

## The Last Word

Orthodontics appeared as a specialty about a hundred years ago. We leave it to others to seek out the exact date when a dentist first announced a limitation of practice to Orthodontics, but the remarkable insights and treatment already demonstrated at that time leave little doubt that the correction of dentofacial deformities was a primary activity of some of those professional pioneers. Among the first was Edward H. Angle, whose First Edition appeared about 1887, and his insight, mechanical genius, and flamboyance left indelible marks over the next forty-three years.

*The Angle Orthodontist* has been a part of the orthodontic scene for most of those hundred years. Angle never saw *the Angle Orthodontist*, because it was founded immediately after his death in 1930 as a memorial to the man and his many contributions. It has been a living memorial, continuing over the years to spread ideas and information related to our specialty.

Even though *the Angle Orthodontist* has continued to reflect its Angle heritage, it has not remained entrenched in the past. It has matured with the specialty as parochial bounds have been gradually breached and its pages opened to the full spectrum of scientific and clinical information.

Angle was an innovator, but he looked askance at any innovation by others. His teaching style was unequivocally authoritarian; students were expected to follow his teachings without question, not strike out on their own. Those who dared express doubt or dissent could find themselves summarily dismissed, but those who completed his courses were far from servile sycophants. His demanding nature would no more accept mediocrity than dissent, and many of his students went on to become leaders in their own right.

The first editors were a core group of the devoted Angle alumni who founded the publication, followed in succession by Wendell Wylie, Morse Newcomb, Arthur Lewis, and your present editor. It has always been a largely volunteer effort, governed by a Foundation Board established by the Angle Society. The editor has constituted the entire editorial and production staff, supported only by available orthodontic office staff, and this is no longer sufficient in today's world. Your present editor has implemented many innovations, and has been exploring new options for the future with our business manager. Plans are now well along for significant staff and production changes, making this final planning stage a propitious time for a new editor to step in. It is also time for me to catch up on the many personal writing and other projects that have been put aside for so long.

The need for the independent voice of the *the Angle Orthodontist* remains great in this world where the package often outshines the product and markets tend to be driven more by marketers than consumers. Absence of advertising in these pages also means the absence of advertisers and the real or imagined constraints that they might place on content.

Such an open environment has great potential for the reader, and that in turn places great responsibility on an editor. With an abundance of articles to choose from, what criteria should govern selection? This is the subject of much discussion, but there are no written guidelines, and the individual members of the Foundation Board have widely varied opinions. Nevertheless, there is strong unanimity in a desire for a quality publication that will be of interest and value to teachers, researchers, and practicing orthodontists.

Orthodontics and its collateral sciences are still growing vigorously. The role of a journal like *the Angle Orthodontist* is to augment that growth by disseminating new facts and ideas, and the only invariable criterion is *truth*.

Outside reviewers provide essential input, and our Editorial Board has been very helpful in broadening the pool of reviewers available for consultation in special areas. Nevertheless, there is no single voice, much less last word, on most subjects; few situations are so clear-cut that they evoke a unanimous "yes" or "no" response. The many parochial precincts of orthodontics assure broad variety in both the manuscripts and their review, so the typical response is an assortment of qualified comments and suggestions that require further action by the author or editor.

Academic or other chauvinism can also occasionally appear. Providing a medium for academic publication has always been one of our major functions, but this must be balanced by dissemination of the clinical research findings of those actively involved in direct patient care. This balance goes beyond directly serving the broad interests of our readers by closing the loop with new challenges for investigation by the academic community.

Progress requires continual exploration of new frontiers as well as the development and refinement of existing concepts. "Scientific proof" in the form of arcane statistical relationships is a first word, not the last, in that process. Until such scientific observations are followed up to find and understand the underlying mechanisms and the reasons for the great variability, grasping at these statistical straws gives us little more than interesting observations.

Clinical observations are not always possible in numbers that qualify for statistical evaluation, but they still present similar challenges. The knowledge that a particular procedure may evoke a certain response raises inevitable questions of predictability and applicability that can be resolved only by further investigation.

The role of a publication like the *the Angle Orthodontist* is to present information at every stage of discovery and exploration. If we were to wait for the truly last word, we would have no publication at all and the whole system would come to a halt. Publication exposes new findings to the critical minds of our many readers for consideration in the light of their own varied backgrounds of knowledge and experience. Perhaps someone who has made a similar or contrary observation will come forward, while others may carry on their own evaluations to further expand our knowledge and understanding.

References are an important part of most of our articles. It is sometimes said that references more than five years old are too out-of-date to be of value. That may hold true for some technological fields, but this assumption can be a dangerous one in broad areas of biology, including orthodontics. A much more appropriate comment for our area of interest is that those who fail to learn history are doomed to relive it.

Yesterday's fact becomes today's fallacy and tomorrow's discovery.

The body grows and works now the same as it did a hundred years ago and long before. Norman Kingsley was applying high-pull headgear to long faces and decrying the effects of airway obstruction on facial development in 1892 (DENT. COSMOS 34:16-22), yet even now a large part of the medical profession still resists the obvious clinical preventive measures.

Even with the great strides of the last hundred years, we are still just beginning to understand what dentofacial orthopedics is all about, and how we might intervene for better or for worse. The crude cephalometric diagrams that we measure with ritualistic precision merely map the gross relationships of structures whose functional roles and inner workings are still understood poorly if at all. Converting them to video games can take us even farther from the real world of the three-dimensional living patient. Our enchantment with implants has led us off on tangents that sometimes cloud our understanding of what their migrations really mean. Vital staining and autoradiography identify areas of physiologic activity that we interpret as growth, but this information just points the way for yet unplanned studies of why those patterns exist, how they work, and how they might be regulated.

Each finding raises new questions and opens new frontiers. There is still much to be learned, and facilitating this exchange of information as the editor of the *the Angle Orthodontist* for the past eight years has been a unique and gratifying experience. I am looking forward to the future reports from our contributing authors around the world as Dr. Turpin selects, prepares, and presents them for us.

*Raymond C. Thurow, D.D.S.*