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## **Science Diplomacy: New Global Challenges, New Trend**

*By Luk van Langenhove*

### **Synopsis**

*As new challenges such as the critical need for a universal sustainable development agenda confront mankind, science and diplomacy are converging as common tools for trouble-shooting. A new phenomenon is Science Diplomacy involving the role of science in diplomacy.*

### **Commentary**

MOST SCHOLARS of International Relations now agree that a revamp of the Westphalian model of sovereign states is long overdue. Globalisation, based upon massive changes in transport and electronic communications, has created greater interdependence between states. Meanwhile ‘international relations’ and the diplomatic activities that go with it are no longer the preserve of sovereign states.

Other actors, such as supranational regional organisations or subnational entities engage in diplomacy as well. The rise of so-called “Public Diplomacy” is another one of those changes. It is related to the growing importance of soft power and the need to gain public support for foreign policies. There has also been an evolving relationship between science and diplomacy.

### **Rise of Science Diplomacy**

In principle they represent two distinct spheres of human activity that have little in common. As one scholar once put it: science and diplomacy are not obvious bedfellows. Nevertheless scientific networks and evidence are playing an increasingly important role in diplomacy efforts initiated by both state and non-state actors. This practice can be termed as “Science Diplomacy”.

Though this is a new concept, it refers to an old practice as scientists always have been at the forefront of international collaboration. As early as 1723, the UK Royal Society instituted the post of Foreign Secretary. Today scientists all over the world are connected to each other through “invisible colleges” - that is networks organised around scientific disciplines or problems.

### **Three Varieties of Science Diplomacy**

It is not clear when the concept of Science Diplomacy was coined and first used, but today it is becoming widely used by policy-makers, scientists and scholars of International Relations. In 2010 the U.K. Royal Society and the American Association for the Advancement of Science (AAAS) published a landmark report in which they distinguished between three forms of Science Diplomacy: diplomacy for science, science in diplomacy and science for diplomacy.

*Diplomacy for Science* is mainly about the facilitation of international scientific collaboration. Here classical tools of diplomacy are put to use to support the scientific and technological community. It is about using diplomacy in order to establish cooperation agreements at government or institutional level. The goal of actions of diplomacy for science is to benefit from foreign science and technology capacity in order to improve the national capacity.

With *Science in Diplomacy* the roles are reversed: here the scientists are prompted towards supporting foreign policy. In times of war this has resulted in mobilising national scientific and technological resources for the development of arms. In times of peace this is about using scientific knowledge in foreign policy decisions. The goal of such activities is to improve Foreign Policy actions through the use of scientific knowledge.

*Science for Diplomacy* goes one step further: here science is used as a tool to build and improve relations between states. This can be done when there are tensions in relations between certain states or when states are faced with common problems that they cannot solve on their own. Scientific collaboration is used here to provide collaborative relationships that are based upon a non-ideological basis. The goal is here to support Foreign Policy actions by mobilising scientific networks.

### **States and Scientists as Science Diplomacy Actors**

In general Science Diplomacy can thus be regarded as a tool for states to use science and scientists to pursue their Foreign Policy goals. This can be done to promote the national interests or to solve problems faced by the state.

But scientists themselves can also embark upon Science Diplomacy activities without states being directly involved. They can intentionally act on existing diplomatic goals or what they do can have intended or unintended diplomatic effects. So Science Diplomacy is a concept used in either identifying ongoing activities as being of a diplomatic nature or as a term used to qualify certain policy actions in a certain way. In other words, Science Diplomacy can refer to both practices and discourses.

## **Stepping up Science Diplomacy activities**

There are several interesting cases of the mobilisation of scientific communities for Science Diplomacy. A classical case is the scientific cooperation between the United States and the Soviet Union during the Cold War. In 1954, when the European Organisation for Nuclear Research (CERN) was established, it became an arena where France and Germany collaborated. The most recent example of successful Science Diplomacy is the nuclear agreement between the US and Iran.

Today, a major promoter of Science Diplomacy is the American Academy for the Advancement of Science (AAAS), as is the Royal Society of the United Kingdom. In 2008 the AAAS created a Centre for Science Diplomacy and in 2012 it launched an open source journal called "Science and Diplomacy". Also in the US a 'Science envoy programme' has been initiated in 2009 by the Obama administration.

Several other states now have their own Science Diplomacy programmes. Even if no national Science Diplomacy programme is available, many states have long deployed scientific attachés in their embassies. An interesting case is Spain where the Spanish Foundation for Science and Technology has recently appointed three international coordinators to its embassies in London, Washington and Berlin.

They operate as offices for cultural and scientific affairs of the Embassies of Spain. In Europe, the EU also pays increasingly attention to Science Diplomacy as part of its foreign policy although the driving force is its Directorate General for Research, not the European External Action Services.

## **Science Diplomacy: To What End?**

The rise of scientific diplomacy in different parts of the world is an interesting trend to watch. It poses the question for what purposes will states and scientists work together? The answer might lie in the Sustainable Development Agenda. Perhaps the most salient development for the future of Science Diplomacy is the growing awareness of global problems that sovereign states are faced with.

They are not only of a planetary nature, they also are connected to scientific and technological issues for which finding solutions are critical. Almost all of today's pressing global problems such as climate change or energy security have a scientific component. Hence the need to link global governance with scientific evidence. On 25 September 2015, the United Nations adopted a set of ambitious goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda.

Each goal has specific targets to be achieved over the next 15 years. For these, different actors need to do their parts: governments, the private sector, civil society and also the scientific communities. Science Diplomacy might therefore just be the tool needed to realise these goals.

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