

Whither Science Diplomacy and the Building of Global Science

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Merging of Terms “Science and Diplomacy”

- Science in Diplomacy
 - Global issues with science basis (climate change, global health, agriculture, sustainability, energy, etc)
- Diplomacy for Science
 - Getting things done for the science community
- Science for Diplomacy (Science Diplomacy)
 - Science’s direct role in affecting bilateral relations

“New Frontiers in Science Diplomacy”
The Royal Society and AAAS

Science Diplomacy is not just another term for International Science Cooperation?

- The motivation for International Science Cooperation is to advance *science*
- The motivation for Science Diplomacy is to affect *relationships*

Science Diplomacy in the United States (Historical)

“Science and technology may be stepping into a new and more important role in the conduct of American foreign policy.”

[The Secretary of State] “. . .thinks that Americans' ability to contribute money and run the world in the old-fashioned way . . . is now over. What we can contribute-and what the world wants-is our technological capabilities.”

from *Science Magazine*

The Secretary of State at the Time

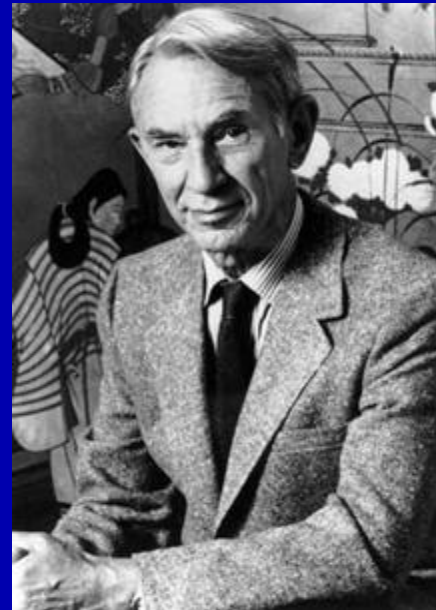


History of Science Diplomacy in the U.S.

- U.S. – Japan:
- U.S.- China:
- U.S. – USSR:

History of Science Diplomacy in the U.S.

- **U.S. – Japan:**
- “Fixing the Broken Dialogue”
- President Kennedy and PM Ikeda agree to science cooperation to bridge divide in intellectual communities;



Ambassador Reischauer

U.S. and Japanese Physicists Share 2008 Nobel Prize



History of Science Diplomacy in the U.S.

- U.S.- China: 1970s, Moving the relationship beyond geopolitical;

“In early 1972, President Nixon decided to try to change the U.S. relationship with China. The diplomatic history of his visit to China ... is well known. But what is not known is the role that science may have played. The U.S. government decided that in addition to the political change that we planned to raise with the Chinese, we would offer something of direct tangible benefit, specifically cooperation in science and technology.”

Norman Neureiter, from “*Science as a gateway to understanding*”, 2008

History of Science Diplomacy in the U.S.

- **U.S. – USSR: Establishing a relationship and dialogue during time of official political strain**

“ . . .we cannot forget that we are dealing with a closed society, and that these exchanges often give us the only access to significant circles in that society with whom we would otherwise have little or no contact. It would be short-sighted of us not to recognize that it is in our national interest to seek to expand scientific cooperation with the Soviet Union.”

Amb John Negroponte
September 1987

Science Diplomacy In The United States (Current context)

- Science Diplomacy becoming an ever more important element of official US Foreign Policy
- New initiatives – NODES and STEPI look to take advantage of interaction between State Department and US Science Organizations

Official Science Diplomacy: President Obama Cairo Speech



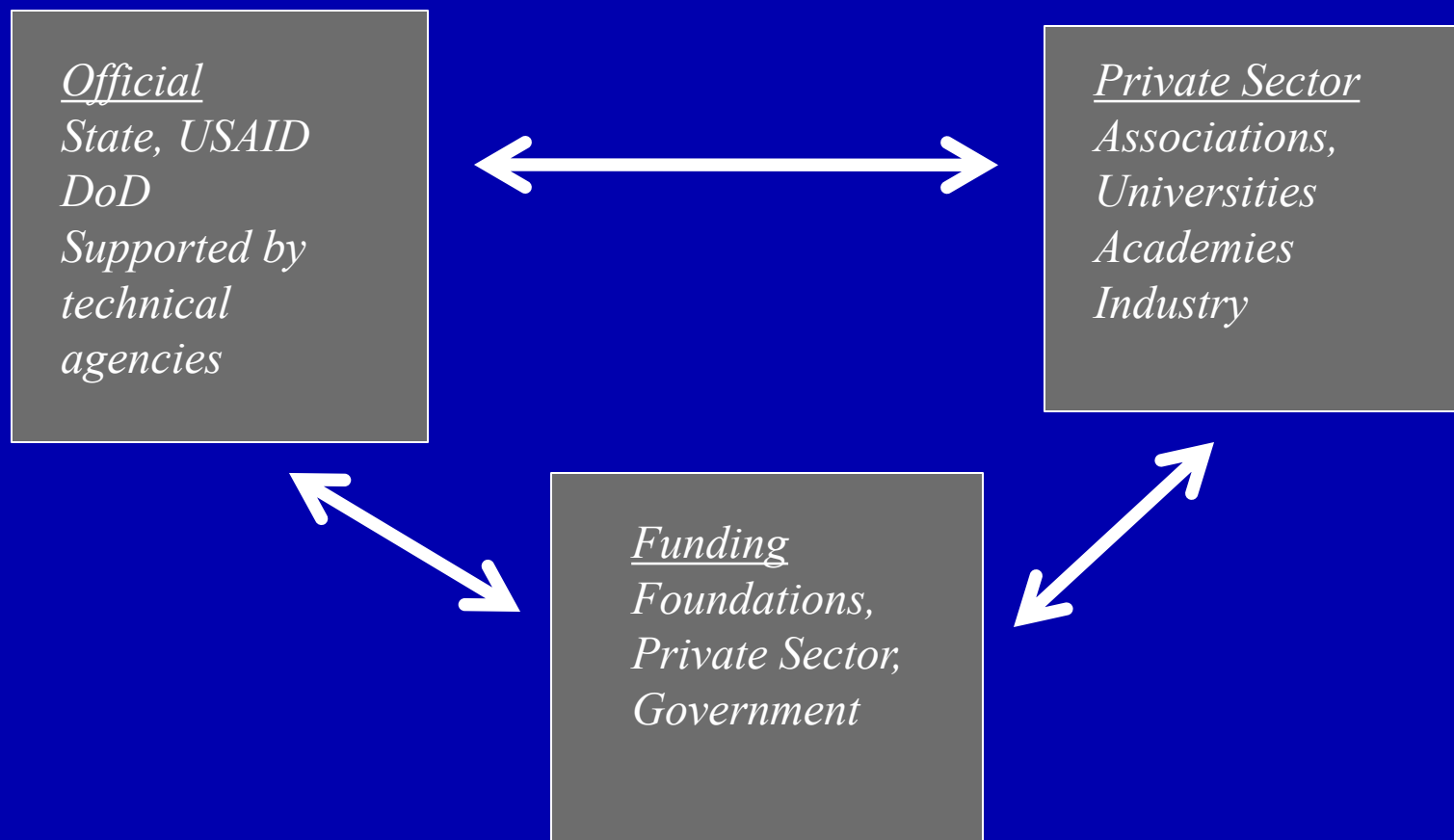
Centers of Excellence in
Science and Technology

Science Envoys

US Science System

- Complicated with over 20 agencies having science – and lots of international
- Separation of powers (President Proposes, Congress Funds)
- OSTP has important role in coordinating basic (non-health) research agencies
- Science Diplomacy is often coordinated out of the Department of State (even if it is not funded out of there)
- Major role for non-governmental organizations

Who Does Science Diplomacy in the United States?



The three-E's Of Science Diplomacy - Science Diplomacy to:

- Express national power and influence
- Encourage broader regional integration
- Enable building of trust and relationships


Expressing national power and influence

“As a small nation we must compete hard to maintain our relevance in a world where we can easily be forgotten. We have to demonstrate that small countries can indeed, make a difference.: - Sir Peter Gluckman, February 2011

Encouraging broader regional integration




Enabling the building of trust and relationships



"The Binary Pulsar Experiment and Related Matters"

Prof. Joseph Taylor
Nobel Laureate in Physics, 1993
Professor, Physics Department, Princeton University

Speech: The Binary Pulsar Experiment and Related Matters



Organized by:
Sharif University of Technology

Date: Tuesday, October 16th, 2007 – Mehr 24th, 1386
Place: Sharif University of Technology, Jaber-ebn Haian auditorium
15:00-16:00 Speech by Prof. Joseph H. Taylor
16:00-17:00 Question and answer

از کلیه علاقمندان دعوت می شود تا در این گردهمایی که در سالن جابربن حیان برگزار می شود حضور یابند.

Science is effective for the foreign policy community because it:

- Promotes sustained and ongoing interactions with often influential people in or critical people to society
- Encourages collaboration
- Focuses on understanding or addressing problems with importance to society
- Depends on following a methodological approach consistent with other goals of diplomacy
 - Transparency
 - Meritocracy and Peer Review
 - Data sharing

What benefits for science (scientists)?

- **Funding** – When international science has recognized national interest, policy makers more likely to support it
- **Priority** – Ability to elevate science issues to policy front burner in a country (e.g. closer link between science and science for policy)
- **Access** – diplomatic agreements might smooth the way for scientists to have access to samples and experts from other countries, while making cooperation

AAAS Center for Science Diplomacy

- Established in July 2008 – During Congressional Testimony
- Focuses on Three Sets of Activities
 - Informational
 - Operational
 - Intellectual

What is AAAS – and why is it involved

- Largest general science society
- Non-Governmental (Not trying to push a political agenda)
- International in scope – with strong access and links to and with the policy and research communities

Science Diplomacy: AAAS's Center Mandate

- ***“Advancing science, its methods and applications through international cooperation with the goal of establishing or enhancing societal relationships, especially when official relations are limited or strained ”***

Current examples of U.S. Science Diplomacy (Engaging where official relations are limited)



US – Cuba



US - DPRK



US – Burma (Myanmar)



US – Burma (Myanmar) - cont



Other things we have done or are looking to do

- Joint meeting with India on Developing Cooperation of Joint Science Diplomacy Activities
- U.S. – Uzbekistan
- Joint initiative with TWAS (Academy of Sciences for the Developing World) on Science Diplomacy

Intellectual

- AAAS aims to serve as the intellectual hub for issues at the interface of Science and Foreign Policy
- We do this through Publications, Research and Scholars, Meetings and Workshops

MARCH 2012

SCIENCE & DIPLOMACY

A quarterly publication from the
AAAS Center for Science Diplomacy

Science and Diplomacy: The Past as Prologue
Vaughan C. Turekian and Norman P. Neureiter

Science Diplomacy and Twenty-First Century Statecraft
Robert D. Hormats

Nunn-Lugar: Science Cooperation Essential for
Nonproliferation Efforts
Richard G. Lugar

South African Science Diplomacy: Fostering Global Partnerships
and Advancing the African Agenda
Naledi Pandor

From Cold War to Warm Relations: Fertile Ground for Science
Diplomacy in Central Asia
Alice P. Gast

Rediscovering Eastern Europe for Science Diplomacy
Marek Konarzewski and Grażyna Żebrowska

International Fusion Energy Cooperation: ITER as a Case Study
in Science and Diplomacy
Todd K. Harding, Melanie J. Khanna, and Raymond L. Orbach

WWW.SCIENCEDIPLOMACY.ORG

AAAS Launches new
Quarterly March 2012

www.sciencediplomacy.org/welcome

Coherence and Compatibility

- Activity started with conversation with Arimoto and Turekian in 2008 –right here in Tokyo about the implications for and challenges to global science given rise of new science powers
- Leshner and Turekian 2009 editorial “Harmonizing Global Science”
- 2011 meeting on Building Coherent and Compatible Science Enterprise

Science Diplomacy and Japan

- Japan well positioned given numerous links – especially in SE Asia
- Would benefit from having a central non-governmental node for science diplomacy – think tank/association
- Need to develop a strategy - Which of the E's are the focus?
- Establish inter-ministerial coordinating group
- Build tri-lateral partnerships