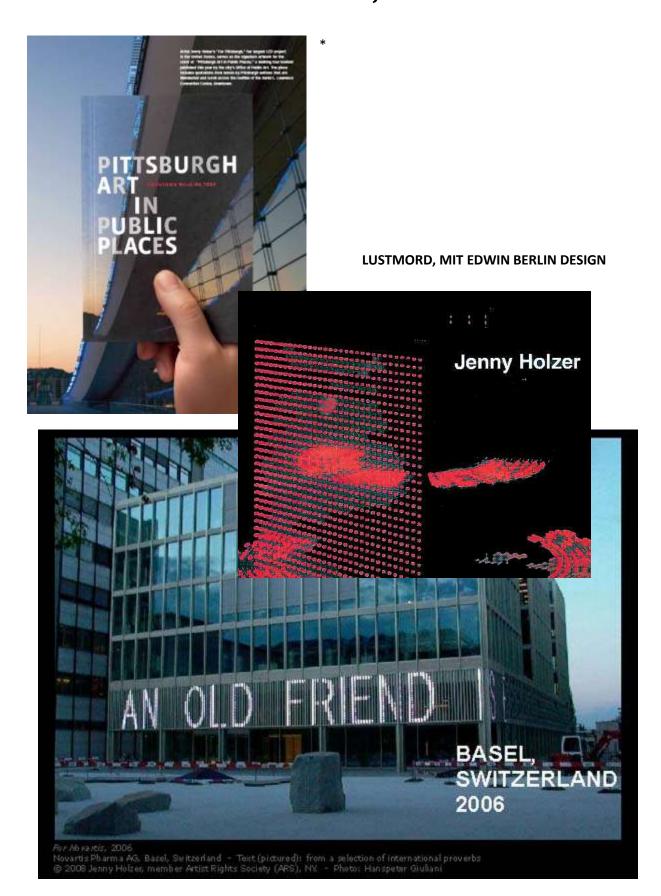
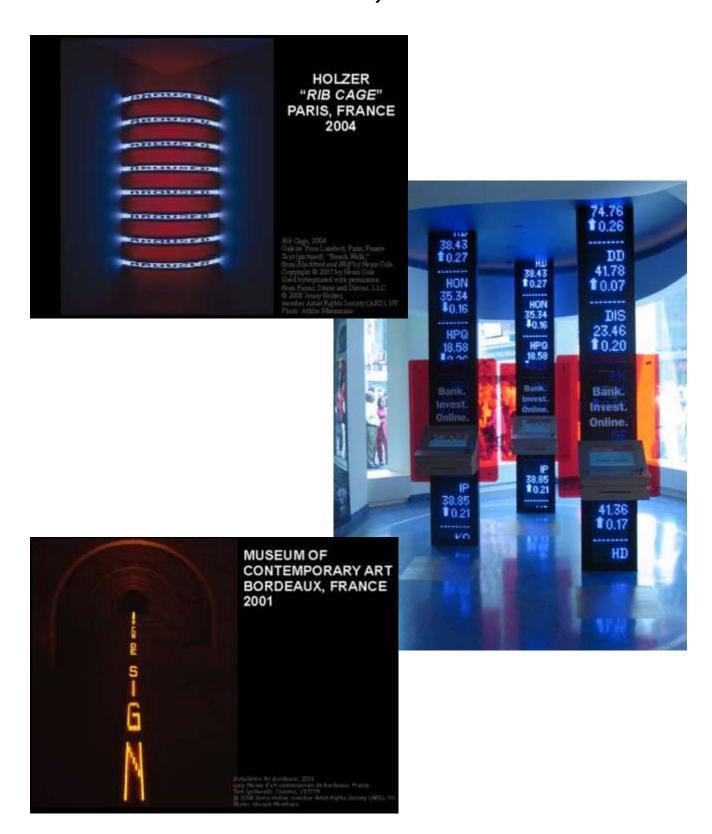
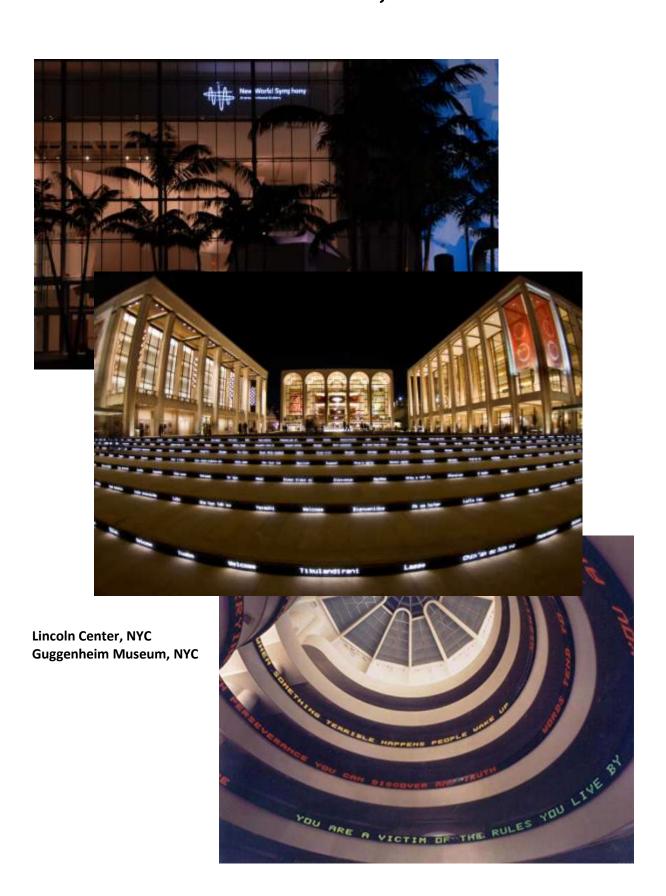
CELEBRATING MIT'S PAUL MILLER (EE'75)

History of LED Illumination









Paul and I met at MIT in the late 1970s, as he was founding his LED company and I was in search of light sources for early experiments in the optical activation of neurons. Paul complemented my knowledge of human vision, with the brilliant, practical knowledge of engineering circuits which worked flawlessly.

Thanks to my early experiences with Prof. Louis 'Lou' Smullin, lasers and light emitting diodes were in my lexicon, and Paul and I reconnected in the 1980s over LEDs for stage and concert lighting, an personal avocation which had accidently become quite successful. Although blue LEDs where yet to be invented, Paul's circuits found their way onto the Broadway stage among the first 'wearables' and props.

Years earlier, Paul and I had both seen the early prototype of MIT's Edwin P. Berlin, Jr., MIT EE 1970s three dimensional display, and thought it had great potential. MIT had already licensed the technology to an international consortium. A decade later In the late 1980s, I was an active MIT donor, and while attending an MIT Club meeting in Florida, was enticed by the MIT Licensing Office speaker to try to resurrect the Berlin patent which had returned without success.

Paul and I had followed the evolution of massively-parallel processing, electronically and computationally, respectively. Improving the Berlin project was a perfect collaboration- and in the next years, we improved the technology including the centerpiece of Jonny Holzer's acclaimed "Lustmord" Exhibition. Another project, funded by U.S. Air Force Intelligence Directorate, integrated our backplane architecture with Teledyne's high density LED arrays. Paul's architecture and LED driver technology excelled. Teledyne had tried to sabotage the project and was later fined \$112 million dollars for general Defense contracting fraud.

A resurrection of Teledyne, headquartered in Pittsburgh, took place under Robert Mehrabian, a former untenured MIT professor and Carnegie-Mellon administrator, who behind the scenes, sent two Carnegie-Mellon graduates on a industrial espionage mission to Paul before starting a knock-off of Paul's designs as Color Kinetics in the 1990s.

Later, in 2005, Paul and the legendary Yale Professor George Izenour would file formal affidavits in Federal lawsuit of the LED Alliance verses Color Kinetics seeking to invalidate a majority of the Color Kinetics patents procured by the law firm of Wolf, Greenfield and Sacks. At stake was was the \$791 million dollar sale of Color Kinetics to Philips. A few months later, Paul Miller died unexpectedly while installing a \$1,000,000 Holzer Exhibit at the new Pittsburgh Convention Center.

Last year, I inquired of Leila Kinney and Philip Khoury, about proposing an on-campus exhibition of Paul Miller/Jenny Holzer's work in commemoration of Paul's 40th and was told that Color Kinetics/Philip's was sponsoring a exhibition this year.

Obituary of Paul Miller (2005)

Mr. Paul A. Miller, 55, of Marshfield died Tuesday, November 8, 2005 at the New Convention Center in Pittsburgh PA, while on a business trip. The son of the late Theodore and Patricia (Pitts) Miller, he was born in New Brunswick NJ on June 5, 1950. He was raised and educated in Plainfield NJ and was a graduate of Massachusetts Institute of Technology in Cambridge.

Mr. Miller was formerly a resident of Cambridge and Scituate before moving to Marshfield 19 years ago. He was an Electrical Engineer and was a-founder of Sunrise Systems of Pembroke. He was a member of the Society of Environmental Graphic Designers, a member of the American Public Transit Association and a member of the American Association of Museums. Paul enjoyed mountain climbing, back packing and classical music.

He is survived by his wife, Andrea L. (Perkins) Miller, 1 son, Thomas Byron Miller of Marshfield, 1 sister, Georgina Martin of Manville NJ and 1 niece, Bonnie Martin of Princeton NJ.

In lieu of flowers donations may be made to the Wildlands Trust of Southeastern MA, PO Box 2282, Duxbury MA 02331. www.wildlandstrust.org