

Quantum optics revisited

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Professor Herbert Walther and I met regularly at the series of International Conferences on Laser Spectroscopy during the seventies. I remember, in particular, the one he organized in Rottach-Egern in 1979. He also invited me to visit the Max-Planck Institute für Quantum Optik (MPI-QO) in Garching during my sabbatical leave from Harvard in the spring of 1980. With the aid of a Senior Humboldt Award, I gladly accepted this invitation. It was a most stimulating experience, in which I interacted not only with Walther's group on Quantum Optics, but also with Kompa's group on photochemical physics and with Witkowski's group on laser-plasma interactions. The MPI-QE was then housed in rather cramped temporary quarters, as the impressive current building dedicated to MPI-QO was in the planning stages.

In 1980, Professor Walther had already laid the foundation for a coordinated effort in Quantum Optics of international renown. In addition to his scientific and administrative duties as co-director of the MPI-QO, he also headed a separate research laboratory in connection with his chair at the University of Munich. It was located in the same large research park at Garching. There, Walther lectured in a regular course on atomic physics and supervised the Ph.D. thesis work of numerous graduate students.

His energy and dedication to science were awesome. In addition to the scientific and administrative direction of two impressive research groups in quantum optics, he also provided extremely helpful hospitality to a large number of foreign visitors. The unwavering and intelligent support of his wife Margot stood behind all his activities.

The foreign visitors to the MPI-QO could not help but notice that on Friday afternoons they were among them-

selves without German counterparts. Most of the MPI-QO employees, scientists and staff, left early for long weekends. When we teased director Walther about this situation, and compared it to the American work ethic, he explained that, through a democratic process, German employees had adopted a time table of starting somewhat earlier than the official customary time on all workdays, and this, in combination with a later lunch hour on Fridays, made Friday afternoons essentially free for them.

It was a pleasure to return seven years later during my next sabbatical leave in 1987, when I spent four months in the new MPI-QO building. While the field of Quantum Optics had experienced a remarkable growth worldwide, the relative importance of the Munich area in this field had increased even more. Walther had been able to attract T.W. Hänsch as a co-director of MPI-QO. The sophistication and diversity of the experimental equipment in the laboratories was impressive.

This growing trend was confirmed and reinforced during my recent brief visit during two days in July of 1994. I had the privilege of receiving a personal tour, with Walther pointing out key areas of progress. It was quite clear to me that in these past two decades, my role had gradually changed from being an active player to becoming an interested spectator. I still have some understanding of the game, the science and technology of Quantum Optics, and I enjoy following the progress made by so many dedicated physicists in this active area of scientific endeavor. I refrain, however, from attempting to make a second-rate scientific contribution to this volume. These brief comments and recollections are dedicated to Herbert Walther on his 60th birthday. I wish him health and happiness, and even further successes in his remarkable career as a scientific leader.