Commemorative Article

Evolution of the *Journal of Neurosurgery*

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The *Journal of Neurosurgery*, begun in 1944, has successfully fulfilled the purposes of its founders. During the 50 years of its existence it has remained pre-eminent in its field, while evolving in presentation, size, and content in response to the needs of succeeding generations of neurosurgeons and allied specialists. This article draws from the memories of many people, from the minutes of meetings of the Editorial Board, and from reports of successive editors, and touches on some of the knotty problems faced by those dedicated individuals.

**KEY WORDS** • *Journal of Neurosurgery* • Henry Heyl • Henry Schwartz • history of neurosurgery

It was with considerable excitement that I responded to the request by the Editor, Dr. John Jane, to contribute a portion of the history of the *Journal of Neurosurgery* at this, the 50th anniversary of its publication.

During World War II, as a neurosurgeon (Army classification 3131C: “Neurosurgeon, in training not board-qualified”) stationed at an evacuation hospital in New Guinea, I was fortunate enough to contribute to Volume 1, No. 6, of the *Journal of Neurosurgery*. I, of course, knew nothing of the formation of the *Journal* and learned very little about it until the war was over. My coauthor, Pete Campbell, did know about the new journal, and it was he who facilitated the submission of our article to the *Journal of Neurosurgery*.

The historical contribution of Dr. Paul Bucy,1 published in the *Journal of Neurosurgery*, cannot be duplicated or improved upon. As Dr. Bucy indicated, his “brief recital of the origin, development, progress, and plans for the future of the *Journal of Neurosurgery* is doubtless not complete in every respect. Furthermore, these events have been seen through many eyes and from many viewpoints. Others would have added or deleted or would have altered the emphasis which I have seen fit to place upon various developments.” No one is going to improve on that.

The years to 1980 are briefly summarized by Dr. Henry Schwartz, who, as Editor of the *Journal*, had many intimate memories.2 However, his humility did not allow him to emphasize many of the important developments that were attributable to his leadership. For example, when the first Editor, Dr. Louise Eisenhardt, became ill in 1965 and the *Journal* could not function effectively, it was Schwartz who suggested that Dr. Henry Heyl, a neurosurgeon who had become severely disabled by paraplegia, would be an ideal editor. It was he who prevailed upon Dr. Heyl to take Dr. Eisenhardt’s place. It was Schwartz also who, when Dr. Heyl died in 1975, agreed to take on the editorship.

It is appropriate, therefore, to review some of the early history of the *Journal* and then continue with that history since 1980.

**Evolution of the Journal**

The *Journal of Neurosurgery* began in 1944 as a publication of the Harvey Cushing Society, and thus subsequently came under the control of the Board of Directors of the American Association of Neurological Surgeons, albeit as an independent organization. The Editorial Board was, and always has been, entirely responsible for the publication of the *Journal* and its contents. For many years the Board consisted of five neurosurgeons, each serving 10-year terms, “the term of one member expiring each two years,” and each became Chairman of the Board during his last 2 years on the Board. The Board has now increased to 10 members, who work tirelessly and in a dedicated fashion to keep the Journal at its present peak of excellence.
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The format of the *Journal* remained the same as first laid out until 1970, when Elaine Selle, then assistant editor, redesigned it with the agreement of Dr. Heyl and the Editorial Board. The July, 1970, issue was the first to carry a cover illustration—a color reproduction of the hieroglyphics from Case 31 of the first known surgical treatise, the Edwin Smith Surgical Papyrus. Subsequently, the managing editors, particularly Jean Lawe in the Hanover, New Hampshire editorial office, have selected appropriate illustrations for each cover, and these have become an attractive feature of the *Journal*. Other changes at that time included introduction of an abstract and key words for each article in response to the emergence of abstract services and the development of computer search systems. The Letters to the Editor section, a feature that has become a popular scientific forum, was also added in that issue.

An editorial comment in 1979 by Dr. Schwartz seems appropriate here:

> "The present issue represents a landmark with the appearance of Volume 50. Its format and size have evolved naturally, and we trust will meet with a favorable response from our contributors and readers.

> "So far as content goes, the members of the Editorial Board have, since the very beginning, been resolute in their dedication to evaluate all articles submitted and to select those that represent the best contributions to the science as well as the craft of neurological surgery, however divergent or assorted they may be. To these ends, the *Journal* reconsecrates itself.

> "Fresh contributions give new impetus to any endeavor, but progress comes chiefly through adding capstones to the sturdy masonry of the past. The lead article of Volume 1 of the *Journal* consisted of 'Some of Harvey Cushing's Contributions to Neurological Surgery,' by Gilbert Horrax. It is fitting that the fiftieth volume of the *Journal* founded (and continued) by the Harvey Cushing Society (now the American Association of Neurological Surgeons) contains an up-to-date portrayal of Dr. Cushing, recently presented in a celebration at the Countway Library in Boston. This is published not to emphasize the past, but to remind contemporaries and younger colleagues of at least one set of shoulders upon which neurosurgical accomplishments can continue to ascend."

It seems unnecessary to emphasize the great success of the *Journal of Neurosurgery*, which has grown from a bimonthly journal to a much enlarged monthly journal and from receiving a relatively small number of submitted manuscripts to now having over a thousand manuscripts submitted each year. The *Journal* has over 12,000 subscribers the world over and, under the direction of the Editorial Board and the successive editors, it has achieved international prominence. It is likely that most readers are simply satisfied with the *Journal* and have not been aware of the changes in libraries leading to greater access to the literature, the *Biblio-Index* eventually became unnecessary and was discontinued.

Other special publications included the "Neurosurgical Classics" series, 38 in all, which appeared in the *Journal* from 1962 to 1965 and were later republished in book form. The Cooperative Study on Intracranial Aneurysms appeared in 10 sections beginning in 1966 and this important series was published as a volume in 1969. Supplements have included the proceedings of the Second Symposium on Parkinson's Disease in 1966, the "Report on the National Head and Spinal Cord Injury Survey" in 1980, and the "Report on the Traumatic Coma Data Bank" in 1991. Invited review articles, written by specialists on non-neurosurgical but related topics, were a feature from 1980 to 1992.

The *Journal* published a special Harvey Cushing Memorial issue in April, 1969, to celebrate the 100th anniversary of Dr. Cushing's birth. The January, 1979, issue celebrated Volume 50 with a picture of the Harvey Cushing Medallion, minted in 1961 for the Second International Congress of Neurological Surgery in Washington, D.C.

In June, 1980, the 50-volume Cumulative Index was published. It required 18 months of labor and was highly appreciated by all the readers, who probably did not know that this effort had cost more than $75,000. A similar monumental effort went into producing the Cumulative Index for Volumes 51–70, published in 1989. This 344-page supplement was generated on computer disk so that later indices might be incorporated more easily.

There are a few things of interest that are not in the Editorial Board minutes, and they may be lost to history if I do not relate them as accurately as I can. It was the original intent of the *Journal of Neurosurgery* to publish in book form, possibly as a loose-leaf volume, the "Neurosurgical Techniques" sections of the *Journal*. At that time, there was no good atlas and many young neurosurgeons of my generation used the Bancroft and Pilcher *Surgical Treatment of the Nervous System*, published by J. B. Lippincott and dedicated to Harvey Cushing. The "Techniques" published in the *Journal* were carefully selected, with special emphasis being given to the quality of the drawings. In some instances, when the Editor responsible for this section had thought that an artist's contributions were not adequate and the original bill had been paid by the *Journal*, another artist known to the Editor was selected to produce better illustrations. Thus, the published drawings were all of high quality. However, by the time all of the "Techniques" contributions had been completed, various neurosurgeons had accumulated sufficient material to publish atlases, the field of neurosurgery had expanded exponentially, and the "Techniques" were never published in book form.

**Role of the Editorial Board**

A reading of the Editorial Board meeting minutes and the Editors' reports underlines the fact that these dedicated people do far more than review manuscripts...
and determine the content of the Journal. It is unnecessary to recount the many meetings the Editorial Board has had regarding financial matters, how to control expenditures, when to raise the subscription rates, how to deliver journals overseas speedily and at the best cost, and many other essential details. Consistently, the Journal of Neurosurgery not only has had good leadership, but has also had good business advice from those who are familiar with the publishing field. The original printer was George Banta Company, Inc., in Menasha, Wisconsin, and from 1973 to 1981, the Journal was printed by the Dartmouth Printing Company in Hanover, New Hampshire; currently it is being printed by Waverly Press, whose publishing services also handle the non-member subscriptions and advertising.

At one time, the Journal recovered a certain amount of money, not a great deal, from the publication of reprints, but that has not increased. The availability of copying machines, computers, and the various ways of transmitting information have created some new problems in this regard. The relatively low cost of subscriptions in foreign countries was established to make the Journal available to neurosurgeons in training abroad. In fact, it is sometimes the established neurosurgeons overseas who are subscribing at the reduced rates. The Board has no control over this issue, but has discussed it many times.

From time to time, the Board has had to be concerned about the cost of paper, the cost of printing, the cost of mailing, and many other costs, and has been responsible for the business functions of the Journal. The Board is responsible for laying aside funds to cover any publishing emergency and also for contributing funds to its parent organization, the American Association of Neurological Surgeons. The Board has sought the wisdom of various banks and financial institutions and at the present time is depending upon the First National Bank of Maryland for its financial advice along with a Finance Committee under the chairmanship of ex-Editor William Collins. The Journal of Neurosurgery is a large operation, and its annual budget is almost $2 million. At present it has a core reserve of well over $600,000.

Up to 1980, the manuscripts submitted were reviewed by all five members of the Editorial Board. However, as time went on and the number of manuscripts increased, it became too difficult for those busy neurosurgeons to handle this task, and the circulation of submitted manuscripts became limited to the Editor and to two or three peer review editors selected by him, with the Editor retaining the option of sending a manuscript to someone else when there was doubt about acceptability. The Editorial Board has taken full responsibility for this policy, and is not answerable to anyone regarding its own transaction of this business.

In the beginning, in January, 1944, the original Chairman of the Board, Dr. Gilbert Horrax, had stated: "The Journal welcomes papers of technical advances, neurosurgical and neuropathological experiences." The Journal still does, and the respected position that the Journal holds is related to the quality of manuscripts submitted and the careful consideration given them during critical review by the Editorial Board. There has been discussion from time to time about adding representatives from other subspecialties in neurosurgery to the Board, but this has not been considered to be appropriate since, when further judgment is needed, each member has access to qualified subspecialists at his own institution.

Although the Editorial Board has discussed several times the advisability of publishing editorials, controversial articles, or discussions about individual papers, in general, it has been agreed that this is not advisable for the Journal of Neurosurgery, and that the Journal should continue with its present style and policies.

New developments and modern methods are bringing new problems to the Board. Most of these are related to the huge success of the Journal itself. The concern for the advertising in the Journal, which is placed entirely at the end of each issue, never at the beginning or in the middle as in some journals, and the decision to have Williams and Wilkins take care of all advertising have made the Journal unique, in that its actual income from advertising has increased rather than decreased, not true of many other journals.

The Mantle of Editorship

Much of the great success of the Journal of Neurosurgery has depended upon the ability of the Board to persuade outstanding neurosurgeons to be its Editors. These include, after Louise Eisenhardt, Henry Heyl, Henry Schwartz, William Collins, Thor Sundt, and now John Jane (Fig. 1). Until 1973, Paul Bucy served as Director of Publications, and his assistant, Rose Lotz, as Advertising and Subscriptions Manager.

When Louise Eisenhardt became disabled and could no longer fill the excellent position she had held as Managing Editor, manuscripts began to collect in her office in New Haven, and it was a frustrating time for the Editorial Board. It was Bronson Ray who finally went to New Haven and resolved the situation. Then Jean Lawe collected all the manuscripts, bringing them back to Hanover for disposition under the new Editor, Henry Heyl (Fig. 2).

The Editorial Board and the Harvey Cushing Society wanted to show the respect and honor due to Louise Eisenhardt, and Bronson Ray had a gold medallion, a precursor of the Cushing Medal, cast from the medal minted in bronze in 1961. This was presented to Dr. Eisenhardt at the Harvey Cushing Society Annual Meeting in 1965, where she gave the first annual Cushing Oration.

Dr. Henry Heyl was a skilled neurosurgeon, originally educated in the humanities and he had, in fact, taught English for a year before going on to medical school. At the time he became paraplegic from the effects of treatment of a malignant disease, he was forced to give up surgery but was still teaching neuroanatomy at Dartmouth Medical School when he accepted the Editorship of the Journal. At first, the Journal shared
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space with the repository of the Dartmouth College Biology Department, with manuscripts being edited among ostrich eggs and stuffed birds. Later the Editorial Office moved off-campus, where it has remained during the editorship of Henry Heyl, Henry Schwartz, William Collins, Thor Sundt, and now John Jane.

Dr. Heyl was a quiet, intelligent, outgoing person, but when he retired from teaching and became a full-time Editor, he did not wish to share his responsibility with the effective but highly opinionated Director of Publications, Paul Bucy. He agreed to take full-time responsibilities only if he could do it alone, without the help of Dr. Bucy. Dr. Henry Schwartz, having brilliantly thought of Henry Heyl for this position and having persuaded Dr. Heyl to accept the job, told me, as one of the more junior members of the Editorial Board, to inform Dr. Bucy of the decision to replace him.

Dr. Bucy may have been small in stature, but he was large in intellect and understanding. His reply to me was “That’s fine. There are plenty of manuscripts to publish. I will start a new journal.” He did and thus was born, in 1973, Surgical Neurology. Far from being offended by my message, he became and remained my close friend up to his death in 1992.

In Conclusion

Considering the outstanding neurosurgeons the Journal of Neurosurgery has attracted to run its many op-

Fig. 2. The second Editor of the Journal of Neurosurgery: Henry L. Heyl.
lations, one would expect that they, in turn, had attracted outstanding people to help, and indeed they did, starting with Dr. Eisenhardt who was assisted by Betty Dennis. Rose Lotz worked with Dr. Bucy as business managers until 1973; Dr. Heyl called on Jean M. C. Lawe for editorial advice and she has remained with the Journal for 29 years, with the assistance of Elaine Selle, Nancy White, Gay Palazzo, and others. Dr. Schwartz had administrative assistance from Viola Graeler, Dr. Collins from Diane Lipin, and Dr. Sundt and currently Dr. Jane from Margie Shreve.

The members of the Editorial Board have been pleased to be asked to participate with these leaders and have performed the necessary functions of the Journal in an exemplary fashion that has made it the envy of other journals. One cannot correlate a significant history of this outstanding Journal without recognition of all these people.

As Onasander wrote in 49 A.D., "envy is a pain of mind that successful men cause their neighbors."

References

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