

Letter from the Desk of David Challinor  
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The current penchant for secrecy may have reached its nadir a few months ago when the Archivist of the United States announced that his predecessor had authorized certain government intelligence agencies to remove from the Archives thousands of previously public, declassified documents. Even the number of documents removed was classified, and the reclassification of this material struck many citizens as emblematic of a dangerous tendency of overzealous civil servants to hide from lesser mortals information they deem “sensitive.” Perhaps nowhere does secrecy impinge more heavily on quality than in the field of science. This month’s letter will consider the contradictory quality of “secret science” and the cost to the welfare of humanity in our tolerating such an oxymoron.

It is not often that a scientist takes advantage of an opportunity to express quietly his/her opposition to a policy that he/she considers flawed, but an eminent Smithsonian scientist, not long before he was hired by the Institution, did just that. This scientist was elected to membership in the National Academy of Sciences (NAS); he rejected a signal honor because he thought it inappropriate for the NAS to have a classified contract with the Office of Naval Research (ONR) on underwater acoustics. WWII was long over and he found little justification for secrecy within one of the Nation’s premier scientific organizations. As far as I know, he was only one of two scientists ever to turn down election to the NAS, and he did so with no fanfare. It was only years later that I learned of his action, and he has had my undying respect ever since.

Problems with government “oversight” certainly arose during my tenure as head of science at the Smithsonian. In 1971, for example, I was the principal investigator on a United States Agency for International Development (USAID) contract to study the biological consequences of a mainstream dam on the Mekong River at Pa Mong, about 20km upstream from the Laotian capital of Vientiane. When my colleagues and I had completed our report, USAID officials informed the Smithsonian that the Agency had to review it before publication. This request smacked of censorship to the authors (all scientists) and, after considerable negotiation, the Smithsonian released the report first and then let USAID “review it” *ex post facto*.

Another example of the cost of classified research arose when a long-term Smithsonian contract (20 years?) with the ONR came up for renewal. As Assistant Secretary for Science, I was told by the Smithsonian’s Contracts Office that some of the research we had been doing openly for years would henceforth be classified. The ONR would not budge on this issue, and I decided not to renew the contract. I use these examples to show how easily an institution like the Smithsonian can be co-opted by government agencies that seem to revel in secrecy and control.

I have long considered the Smithsonian Institution to be a scientific organization. The last time I tallied the professional staff, scientists comprised the majority. From my perspective, science cannot flourish “in camera;” that is not what science is all about. Rather, almost all scientists are motivated by learning something new, and they are anxious to share their findings with their peers. They powerfully resist feeling any kind of bureaucratic control of research, and this is how it should be. As Abraham Pais put it so eloquently: “...secrecy strikes at the very root of what science is, and what it is for. It is not possible to be a scientist unless you believe it is good to learn...unless you think it is of the highest value to share your knowledge...”<sup>\*</sup> Clearly you cannot share “secret knowledge” and that raises the whole issue of government-imposed secrecy even in such enterprises as the development of the atom bomb at Los Alamos.

In retrospect, was all that secrecy about the atom bomb worth it? Consider the Leslie Groves-Robert Oppenheimer controversy with rampant accusations of disloyalty. The procedure to make the bomb did not stay secret long and within a relatively short time the British, Soviets, French, Israelis and others joined the nuclear “club.” A nuclear non-proliferation treaty exists, but I believe the United States is still not a signatory because of Pentagon concern about constraints on the development of a new nuclear armed “bunker-buster.” Practically, I believe that no country, Iran included, would be so foolish as to ever use an atom bomb today. The United States is the only Nation that ever dropped an atom bomb on people, and I believe the burden falls on us particularly to reduce our nuclear bomb stockpile, which still numbers in the thousands. Despite the warnings of pioneer physicists like Nils Bohr, splitting the atom for wartime destructive goals opened a Pandora’s Box that for a half-century humanity has been unwilling or unable to close. The working bombs possessed today by eight or nine countries will hopefully never be detonated and should be considered, I believe, solely as a deterring threat of retaliation against an aggressive invader. Membership today in the nuclear club strikes me as being more of a status symbol, albeit an extraordinarily expensive one, than as an actual weapon of mass destruction. Clearly, no country that possesses one will ever give up such a symbol. Thus, nuclear secrecy will survive despite the futility of trying to keep its details classified. The disgruntled employee, the clever spy and the politically convenient “leak” are all means of spreading so-called privileged information.

Secrecy may be justified for the military and it is truly essential for diplomacy during negotiations. I am sure most will agree that had the Founding Fathers not met “in camera” during the hot summer of 1787 in Philadelphia, our Constitution would not be the great document we value today. In academic and especially scientific institutions, however, secrecy is anathema and when attempted often comes back to haunt the perpetrator. The Smithsonian is no exception; it must sustain its transparency in everything it does to protect its reputation in the world of science and to fulfill its mandate—the increase and diffusion of knowledge. The taint of secrecy is hard to erase, as I learned to my chagrin when the Smithsonian inadvertently was suspected of involvement in the Defense Advance Research Project Agency’s (DARPA) Himalayan Border Countries Program. The Indian newspapers had a field day and the Smithsonian’s

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<sup>\*</sup> Abraham Pais, *J. Robert Oppenheimer: A Life*, Oxford University Press (2006) on page 51.

supposed connection was discussed in India's Parliament. It took years of effort to clear the Institution's name. Its openness is the crucial key for its scientists to gain access to many nations for field research. Without such an image, suspicion becomes rampant and research constraints soon follow.

We would do well to emulate the Center for Advanced Studies in Princeton where faculty and staff decided not to continue administering funds from the Atomic Energy Commission because the latter attempted to impose, as a condition of employment at the Center, an FBI clearance on potential new members. Even the Smithsonian had to put its foot down in 1965 when it celebrated the 200<sup>th</sup> anniversary of Smithson's birth. The FBI sought access within the Smithsonian to photograph surreptitiously the visiting scholars, especially those from behind the Iron Curtain. Secretary Ripley was adamant in his denial of approval, being mindful of the damage to the Institution's international image should such an incident have occurred and come to light later.

There are many examples of successful openness. The world's scientists have succeeded in having Antarctica declared open to all peaceful research. Even the United States does not recognize national claims to that continent's land mass. Such a precedent could also be applicable to the global control of the nuclear genie. The threat of nuclear extinction, remote as it may be, warrants a global agreement in which the concept of national security is acknowledged to be incompatible with maintenance of a nuclear arsenal. The almost impenetrable cloak of secrecy that surrounded the successful effort to split the atom had the unexpected consequence of blocking international discussion among physicists on ways of cooperating to control and develop this new energy source. Nuclear power is here to stay, but its safe use, particularly after the Chernobyl catastrophe, is truly a global responsibility rather than merely a national concern.

Physics, more than most other scientific disciplines, seems most susceptible to secrecy, although even biology (lethal biological weapons) and ethnology (Himalayan Border Countries Project) have also been ensnared. No science is invulnerable to secrecy, and it requires constant diligence to protect the reputation of all scientific institutions. The Smithsonian has fared well, thanks in large measure to the efforts of its scientists to be open and transparent in all their endeavors. Let us pray that it will ever be so.

David Challinor  
Phone: 202-633-4187  
Fax: 202-673-4686  
E-mail: [ChallinorD@aol.com](mailto:ChallinorD@aol.com)