Making Up My Mind, and Then Changing It

When I arrived at UCLA as a 16-year-old undergraduate in 1973, the first Moon landing was still a vivid memory. It seemed to herald wonderful possibilities, and even in retrospect it remains an amazing achievement—something altogether new in human history. Although the astronauts who set foot on the lunar surface were nominally the heroes of the event, the space program was actually the result of a coordinated effort of many thousands of individuals whose efforts were brilliantly harnessed to achieve a common goal. If it was not the moral equivalent of war, it was pretty close.

Culturally, a popular view of the space program was mirrored in the Star Trek TV show of the late 1960s. Setting aside the often-silly operatic conventions of the series, it portrayed space exploration as not only a thrilling means to discovery but as a way to transcend racial, ethnic, and even inter-species conflict.

I was sold. The study of engineering seemed to be a logical way to actualize the promise of the classic science fiction stories (Robert A. Heinlein, Isaac Asimov, Arthur C. Clarke) that I had grown up reading, and to join in the unfolding adventure that was now taking place.¹

That, of course, proved to be quite naive, and not only because the human space exploration program had already peaked for the foreseeable future. My experience with the university engineering curriculum was more crushing than exhilarating. It was nearly all-consuming, with little time allowed for the liberal arts, let alone social transformation. I have no doubt that engineering can be a realm of enormous creativity and enlargement of spirit but I had trouble finding my way there.

My first engineering jobs involved measuring the electric resistance on the surface of an Army helicopter and assembling laser range finders. These were things that apparently needed to be done, so I did them, but with rapidly diminishing enthusiasm. I left the field to spend three years in Israel, where I studied Talmud in two Jerusalem yeshivot (religious academies) and worked in a physics lab at the Technion-Israel Institute of Technology in Haifa, looking for direction.

I returned to a graduate program in electrical engineering at UC Berkeley but it hardly held my interest. I soon concluded that I had made a mistake. Outside of class I was reading widely and trying to expand my horizons. I remember being captivated by Aldous Huxley’s biography of Père Joseph, the original “grey eminence” behind Cardinal Richelieu, and by

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Lewis Mumford’s study of Herman Melville.  I couldn’t help noticing that while the works of these authors ranged widely and magnificently across disciplines and genres, their own academic credentials were sparse. I couldn’t be them, but I could still hope to get beyond the confined intellectual space I was in.

In the summer of 1981, I left Berkeley and started working with a public interest advocacy group in Los Angeles called Committee to Bridge the Gap. It was led by Dan Hirsch, a Harvard graduate turned community organizer. Like me, Dan was the son of European Jews and I immediately felt a sort of kinship with him. His office was filled with books by Thomas Merton, Daniel Berrigan, Dorothy Day and other challenging authors who were as yet unfamiliar to me. The cultural and ideological boundaries at the time felt unusually fluid and permeable. My first published article would appear in the Catholic Agitator, the free newspaper of the Los Angeles Catholic Worker.

More than anyone I had ever met, Dan created a path in life that embodied his own values and he followed it with persistence and fidelity. I knew that I had a lot to learn from him. I audited a course he taught at UCLA in which the required reading included Alinsky’s Rules for Radicals, Gandhi’s My Experiments with Truth, and Huxley’s Ends and Means. The point was not to indoctrinate students in one or another of these works but to teach them about diverse ways in which one might experience life’s conflicts and respond to them. To me, it was a revelation. I hadn’t solved any problems yet, but I was starting to identify and grapple with them.

At Committee to Bridge the Gap (the “gap” meant different things at various times), we worked on community issues – like remediating a local playground that had been built on a toxic waste dump – as well as on national and international concerns. One project aimed to curtail and eliminate the use of weapons-grade highly enriched uranium fuel in research reactors around the world, including one located on the UCLA campus.

Along the way, I acquired new skills and a kind of education in practical citizenship that had previously eluded me. I learned how to file a Freedom of Information Act request, how to write a press release, and how to prepare a grant proposal. I wrote op-ed pieces, met with members of Congress, drafted legislation, and testified before the Nuclear Regulatory Commission and a U.S. Senate Committee. As needed for our work, I learned the rudiments of administrative law, how to model atmospheric dispersion of radioactive plumes, and basic health physics.

At some point we turned our attention to NASA’s Galileo mission to Jupiter, which was scheduled for launch in 1989. It raised safety concerns because it was powered by a sizable quantity of plutonium-238. While this isotope, unlike plutonium-239,
239, is not suitable for fission weapons, it is actually far more radioactive (generating decay heat that can be converted into electricity). The environmental and public health consequences of a launch failure, such as the explosion of the Challenger space shuttle in 1986, could therefore be serious.

I prepared critical comments on the Galileo Environmental Impact Statement and submitted them to NASA. I outlined the history of accidents involving space nuclear power sources, identified gaps in the data relied upon by NASA, and proposed potential alternatives that would reduce some of the risks.

To my surprise, I got a call from the Galileo project manager, John Casani. He asked me to come out to his office at the Jet Propulsion Laboratory in Pasadena, where the spacecraft was being assembled, to discuss my comments. While NASA officials didn’t quite know what to say to anti-Galileo demonstrators chanting “What Do We Want?, When Do We Want It?,” it seemed that my objections were presented in a language they could speak.

Over several hours, Mr. Casani went through my comments one by one and explained where he disagreed and where he agreed, and why. Although he was an accomplished engineer who had already managed successful missions to the outer solar system and I – well, I was not – he listened to me attentively and responded to my points with substance and clarity. He did not contend that the Galileo mission was safe in any absolute sense. It wasn’t. But he argued that the potential accident scenarios had been carefully mapped out and that the plutonium generators had been designed with a worst-case scenario in mind so as to minimize the consequences. I was impressed.

I thought it over for a while, and then I did what I would often ask others to do in the future: I changed my mind. I decided that I would not oppose the Galileo mission and that I would even speak out in support of it.7

This became a source of friction between some of my colleagues and me. The facts had not changed, so why had I? Had I been corrupted by ‘proximity to power’? Was I acting out some kind of self-gratifying role? I didn’t think so. But I had trouble explaining my change in perspective to their satisfaction. I also couldn’t say that their opposition was entirely wrong. Fortunately, Galileo was safely launched in October 1989 and successfully completed its mission to Jupiter in 2003. I had some difficulty breaking ranks with my own cohort. But it would happen again, and it would become easier. From then on, my choices and my mistakes would be my own.

My work on space nuclear power led me to the Federation of American Scientists, a policy research and advocacy organization that focused on nuclear arms control and other national security policy issues. The president of FAS, Dr. Jeremy J. Stone, was a mathematician who had left that field behind to become a surprisingly influential innovator and advocate in national security policy.8

He took a somewhat paternal interest in the professional development of the younger people whom he drew to FAS, including myself. When I started exploring the subject of national security secrecy, he suggested – citing the example of his own father, the writer I.F. Stone – that I write a regular newsletter about it. This proved a useful way for me to present my findings, and to cultivate an audience. Jeremy pressed me to overcome my tendency towards introversion and to go out and interview government officials and others in order to acquire new knowledge. When I gained unauthorized access to

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classified documents, a rare but repeated occurrence, Jeremy said I could not release them without offering the relevant government agency a chance to justify continued secrecy. He also said that I needed to dress better.

As I focused on reducing official secrecy, some of my advocacy work converged with the interests of historians and other scholars, and with their efforts to improve access to government records. I found that I was most effective when I was able to argue convincingly that greater openness was in everyone’s interests, even if not everyone recognized that at the time. For example:

In 1997 I filed a Freedom of Information Act lawsuit against the Central Intelligence Agency which led to declassification of the total intelligence budget for the first time. In 1999 I filed another lawsuit seeking that year’s budget total as well as the next year’s budget request. The CIA balked at that. The Director of Central Intelligence, George J. Tenet, submitted a sworn declaration stating that such disclosure “reasonably could be expected to cause damage to the national security in several ways” and I lost the case.9 But it turned out to be a temporary setback. Nowadays, the Office of the Director of National Intelligence issues press releases each year to publicly announce such budget information.10

Decades ago, I started systematically gathering and posting reports of the Congressional Research Service on the FAS website. These reports are often highly informative on a broad range of topics, and they are widely used by specialists and by members of the public alike. But Congress refused to make them publicly available online. Finally, a few years ago, following a long campaign by public interest advocates, Congress accepted the reality of the situation and CRS now makes the reports available itself.11

Members of the State Department’s Historical Advisory Committee used to meet behind closed doors with government agency officials without reporting publicly on their deliberations. So I went to the State Department reading room in the late 1990s to collect the minutes of those meetings and I posted them online. This initially caused some dismay.12 But the utility of publishing the meeting minutes was soon accepted, and the Committee has continued the practice on its own ever since.

These and other discrete initiatives were successful, I think, because they implicitly appealed to a shared commitment to an open society.

Some other such efforts of mine have failed, at least up to now. I have advocated for a fixed limit on the duration of national security classification – perhaps 40 or 50 years – beyond which classification would simply expire without any need for formal declassification. This would be a highly productive, zero-cost measure that has nevertheless not gained any traction to date.13 I have also tried to build support for a public-facing open source intelligence entity that would serve scholars,

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journalists, and members of the public in a way that would be roughly analogous to the role played by the Foreign Broadcast Information Service during the Cold War. But the CIA won’t hear of it.\textsuperscript{14}

What is most worrisome is that the very possibility of this kind of work is jeopardized by the apparent erosion of commonly held values. As a society the United States seems to be drifting farther away from a shared view of what is real and what is true, which makes conventional advocacy quite difficult. The practice of persuasion and other democratic political arts is predicated on the ability to communicate effectively with those who may disagree.

For that reason, I think scholars today have their own special role to play in preserving an open society by carefully marshaling evidence in support of a knowable reality, by upholding the canons of argument, and by insisting on the possibility of “changing one’s mind.”

I would hesitate to offer my experience as a model to others, particularly since my formative years involved numerous missteps and false starts. I also benefited in unplanned and unpredictable ways from meetings with those who would become my teachers. Maybe the lesson to be learned is that some such errors are to be expected and may even be fruitful, and that what seem like wrong turns can nevertheless lead to meaningful destinations.

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