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Peter Kirstein, Father of the European Internet, Is Dead at 86

He was crucial to the spread of the protocols that underpin today's internet (and gave Queen Elizabeth her own email address).

By Katie Hafner

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Peter Kirstein, a British computer scientist who was widely recognized as the father of the European internet, died on Wednesday at his home in London. He was 86.

His daughter, Sara Lynn Black, said the cause was a brain tumor.

Professor Kirstein fashioned his pivotal role in computer networking the old-fashioned way: through human connections. In 1982, his collegial ties to American scientists working in the nascent field of computer networks led him to adopt their standards in his own London research lab.

Those standards were called Transmission Control Protocol and Internet Protocol, or TCP/IP, which enable different computer networks to share information. Professor Kirstein embraced TCP/IP despite competing protocols being put forward at the time by international standards groups.

"Peter was the internet's great champion in Europe," said Vinton G. Cerf, an American internet pioneer who was a developer of TCP/IP and a colleague and friend of Professor Kirstein's. "With skill and finesse, he resisted enormous pressure to adopt alternatives."

Queen Elizabeth II sending an email on March 26, 1976, from the newly created Royal Signals and Radar Establishment in Malvern, England, becoming one of the first heads

of state to do so. Professor Kirstein gave her her own email address.

Professor Kirstein was so avid a fan of computer networking that he gave Queen Elizabeth II her own email address, HME2. In 1976, while christening a telecommunications research center in Malvern, England, the queen became one of the first heads of state to send an email.

In 2003, when the queen made Professor Kirstein a Commander of the Order of the British Empire, he reminded her of that day in Malvern, and "she smiled," he recalled in an interview for this obituary in 2019.

"If she actually remembered sending that email, I can't say," he said.

Peter Thomas Kirschstein was born on June 20, 1933, in Berlin to Walter and Eleanor (Jacobsohn) Kirschstein. Both parents were dentists. His mother was born in London but raised in Germany. His father, who had been awarded the Iron Cross for his service in World War I, considered himself a patriotic German, Professor Kirstein said.

He referred to his parents as highly assimilated Jews. "My mother was completely agnostic," he said. "That class of Jews in Germany had absolutely no contact, really, with Judaism."

His father belonged to an exclusive yacht club in Berlin.

"As early as 1931, the secretary of the club said, 'You can't be very happy here with people like Joachim von Ribbentrop and Hermann Göring in the club,'" Professor Kirstein said. "It wasn't until they said that to him that he suddenly realized they were regarding him as Jewish."

Feeling increasingly unsafe in Germany, the family took advantage of Eleanor Kirschstein's British citizenship and moved to London in 1937. Walter changed the family's surname to Kirstein when he became a naturalized citizen in 1947.

Professor Kirstein studied mathematics at Cambridge University, where he received a bachelor's degree in 1954. For graduate work, he went to Stanford University, where he received a Ph.D. in electrical engineering in 1957.

In 1956, during a trans-Atlantic crossing, he met Gwen Oldham, a dental hygienist who was on her way home to England. "I noticed her as we were leaving," he recalled. "She was busy flirting with lots of boys. I thought, 'That's the kind of person I'd stay away from.'" They married in 1958.

In addition to his daughter Ms. Black, Professor Kirstein is survived by his wife; another daughter, Claire Fiona Kirstein; a sister, Ellen Batzdorf; and six grandchildren.

In 1973, after stints with the European Organization for Nuclear Research, or CERN, in Geneva and in General Electric's Zurich office, Professor Kirstein joined the faculty at the University College London. Computer networking became his principal research field.

When he built the university's email gateway to the United States in 1973, his lab became one of the first international connections on the Arpanet, the precursor to the internet. For the next decade he oversaw Britain's presence on the Arpanet.

Professor Kirstein formed a close working relationship with Dr. Cerf and another American, Robert Kahn — the co-inventors of TCP/IP — and exerted considerable influence in the field through his ties to the British Ministry of Defence and the British Engineering and Physical Science Research Council.

With additional support from the Pentagon's research arm, the Defense Advanced Research Projects Agency, he became a crucial facilitator in the spread of TCP/IP in Europe, pushing academic and research communities there to use them. He adopted TCP/IP at University College London in 1982.

The protocols remain the technical underpinning of today's internet.

"It's possible that even without Peter, TCP/IP would eventually have made its way into Europe," Dr. Cerf said. "But Peter was the bellwether."