Science Diplomacy at the heart of international relations

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Science diplomacy is a move away from the development of hard power capabilities of technological development in the military, and on to soft power[1], using science as an asset to further mediation and cooperation between nations. According to US Secretary of State Hillary Clinton, “Science diplomacy and science and technology cooperation between the United States and other countries is one of our most effective ways of influencing and assisting other nations and creating real bridges between the United States and counterparts.”[2]

In a recent report, The Royal Society concluded that the still fluid concept of science diplomacy could be applied in three ways:

1. Informing foreign policy objectives with scientific advice (science in diplomacy),
2. Facilitating international science cooperation (diplomacy for science),
3. Using science cooperation to improve international relations between countries (science for diplomacy.)[3]

There has been a surge in recent years of an interest in science and its potential uses in foreign policy. There are two primary groups that currently have a stake in the development of science as a tool in international relations: foreign policy advocates and the scientific community itself. For the foreign policy advocates, science policy is used to further wider goals, whilst for scientists the primary aims are the desire to collaborate with the best people in their field, to work in the best research facilities, and to secure further sources of funding.

Scientific organisations are currently pushing science cooperation and diplomacy higher up the political agenda. With the aim of making science policy a key element of foreign policy, the American Association for the Advancement of Science (AAAS) now has a dedicated Centre for Science Diplomacy[4], and the organisation already cooperates closely with its EU counterparts on issues such as nuclear arms monitoring.[5]

Possibly the most high profile example of scientific cooperation across Europe is the European Organisation for Nuclear Research (CERN), which was one of Europe’s first joint ventures and it now includes 20 Member States. Key to the discovery and development of the internet, CERN’s business is fundamental physics, finding out what the universe is made of and how it works.[6] A major, international flagship project, the Large Hadron Collider (LHC) at CERN, is funded by various organisations from a number of different countries. In terms of diplomacy, the organisation can list some of the first post-Second World War contracts between German and Israeli scientists, and cooperation between the USSR and other Iron Curtain countries in among its historical achievements. While still in the discussion stage, the EU intends to create the position of Chief Scientific Advisor, although it is presently unclear whether the structure of the body will be similar to that of the US President’s Council of Advisors on Science and Technology (PCAST).[7] However, it does point to the fact that EU leaders firmly acknowledge the important of science at the heart of their organisation, although there is no escaping the fact that great difficulty still arises as a result of 90% of R&D funding coming from national budgets. With many issues, including environment policy and security, being transnational in nature, surely it is imperative to effectively tackle these issues on a transnational basis? [8]

In a recent Huffington Post article, Jared Cohen discusses the U.S. government led delegation of high-technology CEOs to Russia to engage with Russian government stakeholders, civil society, students, academic leaders, and

private sector entities from a cross-section of Russian society with the aims of forging partnerships on education, health, anti-trafficking, anti-corruption, and e-governance. He argues that during the Cold War, such dialogue would not have been possible as both the Russians and the US viewed innovation as a zero-sum game, and that whereas now innovation is perhaps the most important shared resource between the two nations. "Much more than government-to-government meetings on START and Iran; it also entails government officials engaging non-governmental actors, including NGOs, entrepreneurs, students, and professors. At the core of this policy is the creation of linkages between non-governmental Americans and their Russian counterparts, and with Russian government interlocutors to find areas of mutual interest and seek out new opportunities for collaboration".[9] Via "U.S. Innovation Dialogue" Cohen identifies six major areas where the actors seek to deliver:

1. **Education, Entrepreneurship Training, and Mentorship**
2. **Anti-trafficking and child protection**
3. **Combating Cyber-crime**
4. **Health**
5. **E-governance and Collaboration**
6. **Promoting Cultural Collaboration**

Although certainly involving another dimension – collaboration on international issues and involving new technologies and communication tools not previously available – and a transparency that did not exist during the Cold War years, Cohen nevertheless does touch on an area in diplomacy that is worth exploring within the context of science.

In addition to philanthropic assistance, the West responded to the crisis in Russian science at the end of the Cold War not only by trying to prevent nuclear proliferation but also by pursuing profitable ventures. The US and Germany, afraid that top Soviet nuclear scientists would be courted by nations trying to develop their own nuclear arsenal, developed the Baker-Genscher initiative. Part of this initiative was agreed in 1992, whereby the US would provide $35m and Europe $25m to create "clearing houses" for the top 2000 nuclear scientists from the former-USSR to focus on research fields unrelated to weapons development.[10] By the late 1990s, the U.S. Department of Energy and the Russian Ministry of Atomic Energy had entered into a dozen agreements involving nuclear science and technology.[11]

Often maligned as being merely an expensive exercise in national prestige, space policy – and the competitive/cooperative relationship between the US and USSR/Russia – has also often proved to be a good case study for science diplomacy. NASA, an organisation originally set up during the Cold War, which competed with the USSR in the Space Race to the moon and for dominance in orbit, had its roots directly linked to enhancing national security. Since the early 1990s, the agency was placed at the forefront of cooperation with Russia on space programmes with the continual aim of aiding US national security interests. Via cooperation with the Russian space agency, and in a similar vein to the Baker-Genscher initiative, the US helped provide continued employment to former Soviet scientists who might otherwise have plied their trade in Iran or North Korea, and aided the ailing Russian economy. When Russia sought to sell cryogenic rocket engines to India, the US was concerned the dual-use technology could be applied to ballistic missile development despite the two parties insistence that technology transfers were purely intended to aid India's indigenous satellite launching program; investment by the US and cooperation with Russia eventually ended the sale. However, this was another stepping stone to what had come before: cooperation between the two nations during the height of the Cold War under the auspices of scientific bodies and national academies when formal political relations were strained, or even directly between the two governments on the high profile Apollo-Soyuz Test Project (ASTP) during the 1970s when the political climate of détente allowed for increased collaboration.

It can certainly be argued that by examining the pattern of previous scientific cooperation between the two nations, there is evidence to suggest that what Cohen describes is a logical and expedient continuation and expansion in policy and development between the US and Russia, and that this will no doubt continue while it still serves both their mutual interests. Although referring specifically to space policy, the broader aspects of the geopolitics of science that

Nicholas Peter discusses in his 2006 paper certainly apply. [12] During the Cold War "intrabloc" cooperation was the norm; however, "interbloc" cooperation also took place on a more limited set of occasions. This pattern has evolved since the end of the Cold War, leading to science and technology increasingly shaping foreign policy and diplomacy. Therefore, it can be expected that activities will also influence the future geopolitical context as governments initiate or participate in collaborative projects for a number of scientific reasons, but also for broader domestic and foreign policy reasons.

Science should ideally provide the basis of non-ideological environments for the participation and free exchange of ideas. However, science has been, and will no doubt at times continue to be, used for political gain with the express aim of furthering a particular ideology and proving its superiority. Despite the negatives surrounding it as a policy tool, science diplomacy has been effective for many years and led to coalition building and conflict resolution, and as the expansion of new technology continues it seems that politicians are seeing even further value to exploring science as a method of foreign policy.

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Bibliography

Clinton, Hillary, (2009) **State Department Town Hall Meeting on Quadrennial Diplomacy and Development Review,** http://london.usembassy.gov/forpo051.html

Cohen, Jared, (2010) *Resetting U.S.-Russia Relations with a Mix of Tech and Diplomacy*, Huffington Post, http://www.huffingtonpost.com/jared-cohen/resetting-us-russia-relat_b_504051.html

Eisenhower, Susan (2004) Partners In Space: US-Russian Cooperation After The Cold War, Washington DC: Eisenhower Institute

EurActiv.com, (2009) *EU, US scientists ink deal on nuclear arms monitoring*, 29 October 2009, http://www.euractiv.com/en/science/eu-us-scientists-ink-deal-nuclear-arms-monitoring/article-186879

EurActiv.com, (2009) *Commission to name 'chief scientific advisor'*, 25 September 2009, http://www.euractiv.com/en/priorities/commission-name-chief-scientific-advisor/article-185685

Friedman, Thomas L. (1992) "US To Offer Plan To Keep Scientists At Work In Russia", New York Times, 8 February 1992, A1

National Academy of Sciences (2004) Scientists, Engineers, and Track-Two Diplomacy: A Half-Century of U.S.-Russian Interacademy Cooperation, http://www.nap.edu/catalog.php?record_id=10888

Nye, Joseph S., (1990) Soft Power, Foreign Policy (80), 153-171

Nye, Joseph S. and Robert O. Keohane (2000) International Relations Theory: Power and Interdependence,3rd Edition, Longman

Peter, Nicholas (2006) "The changing geopolitics of space activities", Space Policy, 22 (2), 100-109

The Royal Society (2010) "New frontiers in science diplomacy – Navigating the changing balance of power"

Von Bencke, Matthew J. (1997) The Politics of Space-A History of US Soviet/Russian Competition and Cooperation, WestView Press

[1] Nye, Joseph S., (1990) Soft Power, Foreign Policy (80), 153-171

[2] US Secretary of State, Hillary Clinton, **State Department Town Hall Meeting on Quadrennial Diplomacy and Development Review, July 2009**, http://london.usembassy.gov/forpo051.html

[3] The Royal Society (2010) "New frontiers in science diplomacy – Navigating the changing balance of power", p.iv

[4] See http://diplomacy.aaas.org/

[5] http://www.euractiv.com/en/science/eu-us-scientists-ink-deal-nuclear-arms-monitoring/article-186879

[6] For more information about CERN, see http://public.web.cern.ch/public/en/About/About-en.html

[7] For more information see http://www.whitehouse.gov/administration/eop/ostp/pcast/about

[8] http://www.euractiv.com/en/priorities/commission-name-chief-scientific-advisor/article-185685

[9] Jared Cohen, *Resetting U.S.-Russia Relations with a Mix of Tech and Diplomacy*, Huffington Post, March 18, 2010, http://www.huffingtonpost.com/jared-cohen/resetting-us-russia-relat_b_504051.html

[10] Friedman, Thomas L. (1992) "US To Offer Plan To Keep Scientists At Work In Russia", New York Times, 8 February 1992, A1

[11] National Academy of Sciences (2004) Scientists, Engineers, and Track-Two Diplomacy: A Half-Century of U.S.-Russian Interacademy Cooperation

[12] Peter, Nicholas (2006) "The changing geopolitics of space activities", Space Policy, 22 (2), 100-109