When the series of the *Journal of the Optical Society of America* (JOSA) ended in December 1983 and the first issue of JOSA A appeared in January 1984, Robert Terhune had achieved only half of his grand scheme to revamp JOSA. Now it was time to focus on JOSA B.

Robert Terhune, who was editor of both JOSA A and B, inherited only a small portion of the technical areas of the regular papers submitted to JOSA for JOSA B, subtitled *Optical Physics*. Those papers were primarily in the areas of spectroscopy and the optical properties of materials. The rest of the domain of this new journal was to be mostly new. The target areas that Terhune wanted to attract from other journals were laser spectroscopy, laser physics and modern quantum optics.

These were the exciting areas in which Arthur Schawlow and Nicolaas Bloembergen had won Nobel Prizes. And much activity in these fields was being pursued by other bright physicists who were still hoping to win their own future Nobel Prizes. Yet very few papers in these areas were coming to OSA journals. A 1983 opinion survey of the OSA membership clearly indicated that workers in quantum optics did not view either *Applied Optics* (AO) or JOSA as the primary places to publish. Instead, articles on those topics were being presented at various physics and quantum electronics meetings (such as IQEC, the International Quantum Electronics Conferences) and then appearing in various related journals.

In an article in the November 1983 *Optics News* (the precursor to OPN), Terhune outlined his plans to revitalize JOSA. He organized JOSA B in a parallel structure to JOSA A: There were ten topical editors, each in an important active subfield of optical physics, and again each bolstered by an initial launch committee. Calls for papers for the first three feature issues (on instabilities in active optical media; femtosecond optical interactions; and infrared spectroscopy with tunable lasers) appeared in JOSA A and *Optics News* in March 1984, and calls for papers for new additional features appeared in every issue of JOSA A.

Meanwhile, Terhune and his team of topical editors had contacted speakers at two major spectroscopy and quantum electronics conferences, and obtained many of the papers from those meetings. One of the topical editors—P.F. Liao—outlined his hopes for JOSA B in an article in *Optics News* (March 1984, p. 29). “Look at the rapidly growing literature on UV and X-ray physics,” he said. “That work is published in several journals whose readership is often without overlap…How nice if this optical physics work would have a home.”

The first issue of JOSA B appeared in March of 1984, and the first volume contained only six issues, with a total of 900 pages. To help introduce the journal, OSA sent it to all OSA members free of
charge for the first year. By the end of 1985, many of the planned features had materialized, contributed papers were beginning to arrive, and the journal had reached 2,000 pages—the same size as the old JOSA.

Since that time, the journal has continued to thrive, with six or eight topical features each year, including entire issues devoted to papers originally presented at IQEC meetings. In 1987, Robert Terhune retired as editor of JOSA B, after having successfully established three distinct viable journals over a 10-year period: Optics Letters, JOSA A and JOSA B.

He was succeeded by Willis H. Weber of Ford Research Laboratories as editor of JOSA B for 1988 and then by Paul F. Liao (1989 to 1994) of Bellcore. Tony Heinz took the reins in 1995, and George I. Stegeman has been editor-in-chief since 2001.

By 1990, the two JOSAs had a combined annual page total of 4,500 pages—which was more than twice the size of the old JOSA. In 2005, that number had reached nearly 6,000.

I should also mention that Robert Terhune introduced a successful editorial scheme in the process of planning the new journals Optics Letters, JOSA A and JOSA B. He decided to appoint a board of topical editors charged not only with reviewing contributed papers but also with stimulating the submission of papers in their respective areas.

In addition to increasing the quality and volume of available articles, this approach provided OSA with a pool of talented people that had some editing experience. All of the more recently appointed editors of Optics Letters, JOSA A and B, and even AO, had previously served as topical editors. Both journals have topical characters that are distinct from AO.

The general approach was also adopted when AO was split into three divisions in 1990. The scheme is not particularly new; AO had made extensive use of feature editors in the 1960s, but the journal then grew so fast that it began to exceed the page budget assigned to it by the OSA Board. Thus, it became necessary to curtail features and feature editors. When the same approach was tried again in JOSA in the 1980s, the Society had more financial resources and the OSA Board was more easily persuaded to let page budgets grow.

As talented as Terhune and other OSA editors were (and are), they are not the main reasons for the growth and success of these various journals. Rather, the credit should go to the authors and to the unsung heroes who have critically reviewed the manuscripts prior to publication. It was the flow of papers that drove the process, and not the other way around.

I compiled this and other information for a history of OSA in 1990, intended for the celebration of the Society’s 75th Anniversary in 1991. In the 30 years between 1960 and 1990, the OSA archival journals had grown from the 1,500 annual pages of the monthly JOSA in 1960 to 11,300 pages in four journals arriving seven times each month—an expansion factor of 7.5. As a quondam editor myself, I can only feel pity for the historian of the next generation of this expansion!

— P.F. Liao