

# Foreword: Nerd Pride

*Nicholas Negroponte*

In the 1970s, art served a function similar to athletics at MIT. Both were seen as a relief from stress, fun to do, socially engaging. But they were not part of the Institute's serious business of doing science and creating technology. Instead, art's purpose on campus was extra-curricular and ancillary. If the students learned a little about art, it was thought, they'd be better rounded individuals. Great artists who then taught at MIT—I am thinking of Minor White and Richard Leacock—were brought to the Institute in large measure as a counter-weight to the general geekiness; call it aesthetics for nerds.

Steve Benton changed all that. He was a bred-in-the-bone scientist, a brilliant physicist who proudly wore a “Nerd Power” pocket protector. His work in optics was so highly esteemed that Steve became the first, and so far only, Media Lab faculty member to jump two rungs of the MIT promotional ladder at once. His commitment to the arts was equally profound and well illustrated by his eventual directorship of the Center for Advanced Visual Studies (CAVS), founded by Gyorgy Kepes in 1968, which Steve headed from 1996 until his death in 2003.

Kepes, the last of the Bauhaus originals, was a great philosopher of art and technology. When Kepes started CAVS—I know because I was there—he had in mind a place like the Center for Advanced Studies at Princeton, the academic home of Albert Einstein and John von Neumann. Little did Kepes know that a thinker of their magisterial ilk would someday head *his* program.

It is well known that the Media Lab was born within MIT's small School of Architecture and Planning, not the much larger School of Engineering, a more logical choice at first glance. This decision held several advantages. One was to keep us below anybody's radar about science and technology, which gave the lab the chance to break all the rules, gain momentum, and establish itself before anybody took notice. Another benefit was the natural *salon des refuses* provided by arts and design. It was more socially and academically acceptable to have iconoclastic science and idiosyncratic engineering in our branch of academia. For this reason, the Media Lab lived happily and undisturbed on the lunatic fringe, because nobody noticed—in the beginning.

Less well known is that the Media Lab's degree program grew out of the Department of Architecture's Masters of Science in Visual Studies, which I headed before Steve came to MIT. This program was so broad, it even included electronic music. Go figure. It also included photography, which as a discipline at MIT was going through a difficult period following the death of its founder, Minor White.

My own campaign for the Media Lab to achieve primacy of place, instead of serving as an occupational therapy clinic, took a major and credible turn for the best when I proposed we convert photography to holography, bring in the world leader in that field, and use holography as an archetype for the future of arts at MIT. At the time, people at the Institute thought it was unlikely we could

attract Benton away from Polaroid, where he not only worked, but was the direct protégé of Dr. Land himself. Fortunately, Jerry Wiesner (the 13th President of MIT and co-founder of the Media Lab) and Dr. Land (whom Jerry knew as Din) were such close friends that this idea was discussed openly and received Land's immediate blessing. Thus began Steve Benton's quarter century at MIT, three years before we moved into the new I. M. Pei building on Ames Street. Shortly afterwards he became the Academic Head of the Media Lab and created a robust PhD program.

What followed were two and a half decades of remarkable work—I am talking about his own research—at the intersection of both art and science, the kind Kepes wrote about. Engineering deadlocks were broken by card-carrying artists. Some of our geeks provided artistic expressions of lasting effect on the art world. The symbiosis went deeper than any before it. For evidence, just consider the pages that follow.

When MIT recruited its 15th President, it found none other than a holographer at the University of Michigan, where Charles Vest was then Provost. During his presidency, Chuck, as he is called, taught only one class a year at MIT; that was in Benton's course, proudly at the Media Lab. While their specializations within holography were different, their scientific interests overlapped. Chuck held Steve in the highest admiration, as he movingly recalls in his introduction that precedes this one

When Steve fell ill, Chuck and I decided together that we should hold an international symposium in Benton's honor. Of course, the invitees included the world's foremost holographers, including Emmett Leith and Yuri Denisyuk. After a small amount of planning, we moved the date up by six months to accommodate Steve's worsening prognosis. Even on short notice, it was easy to get these busy people to come from around the world. Alas, it was not soon enough.

Thirty-six hours before the meeting, Steve died. Some of the more distant participants had already started their trips—they wouldn't know until the day of the symposium that it had become a memorial.

Jeannie Benton asked to be the first speaker. She quickly turned commiseration into celebration, breathing life into the solemn event, giving everybody both energy and goosebumps. One result of the symposium is this compendium in Steve's honor. It documents remarkable work and real attitude. What it cannot provide as easily, but you will find between the lines, is family. Steve's family and students were indistinguishable. This was the hallmark of his teaching and research and explains the perfect attendance at his memorial. It was an opportunity that none would miss if possible.

Steve was born on December 1st. So was I. So was Neil Gershenfeld, also a senior faculty member at the Media Lab. We used to wish each other happy birthday and joke among ourselves that being born on December 1st was the key to tenure. Now all three of us have departed the lab; Steve with sad finality. Yet sadness hardly is his legacy. Steve wasn't only a gifted scientist and man of parts. As his widow reminded a silent auditorium that day, Steve also exemplified "demo or die," the Lab's cheeky take-off on "publish or

perish.” He always demo’ed and now had died. He was a cherished friend, colleague and example to us all, and we miss him.

*Nicholas Negroponte co-founded the MIT Media Lab with Jerome B. Weisner, starting in 1980. Thereafter he served as its first Director until 2000, at which time he became Chairman. He was a founder of and columnist for WiReD Magazine, which led to his New York Times best seller, Being Digital. He is currently on leave from MIT and is the founding Chairman of the One Laptop per Child non-profit Association and the 2B1 Foundation, that work together to bring \$100 laptops to children in the developing world.*