

# Cylinder Record Research

*Curators of sound archives seldom come to their jobs equipped with “hands-on” cylinder experience. Fortunately, some private collectors have become serious historians through passionate and intelligent study of their interests and they are being gracious in sharing their findings. ARSC Conferences offer opportunities for interaction between institutional professionals and private collectors, broadening the knowledge of each. At the 1993 Conference, the Association’s Technical Committee sponsored a session (on May 14) at which three private researchers gave papers addressing some of the critical issues in cylinder record research. These papers are presented together in this issue of the ARSC Journal.*

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Cylinder phonograph records may be nearing the end of their useful life, if “useful life” is defined as the possibility of faithfully recovering the audio information they originally carried. Most vulnerable are the “wax” cylinders, which are subject to the ravages of humidity and casual storage, manifested by mold growth and consequent pitting. Celluloid cylinders have proven more environmentally stable, but they develop stresses of their own that threaten their integrity.

A surprisingly large number of cylinder records survive in public and private collections around the world - at least 300,000 cylinders in the United States, with fewer in Europe - extrapolating from the number of records in known collections.

The cylinder format dominated the first 13 years of commercial recording, from 1889 through 1901. Cylinder production then overlapped the emergence of the lateral-cut disc record as our century’s principal medium for the distribution of recorded sound. The head-to-head battle of cylinders versus discs raged for a decade after 1900, followed by a rear-guard action with diminished forces until the demise of the entertainment cylinder in 1929.

Wax cylinders provide an aural glimpse of musical culture in flux: the musics which evolved into jazz (minstrel shows, ragtime, vaudeville); the transition of brass playing styles; the shift from concert band to symphony orchestra as American’s favored large performing ensemble; the earliest documentation of operatic vocal training by legendary teachers of *bel canto*, via examples of their students’ performances; samples of the “before” in the revolution in classical music performance practice (a change already far advanced before discs took over) – these are only some of the significant musico-historical developments documented by cylinder records.

Our perception of this early period is usually biased toward shellac discs by their familiarity, convenience and ease of playback, in contrast to the bulkier, more fragile cylinder records, which can be more difficult to fully identify and properly reproduce. Nonetheless, it is essential that the sounds held by these primal sound carriers be on call for future students of audio and musical history.

Though a great deal of research has been published on the development, identification, authentication and restoration of cylinder phonographs, the study of cylinder records as historical artifacts has been scattered, fragmentary and sometimes partisan - some of the existing popular literature was written by persons with "Edison above all" axes to grind, and as a result, is less than objective, sometimes downright wrong.

Peter Shambarger's article points out that cylinders comprise a diverse family of manufactured products, with each type having its own distinguishing characteristics. Proper reproduction first requires a dependable identification of the exact cylinder type. Playback equipment must then be appropriately chosen to recover the sound accurately, while preventing damage to the often delicate cylinder surface. Peter's article provides the keys to identifying and playing the most common cylinder records. This is the first time that such guiding information has been gathered in one place, presented in a systematic manner, and reviewed by experts prior to publication.

Peter also discusses the problems of storing and handling cylinders, in connection with the various materials used to construct cylinder records and blanks. Preparing cylinders for playback may involve cleaning, which definitely requires a knowledge of the materials at hand. Ray Wile's article focuses on the chemical composition of cylinders, drawing on original documents he found and notes he made while researching the history of the recording industry.

Finally, Bill Klinger describes his study of the cylinder record industry, which ties together the developing businesses, technologies, products and people, *worldwide*, and in detail. His project compiles a vast amount of data on lesser-known brands and manufacturers and on cylinder oddities, as well as the commonplace types and brands. **Steve Smolian.**

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