## From the APPEL Director

## Innovation: Burning Bridges or Building Them?

BY ED HOFFMAN



"I can only talk about what has moved me or intrigued me. I can't really be objective here."

-Martin Scorsese, from A Personal Journey with Martin Scorsese Through American Movies I love movies. What does that have to do with ASK and NASA? My love of movies recently led me to purchase a DVD set called A Personal Journey with Martin Scorsese Through American Movies. Scorsese is a great director. Among his forty films are Taxi Driver, Raging Bull, Goodfellas, and The Departed. Buying and watching the documentary crystallized for me concepts about innovation—an issue that is critically important to NASA and this magazine.

Until now, I accepted the notion that innovation was about destruction: breaking away from the past, blowing up the old, changing everything. Burn your ships when you get to a new place so there's no going back. (According to legend, Spaniard Hernándo Cortés did that on the coast of Mexico to make retreat impossible.)

I think that view is wrong. In reality, innovation brings the old and new together, both in what it creates and how the creative process happens. It doesn't burn bridges; it builds them.

I first saw the Scorsese documentary years ago when I checked out a beaten-up set of VHS tapes from my local library. I loved every minute of it. Scorsese communicated his passion and devotion to great movies and vividly evoked the challenge movie artists face in bringing their unique visions to the screen. Those individual visions can only be made real through the competence and cooperation of a whole community of reflective practitioners. And however brilliant and "new" they may be, they will only matter to audiences if they connect with fundamental human experiences and feelings that are very old.

I never expected to see this documentary again. But after watching the recent Kennedy Center Honors that included Scorsese, I typed "Martin Scorsese" into Amazon's search field and was ecstatic to find the documentary had been put on DVD in 2000.

The relatively new experience of online purchasing is amazing. The Amazon site offers reviews, search capabilities, communities, buying options, and links to other sites. It is successful not only because of shopping convenience but because its technology makes a large, like-minded social community instantly accessible. It helps you do old things—buy something you want and connect with other people—in a new way.

By definition, innovation means something new, but the best innovations of the Internet-Google, Amazon, eBay, Second Life—are powerful because they build on exactly the things that are most useful and valuable from the past. Instead of the new overthrowing the old, the new strengthens and extends proven ideas and capabilities. The ease and power of its social connections has made the Internet a ubiquitous tool, as common as driving a car or turning on the television. From games to shopping to information exchange to influence networks, it has wrought a tremendous transformation thanks especially to the vast potential for collaboration it has opened up. The Internet is an innovation in how we collaborate that I believe will lead to even greater innovation.

So both Scorsese's understanding of how great movies are made and my experience of buying the DVDs on which he shared his wisdom tell me that community is an essential part of innovation. Humans have always needed to communicate, collaborate, and share with other humans, and great innovations spring from our communal experience. Innovation is more about connection than destruction.