrons and vice versa.

<sup>74</sup> John Dickie, ‘Special’ no more. *Anglo-American relations: rhetoric and reality* (London: Weidenfeld & Nicolson, 1994), p. 18.

<sup>75</sup> UK Ministry of Defence, ‘UK and US service chiefs discuss future strategic challenges’, 28 March 2013, <https://www.gov.uk/government/news/uk-and-us-service-chiefs-discuss-future-strategic-challenges>.

<sup>76</sup> UK Ministry of Defence, ‘Military leaders meet in London for first time since WW2’, 10 June 2014, <https://www.gov.uk/government/news/military-leaders-meet-in-london-for-first-time-since-ww2>.

<sup>77</sup> Royal Navy, ‘*Daring* enjoys “truly amazing” experience working with American carriers’, 21 March 2012, <https://navynews.co.uk/archive/news/item/4091>.

<sup>78</sup> Christopher Finnand and Paul D. Berg, ‘Anglo-American strategic air power cooperation in the Cold War and beyond’, *Air & Space Power Journal* 18: 4, 2004, p. 51; White House, ‘Joint fact sheet: US and UK defense cooperation’, 14 March 2012, <http://www.whitehouse.gov/the-press-office/2012/03/14/joint-fact-sheet-us-and-uk-defense-cooperation>.

RAF officers usually have closer relationships with their American counterparts than with British officers in the other services.<sup>79</sup>

The UK and the US routinely send military officers to teach or study in each other's defence schools. There are some British officers teaching at West Point and the Naval War College. Similarly, some American officers attend the British defence schools.<sup>80</sup> For example, Captain Michael Wettlaufer, formerly commanding officer of USS *John C. Stennis*, was a fixed-wing tutor and test pilot in the Empire Test Pilots' School of Britain between 1998 and 2000. Moreover, some of the defence schools of the UK and the US have training exchange agreements. For example, there is a training exchange agreement between Britannia Royal Naval College and the US Naval Academy at Annapolis.<sup>81</sup> The annual Kermit Roosevelt Speaking Lecture, which dates back to 1947, also demonstrates the long-established close ties between the two armed forces.<sup>82</sup>

The armed forces of the UK and the US engage in regular training exercises together. In March 2012, 1,100 British military personnel participated in ten training exercises with American armed forces in the US. For example, a detachment from the Royal Regiment of Artillery took part in an adventure training expedition near the Grand Canyon; a squadron of RAF GR4 Tornados conducted live-fire heavy weapons training in Arizona; and an RAF squadron took part in a Red Flag exercise at Nellis Air Force Base, Nevada.<sup>83</sup> Between 27 January and 14 February 2014, the RAF took part in Exercise Red Flag 14-1 along with its American and Australian counterparts;<sup>84</sup> and on 19 February 2015 it finished its latest round of Red Flag exercises in the US.<sup>85</sup>

British and American armed forces also conduct regular training exercises with their NATO allies. The Royal Navy regularly takes part in Baltops, an annual maritime and amphibious warfare exercise led by the US, and the British Army participates in another US-led exercise, Saber Strike, which is conducted annually in Poland and the Baltic states of Estonia, Latvia and Lithuania. Both exercises took place in June 2015 with the RAF and British Army taking their respective parts.<sup>86</sup> In addition, since 2008 the US Navy has regularly participated, along with other NATO allies, in the UK-led exercise Joint Warrior, which is held twice a year in Scotland, for example in April 2015.<sup>87</sup>

Another demonstration of the high-level institutionalization between the UK and US armies is provided by the ABCA Programme, begun in 1947 by the armies

<sup>79</sup> Author's interview with Air Vice-Marshal Michael Harwood, Nottingham, 24 Nov. 2014.

<sup>80</sup> White House, 'Joint fact sheet: US and UK defense cooperation'.

<sup>81</sup> Royal Navy, 'US visit to south west royal navy bases', 16 July 2013, <http://www.royalnavy.mod.uk/news-and-latest-activity/news/2013/july/16/130716-us-visit-to-south-west-royal-navy-bases>.

<sup>82</sup> US Army, 'April 9, 2015—CSA remarks at Kermit Roosevelt Lecture Series', 9 April 2015, [http://www.army.mil/article/146410/April\\_9\\_2015\\_CSA\\_remarks\\_at\\_Kermit\\_Roosevelt\\_Lecture\\_Series/](http://www.army.mil/article/146410/April_9_2015_CSA_remarks_at_Kermit_Roosevelt_Lecture_Series/).

<sup>83</sup> White House, 'Joint fact sheet: US and UK defense cooperation'.

<sup>84</sup> RAF, 'Royal Air Force concludes participation in Red Flag', 14 Feb. 2014, <http://www.raf.mod.uk/news/archive/royal-air-force-concludes-participation-in-red-flag-14022014>.

<sup>85</sup> RAF, 'Red Flag concludes', 19 Feb. 2015, <http://www.raf.mod.uk/news/archive/red-flag-concludes-19022015>.

<sup>86</sup> UK Ministry of Defence, 'UK forces participate in Allied Shield Baltic exercises', 28 May 2015, <https://www.gov.uk/government/news/uk-forces-participate-in-allied-shield-baltic-exercises>.

<sup>87</sup> 'UK-led exercise Joint Warrior to be "biggest ever"', BBC News, 10 April 2015, <http://www.bbc.co.uk/news/uk-scotland-highlands-islands-32252012>.

of the the US, the UK and Canada, with Australia and New Zealand joining in 1963 and 1965 respectively. In October 1964, the US, UK, Canadian and Australian armies ratified the Basic Standardization Agreement 1964, which formalized the ABCA Programme. The annual meeting of the Programme is hosted by one of the member states between March and April every year in order to authorize the annual programme plan. Every second year, the ABCA armies participate in an exercise or activity, hosted by the member states in rotation; this may be a field training exercise, a command post exercise, an experiment, a seminar wargame, a seminar workshop or some combination of these types.<sup>88</sup>

British military personnel's privileged access to American military headquarters also attests to the highly institutionalized military cooperation between the two countries. There are a number of British personnel serving as senior advisers or commanders in American military headquarters. The UK has more military personnel than any other foreign country serving on senior planning staffs at US Central Command (CENTCOM) in Tampa, Florida.<sup>89</sup> There are also British senior liaison officers working in US Northern Command (NORTHCOM), US Cyber Command (CYBERCOM), US Pacific Command (PACOM) and US Strategic Command (STRATCOM).<sup>90</sup> Because of their embedded position in the American command structure, British personnel have played a unique role in American military decision-making.<sup>91</sup>

Defence trade cooperation between the UK and the US is also highly institutionalized. The UK and the US are working partners in 22 collaborative equipment programmes, of which the Joint Strike Fighter (JSF) programme is the most significant. The UK is the only 'Level One' partner in this programme; while Israel has also been a participant in the JSF programme since February 2003, under the agreement reached with the US it is permitted to give input on the design of the JSF but forbidden to participate in discussion of its development.<sup>92</sup>

There are also some American defence companies operating in the UK and some British defence companies operating in the US. For instance, General Dynamics (GD), an American aerospace and defence company, has a subsidiary named GD UK on UK territory. In 2007 General Electric (US) acquired Smiths Aerospace (UK), and BAE Systems (UK) acquired Armour Holdings (US).<sup>93</sup> The institutionalized intertwining of the two countries' defence industries has now reached the point where 'British exports to other countries often include US made components, and vice versa, some US exports contain UK components'.<sup>94</sup>

<sup>88</sup> ABCA, 'Coalition operations handbook', 14 April 2008, <https://info.publicintelligence.net/ABCA-Coalition-Handbook.pdf>.

<sup>89</sup> Author's interview with Major-General Tim Cross, Nottingham, 30 Oct. 2014.

<sup>90</sup> White House, 'Joint fact sheet: US and UK defense cooperation'.

<sup>91</sup> Wallace and Phillips, 'Reassessing the special relationship', p. 268.

<sup>92</sup> Jewish Virtual Library, 'US–Israel strategic cooperation: F-35 Joint Strike Fighter plane', <http://www.jewish-virtuallibrary.org/jsourc/US-Israel/jetfighter.html>.

<sup>93</sup> Stockholm International Peace Research Institute, *SIPRI yearbook 2008: armaments, disarmament and international security* (Oxford: Oxford University Press, 2008), pp. 268–9.

<sup>94</sup> Philip Dunne, 'UK–US defence equipment cooperation', 23 April 2013, <https://www.gov.uk/government/speeches/20130423-uk-us-defence-equipment-cooperation>.

A US–UK memorandum of understanding signed in September 1975 stated the intent to ‘develop greater weapons standardization and interoperability through cooperation in research, development, production and procurement’.<sup>95</sup> With the coming into force of the US–UK Defence Trade Cooperation Treaty on 13 April 2012, the Anglo–American defence trade relationship was further institutionalized, enhancing collaboration and interoperability between the two countries’ armed forces. The aim of this treaty is to ‘further strengthen and deepen the UK and US defence relationship, allowing greater levels of cooperation and interoperability that will help support our Armed Forces operating side by side around the world’.<sup>96</sup>

As is clear from the details given above, path dependence is a feature of the institutionalized Anglo–American military cooperation. Military cooperation between the UK and the US was very intimate in the Cold War and has remained so since. In order to be able to fight together effectively in military operations, the UK and the US continue to take measures to enhance the interoperability of their armed forces. Since modern warfare is increasingly complicated, improving the level of interoperability between the two countries’ armed forces has consistently been a high priority for both the UK and the US over the past decades.

To maintain this capability to fight together effectively, the two armed forces need to work together, train together, study together and even socialize together in peacetime. Hence constant efforts have to be invested by the two sides. The entrenched military liaison arrangements, routinized joint training exercises, teaching and studying exchange programmes, combined planning and weapons-sharing through close defence trade relationships are all measures the countries’ two armed forces have taken to facilitate the improvement of their interoperability.

High-level institutionalization reinforces the interdependence between the armed forces of the UK and the US. On the one hand, there exists sensitivity interdependence between the two countries’ armed forces. Even though the US remains the predominant military power, it still needs the UK as a capable and reliable military ally. The US is currently very sensitive to the UK’s defence cuts. There have been worries in the US that dramatic defence cuts would weaken the capability of its preferred military partner. Former US Defense Secretary Robert Gates has stated that ‘with the fairly substantial reductions in defence spending in Great Britain, what we’re finding is that it won’t have full spectrum capabilities and the ability to be a full partner as they have been in the past’.<sup>97</sup> The head of the US Army, General Raymond Odierno, has also expressed grave concern about the detrimental effects of the UK’s defence cuts, arguing that ‘in the past we would have a British army division working alongside an American division.

<sup>95</sup> Steve Marsh, ‘The Anglo–American defence relationship’, in Dobson and Marsh, eds, *Anglo–American relations*, p. 183.

<sup>96</sup> House of Commons Defence Committee, ‘UK/US defence trade cooperation treaty’, 3rd Report of Session 2007–2008, 4 Dec. 2007, <http://www.publications.parliament.uk/pa/cm200708/cmselect/cmdfence/107/107.pdf>, p. Ev27.

<sup>97</sup> ‘Military cuts mean “no US partnership”, Robert Gates warns Britain’, BBC News, 16 Jan. 2014, <http://www.bbc.co.uk/news/uk-25754870>.

Now it might be a British brigade inside an American division or even a British battalion inside an American brigade.<sup>98</sup> On the other hand, there exists vulnerability interdependence between the two countries' armed forces. The enhanced interoperability has consolidated the UK's status as the US's preferred military partner. There remains no better alternative to the UK with respect to military cooperation. It will be costly for the US to disrupt or forgo its highly institutionalized military cooperation with the UK.

High-level institutionalization also consolidates mutual trust between two countries' armed forces, enabling very frequent interactions between the two armed forces by means of routinized liaison arrangements and joint training exercises in peacetime. According to British Lieutenant-General Graeme Lamb:

You have to have an institutionalized framework for a special relationship to work and develop. It allows constant exchange and builds trust and a close relationship. Without an institutionalized framework, the special relationship will just wither. Remaining in touch and exchanging ideas while struggling together to deal with complex problems reinforces the special relationship.<sup>99</sup>

Significantly, personal relationships between British and American senior military officers can be fruitfully cultivated through these highly institutionalized interactions. Like any relationship, the special military relationship 'has to be driven and held together by individuals from America and from Britain'.<sup>100</sup> Strong mutual trust between British and American senior military officers is undeniably crucial in underpinning the special military relationship between the UK and the US. As Air Vice-Marshal Harwood maintains: 'There are people [in the American Air Force] who are like my brothers. I trust them with everything. I trust them as good people. That keeps the relationship special.'<sup>101</sup>

## Conclusion

Institutionalization is an important contributor to the persistence of the AASR. Any explanation of that relationship's capacity to endure that does not take this factor into account will be inadequate. Institutionalization contributes to the persistence of the AASR because of its path-dependent character. This article has paid particular attention to Anglo-American cooperation in intelligence, nuclear and military domains, which are the three most crucial pillars of the AASR.

As shown in this article, Anglo-American intelligence, nuclear and military relations have been highly institutionalized. The institutionalized intelligence relationship is exemplified by the relationship between GCHQ and the NSA, which is underpinned by the UKUSA Agreement. The institutionalized nuclear relationship is exemplified by a variety of JOWOGs, underpinned by the 1958

<sup>98</sup> BBC News, 'UK defence spending "concerns" US Army Chief Raymond Odierno', 2 March 2015, <http://www.bbc.co.uk/news/uk-31688929>.

<sup>99</sup> Author's interview with Lieutenant-Colonel Graeme Lamb, London, 15 Dec. 2014.

<sup>100</sup> Author's interview with Cross.

<sup>101</sup> Author's interview with Harwood.

MDA. The institutionalized military relationship is exemplified by routinized military personnel exchange programmes, regular joint training exercises and an extremely close defence trade partnership. This high-level institutionalization embeds habits of cooperation, solidifies interdependence and consolidates mutual trust between the UK and the US in their cooperation on intelligence, nuclear and military issues.

There have been concerns that the AASR may be endangered by some new challenges, especially the US's 'pivot' or 'rebalancing' to the Asia-Pacific region and the British government's deep defence cuts, developments that it is feared may weaken the UK's value in Washington. In geostrategic terms, the UK is indeed less useful to the US in the Asia-Pacific region than in Europe and the Middle East; and the Cameron government's defence cuts will effect some shrinkage in British military power. However, any judgement that a negative impact on the AASR will result remains premature. Owing to the high level of institutionalization, the UK will remain the US's preferred working partner on intelligence, nuclear and military issues in the coming decades. The highly institutionalized AASR will prove to be much more persistent than current scholarship of Anglo-American relations envisages.