



By Barbara H. Lange

Standardization is Vital to Progress

Recently, I was reading from the Society's first journal issue (<http://journal.smpte.org/content/1/2.toc>), published in October 1916. The original founding documents—Certification of Incorporation, Constitution and Bylaws, C. Francis Jenkins' opening address—include an address by Henry D. Hubbard, the first Secretary of the U.S. National Bureau of Standards, today's National Institute of Standards and Technology (NIST).

Hubbard's address was given at the Society's first meeting in Washington, D.C., on 24 July 1916. Since the Society was founded on setting industry standards for the budding motion picture industry, it was quite fitting that the head of the National Bureau of Standards would address the industry leadership on this topic. In reading this piece nearly 100 years later, it is amazing to see how progressive the industry was, even at such an early stage, and how some things still hold true today.

Hubbard speaks of the need for standards to progress an industry.

“Standardization is a big word, almost as broad as civilization, for our manners and customs are merely accepted standards of conduct, our laws aim to standardize human relations, and daily life is governed by standards approved by common consent. Standardization is more than a passing fancy of efficiency experts. It thrives everywhere, often against efforts to prevent.”

“Coinage, weights and measures, and time are standard. Business organization is being standardized. So, too, is transportation, manufacturing, and machinery. The motions of the workers are being studied in order to standardize his movements along the lines of least effort. In this personal motion economy with its possibilities for human welfare the motion picture is the indispensable means of research.”

He goes on to speak of standardization as the basis for ongoing development, to provide the industry with the platform on which to make greater advances. Standards are interesting in that they must be bound in some fashion and yet provide for flexibility and growth at the same time.

“.....standardization is a continuous development, not a thing to begin with but to arrive at. Like the bark of a tree, standardization may bound progress but must not limit growth. Inflexible standards are liable to retard progress so that we must keep before us

the ideal that at any time the standards must be the consensus of the best, scientifically formulated.”

Back in the early days of standards work, there was recognition that it takes all interested parties to deliver quality standards work. Today, we continue to include all aspects of the ecosystem, as Hubbard continues....

“Cooperation is implied in the fact that you are organized. Stable standardization is that in which all concerned are represented and their interests regarded—engineer, maker, and user. To overlook any factor is to vitiate the standardization as time will show. It is the business of the engineer to bridge the gap between the maker and user. The user, however, is the final dictator in standardization and his satisfaction is a practical test of quality. It is wise to recognize this fact at the outset and secure the continued cooperation of the engineer, maker, and user.”

In conclusion, Hubbard makes a brilliant statement of why this standardization work was critical back in 1916, and I would say still holds true today.

“To me the motion picture is the wonder of the world in its effects and possibilities. Its uses in education, science, recreation, industry, engineering, and social movements make it vie in interest and power with the printing press itself. It speaks the universal language of action. It is the magic carpet of Bagdad to take us to all lands, under sea and under land, among the clouds, to fairyland, and into the world's markets, laboratories, hospitals, and factories. In portraying the flight of a bullet it magnifies time, in recording the unfolding of a flower from the bud it compresses days into seconds. It is not making the world a little neighborhood, it is rather making of each neighborhood a little world. It intensifies life by broadening its contact with all life—for it is your business to bring into the experience of each the experience of all. Through the motion picture, in fact, we may create new experience, for nowhere has the magic of the miraculous been so tangibly realized as on the screen. The quickening effect of this wonderful art upon social evolution is beyond estimate. To say that as an art it is in its infancy is to state the obvious. Its possibilities are limited only by the power of the creative imagination and the technical powers of the engineer. Its success depends not upon subject alone but upon the factors of economy, efficiency, safety, comfort, and interest, which in turn depend upon scientific standardization.”