The Tennessee Academy of Science and the Second Nashville Meeting of the American Association for the Advancement of Science

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Abstract—As it celebrated its 15th anniversary in 1927, the Tennessee Academy of Science was primarily concerned with its role in the upcoming Nashville meeting of the American Association for the Advancement of Science. Academy members and noted figures in Nashville had successfully campaigned for this meeting several years earlier, gaining approval from Association officials in early 1925. The Academy assumed many responsibilities for this scientific congress and supplied the majority of members of the local arrangements committees. Working with the AAAS astronomy section, the Academy also coordinated the special commemorative activities in honor of famous astronomer and Nashville native Edward Emerson Barnard. An examination of this meeting and the Academy's role in it reveals much about the place of science in Tennessee during the late 1920s.

Among the front-page headlines in the *Nashville* Tennessean on Christmas Eve morning, 1927, was the following: "Reception for Scientists on Monday Program." An extensive discussion provided Nashville readers with an overview of the upcoming meeting of the American Association for the Advancement of Science (AAAS), the second time the nation's premier scientific organization had met in the city. The reception was described in detail, alerting readers that the scientists would "temporarily forget their intricate research ... to make merry at a huge reception being arranged for them" Stressing the significance of this meeting to the host city, the writer observed, "The scope of the entertainment is intended to match the importance of those to be entertained. Thus, it will rival if not excel any similar gathering ever held in Nashville" (Tennessean, 1927a).

Half a century earlier, Nashville had also hosted the AAAS annual meeting (Summerville, 1986), but science had become increasingly important in the United States since 1877. Membership in the AAAS, for example, grew from approximately 1000 in the late 1870s to more than 14,000 by the mid-1920s (Kohlstedt, 1999: 174–175). The nation's press often covered scientific developments, alerting readers to the dramatic new ideas that characterized the

first quarter of the 20th century. Admittedly, the antievolution crusade of the 1920s and the infamous Scopes Trial in Tennessee revealed an alternative reading of the place of science in the United States, but such developments remained in sharp contrast to the generally accepted value of science and scientists.

The incomplete nature of Tennessee Academy of Science records makes a reconstruction of the events surrounding the selection of Nashville for the 1927 AAAS meeting a challenge. Published accounts of AAAS executive committee meetings, however, provide important clues. By October of 1923, annual meetings of the association (now held during the week following Christmas) had been scheduled through 1928, with the exception of the 1927 gathering (Livingston, 1923). When the executive committee met a year later, the site of the 1927 annual meeting remained undetermined, although the committee "expressed its conviction that that meeting should be held in a southern city" (Livingston, 1924).

It is likely that the executive committee had already received an attractive invitation from the Tennessee Academy of Science at this point, probably reinforced by the support of several higher education institutions in Nashville. When the AAAS executive committee and Council met during the 1924 AAAS conference in Washington,

D.C., a few months later, they announced that the 1927 meeting would be held in Nashville, accepting "with thanks the invitations that have been received from Nashville organizations and institutions" (Livingston, 1925).

The Academy's efforts to organize the upcoming meeting began in earnest in November, 1926, when at the organization's business meeting members voted to empower the executive committee to make all needed arrangements for the AAAS meeting the following year (McGill, 1926a). Academy members who were planning to attend the 1926 AAAS meeting in Philadelphia, were urged to solicit suggestions concerning how best to promote the Nashville meeting (McGill, 1926b), while at the January executive committee meeting at the Nashville Chamber of Commerce building, preliminary arrangements for the upcoming meeting "were discussed informally" (McGill, 1927a).

Throughout the spring and summer of 1927, the Academy continued its preparation for the AAAS convention. Often meeting at the Nashville Chamber of Commerce building, an indication of that group's role in the effort, the executive committee organized eight local arrangements committees with some three dozen Academy members in positions of authority. Nashville dignitaries also served on some of these panels, as indicated by noted journalist T. H. Alexander of the *Nashville Tennessean*, who served on the publicity committee (McGill, 1927b, 1927c, 1927d).

During the fall, arrangements neared completion. The publicity committee, for example, was negotiating with local newspapers for special editions to cover the upcoming convention. Lodging for those attending the meeting had been arranged, as had meeting places and transportation (Webb, 1927). An important aspect of local arrangements activity, however, appears to have taken Nashville organizers somewhat by surprise. Locally raised funds had always been an important part of AAAS meetings, but the details of the Nashville contribution required negotiation with AAAS headquarters. By the time the general arrangements committee met in the late fall, the two groups had reached "apparent agreement" that Nashville would contribute \$1500 in cash and

an equal amount in services (Webb, 1927). Similarly taken aback, the Nashville Chamber of Commerce agreed to coordinate local fundraising, working with Academy executive committee member J. W. Barton. In the general program of the meeting, Barton was singled out for his "enthusiastic interest," while the Chamber of Commerce was applauded for its contributions "in financial and other ways" (Trelease, 1927).

The Tennessee Academy of Science, to be sure, remained central to the planning of the event, but Vanderbilt University, George Peabody College for Teachers, and Ward-Belmont School for Women also contributed in many ways. These institutions provided meeting places, dormitory rooms, and eating facilities for the visiting scientists (Trelease, 1927). Local hotels, especially the Andrew Jackson Hotel which served as convention headquarters, were very generous in supplying meeting spaces and complimentary rooms for AAAS use (Livingston, 1928).

The Academy issued a final call for member participation in its special AAAS meeting number of the Journal in October 1927. This issue included a brief preliminary program, a list of local committee members, histories of both the Academy and the AAAS, and an account of the 1877 AAAS meeting. The emphasis of this issue, however, was clearly to encourage Academy members to attend the meeting. George R. Mayfield, the first editor of the Journal, editorialized in "Facing Hard Facts" by pointing out the embarrassing fact that only 60 state residents were AAAS members (out of a total membership of more than 15,000). He also stressed that Academy Secretary J. T. McGill was organizing a membership drive to increase the state's involvement with AAAS, urging that "all members of the Tennessee Academy of Science should cooperate with him in removing the shameful blot on our State" (Mayfield, 1927). The special issue also included a list of hotel accommodations (ranging in price from \$1.50 to \$10.00 per night) and a note that Academy members and friends could make their reservations by contacting W. N. Porter of the Chamber of Commerce (Anon., 1927).

Another important Academy effort for the AAAS meeting was the arrangement of special events to commemorate the life and work of Nashville native and noted astronomer Edward Emerson Barnard (1857–1923). Educated at Vanderbilt University, he joined the staff of Lick Observatory in 1887 and moved to the newly established Yerkes Observatory eight years later (Sheehan, 1995). Astronomer R. G. Aitken of Lick Observatory had announced that his public address as retiring vice president of Section D (astronomy) would discuss Barnard's career, providing the Academy with an excellent opportunity to schedule additional commemorative activities.

The Academy, however, appears to have left these commemorative arrangements to the last minute. At its meeting on 10 November, the executive committee directed secretary McGill to write to AAAS secretary Burton E. Livingston, requesting a joint meeting between the Academy and the astronomy section. McGill was also to request space for an Academy exhibit containing items related to Barnard (McGill, 1927e). At this meeting as well, the committee decided to issue a special number of the Journal of the Tennessee Academy of Science, to be devoted to Barnard. This issue would be published in the name of the Academy's sustaining members, who would be asked to contribute to the estimated \$500 cost of publication. The committee drafted a letter to be sent to these members, outlining the project and asking, "Would you like to share in this tribute to a man who, though generally recognized as one of the world's most noted astronomers, has thus far apparently not been duly appreciated by his native state and city?" (Anon., 1928a).

The many efforts of the Academy attracted the attention of AAAS leaders. In the preliminary announcement of the Nashville meeting, published in the 2 December 1927 issue of *Science*, Association Secretary Livingston praised the local organizers. He encouraged AAAS members to attend the Nashville meeting, assuring them that "the local committee has been so efficient in making the preliminary arrangements that there is no question that all who attend will be well cared for." Noting the many contributions of local

organizations and institutions, Livingston concluded his preliminary comments with the observation, "We may be sure that Nashville hospitality will be unsurpassed" (Livingston, 1927).

Despite the upcoming holidays, Nashvillians were enthusiastic about hosting a gathering of distinguished scientists. Newspaper coverage of the meeting began with the Christmas Eve editions of the Nashville Tennessean and Nashville Banner, both of which described the upcoming convention. Of special note in these Saturday editions (the meeting would begin the following Monday) was the reception scheduled for Monday evening in the War Memorial Building. Reporters described the careful arrangements, including a performance by the famous Fisk Jubilee Singers, and noted that the reception line would include Governor Henry H. Horton and Tennessee Chief Justice Grafton Green, as well as representatives from the Tennessee Academy of Science and the various institutions involved in organizing the meeting (Banner, 1927a; Tennessean, 1927a).

The opening day of the conference attracted even greater attention in the newspapers published on Monday. Published in the morning, the Tennessean discussed the day's events, focusing on the opening session that evening and the reception to follow, observing that the latter "is to be a brilliant affair" (Tennessean, 1927b). The editorial page also noted the meeting, praising scientists and their contributions to society. The writer stressed that the benefits of technology had long been appreciated in the United States, but he observed that "pure science" was increasingly acknowledged as contributing significantly to the improvement of human life (Tennessean, 1927c). That afternoon, the Banner not only included a long front-page article on the meeting, but also published a special "Science Convention Section" in the first three pages of the second section (Banner, 1927b).

Among the items of interest in the *Banner*'s special section was an account of Monday morning's business meeting of the Tennessee Academy of Science. President W. S. Leathers presided at the meeting in the Sun Parlor of the Hermitage Hotel, alerting members to the many events scheduled over the next few days. Of

special note were the activities related to the celebration of Barnard's life. He called attention to the Wednesday afternoon meeting at the Watkins Institute, which would be jointly held with the AAAS astronomy section, at which time several individuals would share their memories of the famous astronomer. Leathers also announced that an exhibit of Barnard memorabilia—including medals, publications, and other items—was on display on the mezzanine floor of the Hermitage Hotel, where it would remain throughout the convention (McGill, 1927f; Banner, 1927c).

The formal opening session that night in the War Memorial auditorium was as noteworthy an event as had been suggested by earlier newspaper accounts. Academy president Leathers called the meeting to order and then relinquished the podium to Vanderbilt Chancellor James H. Kirkland, who presented an address of welcome on behalf of the Tennessee Academy of Science and the city's educational institutions, and to Chief Justice Green, who presented a similar address on behalf of the civic interests of the city and state. Kirkland praised AAAS members as "Nashville's kind of folks" and informed the audience that "In no city will you find intellectual and educational things more highly appreciated than among us" (Howland, 1927a). Following the welcoming addresses, AAAS president Arthur A. Noyes, the distinguished chemist from the California Institute of Technology, gave a brief response. He told the audience that the association "is glad to meet again in the South for the reason that conditions are now clearly propitious for a rapid extension of scientific activities here" and paid tribute to Nashville by stressing that "we look forward to enjoying the famed hospitality of the South in this, one of its leading cities ..." (Noyes, 1928). The assembled gathering next adjourned to the reception area, where refreshments and entertainment were enjoyed by all (Livingston, 1928).

During the following week, the AAAS meeting pursued its traditional mix of sectional and general meetings, representing a cross-section of the American scientific community. In addition to the various presentations, the AAAS meeting also included a science exhibition in the lobby of the Andrew Jackson Hotel. Such exhibitions had

only recently become part of the annual meetings and were still in their formative stage, but local organizers arranged for sufficient space in the headquarters hotel to attract many science equipment manufacturers and book publishers. Of special interest was an exhibit of photographs of the Great Smoky Mountains region contributed by the Knoxville Chamber of Commerce (Trelease, 1927; Livingston, 1928).

Although never stressed during the meeting, a topic that was never far below the surface was the continuing controversy over the teaching of evolution in the public schools. Tennessee's reputation had suffered significantly as a result of the Scopes Trial during the summer of 1925 and the state Supreme Court had only recently ruled on Scopes's appeal (Larson, 1997). The dichotomy between the state's antievolution reputation and its role as host of the nation's leading scientific organization did not escape observers' attention.

Reporting on the opening session for the Tennessean, William S. Howland provided further insight concerning the continuing interest in the Scopes case. He characterized the Butler Act and Scopes Trial as Tennessee's "family skeleton" and pointed out that "its musty bones were rattled beneath the very shadow of the capitol" where the state's antievolution law took shape. Ironically, the issue was raised not by one of the nation's leading scientists attending the Nashville meeting, but by Chief Justice Grafton Green, whose court had earlier that year upheld the antievolution law, even as it overturned Scopes's conviction on a technicality. Attempting to face the issue in a light-hearted fashion, Green assured his scientific audience that they were free to discuss evolution in the state as Tennessee schools were closed for vacation. "Even if you stay," he continued, "and if you should talk in the schools, you would be safe, for the supreme court, that is the majority of it, has never been able to agree on what the evolution statute means." At this point, according to Howland, the speaker had to pause, "as a gale of laughter swept the audience" (Howland, 1927a).

In his response to the opening addresses, association president Noyes also appeared

willing to confront the issue, especially after Chief Justice Green had raised it. The distinguished chemist took as his theme the many changes in science that had taken place since the AAAS last met in Nashville in 1877. The developments in evolutionary knowledge were a central part of these changes and revealed the complexity of terrestrial life. Even so, Noyes observed, "the facts that evolution has been going on and that many animal and plant types have gone through definite stages of development can only be doubted by an individual who like an ostrich buries his head in the sand out of a vague dread that he may see something shocking" (Noyes, 1928). He assured the audience that there existed no controversy among scientists concerning the reality of evolution. "Today," he concluded, "by the mass of converging sciences, such as biology, genetics and others, the fact of evolution, that animals and plants are in a state of development, is as fully established as Newton's law of gravity or the Copernican conception of the solar system" (Howland, 1927a).

For Nashvillians, one of the most important topics discussed during the meeting was the life and work of native son Edward Emerson Barnard. The Wednesday afternoon session at the Watkins Institute attracted a diverse group of speakers and an appreciative audience who learned of Barnard's early life in Nashville, his research at Lick Observatory in California, and his long career with Yerkes Observatory in Wisconsin. Mary Ross Calvert, Barnard's niece and long-time secretary, provided a personal view of her uncle's career at Yerkes, while noted astronomers Robert G. Aitken, Philip Fox, D. W. Morehouse, and Samuel A. Mitchell provided detailed accounts of Barnard's diverse research endeavors (Trelease, 1927). Fox, who had been Barnard's colleague at Yerkes, concluded his comments with the observation that cities in France often named streets after famous scientists. "I wonder," he mused, "if Nashville couldn't find a street beautiful enough and fine enough to be called Barnard Boulevard" (Tennessean, 1927d).

Although the local media covered the commemorative meeting extensively, the public

lecture by Robert G. Aitken scheduled for Wednesday evening attracted even more attention. The Nashville Banner announced the evening's address with the headline, "Association Honors Nashville Scientist," providing a summary of Barnard's career and the many commemorative events on the program (Banner, 1927d). Tennessean writer Howland reported on the evening's festivities in the next day's issue, noting that Aitken "paid tribute as high as the constellations themselves" to the Nashville native. Aitken's address, reprinted in full in the Tennessean, not only provided a biographical overview of Barnard's life, but also placed his astronomical contributions within the context of recent developments in the discipline (Howland, 1927b).

When the conference ended Friday, 30 December, observers stressed its successful nature. Although the attendance of nearly 1700 individuals was noticeably lower than the previous year's Philadelphia meeting, which had attracted more than 3100, no critical comments came from local or AAAS officials. Burton Livingston, AAAS secretary, praised local organizers at the closing session Friday night. He thanked the city for its "hospitality and many courtesies" and noted, "Our stay here has been most pleasant. Nashville truly has upheld the tradition of Southern hospitality" (Tennessean, 1927e). Local observers also took pride in Nashville's role in the AAAS conference. The Tennessean's T. H. Alexander, in his "I Reckon So" column on 31 December, provided a tonguein-cheek look at some of the topics discussed at the meeting, stressing that its willingness to host such a meeting revealed much about the cultural status of Nashville and its appreciation of science (Alexander, 1927).

The closing ceremonies held on the evening of Friday, 30 December, were not the final events associated with the Nashville AAAS meeting. The following morning, nearly four dozen individuals assembled in Knoxville for an excursion to the Great Smoky Mountains. The party included scientists from several institutions and was led by the Academy's L. R. Hesler, a botanist at the University of Tennessee. The Knoxville Chamber

of Commerce, Tennessee Academy of Science, the University of Tennessee, and other groups active in the national park campaign contributed in various ways to the excursion. Despite a cold air mass that plunged the temperature at the summit of Mt. Le Conte to -30° C overnight, the scientists praised the beauty and value of the region when they returned to Knoxville Sunday afternoon (News-Sentinel, 1928).

The only remaining Academy activity was the publication of the special Barnard number of the Journal. Finalizing the details of this project took longer than anticipated, and it was not until mid-, February that the executive committee decided to make the delayed January 1928 issue the special publication (McGill, 1928a). The Barnard number appeared in late March and included a list of the more than 80 individuals who contributed to the project, including Walter S. Adams, director of the Mt. Wilson Observatory in California (Anon... 1928b). Following an introduction that characterized Barnard as "one of the great scientists of all time," the issue reprinted papers presented at the joint meeting with the AAAS astronomy section (Anon., 1928a). Speakers who had delivered their comments extemporaneously, such as astronomers Aitken and Fox, provided manuscript versions of their remarks for publication. Concluding the issue was a reprint of a 1922 article prepared by long-time Academy member J. T. McGill for the Vanderbilt alumni magazine of that year. Barnard had reviewed the manuscript before its publication, convincing McGill that the account was an accurate portrayal of the astronomer who had died the following year (McGill, 1928b).

By the spring of 1928, then, the Tennessee Academy of Science could mark an end to its involvement with the second Nashville meeting of the American Association for the Advancement of Science. For more than three years, Academy members had been focused on the planning and organization of the nation's primary science conference. Leaders of the AAAS expressed their satisfaction with the Nashville meeting, praising the local arrangements and applauding those who had coordinated the many aspects of the meeting. Although convening in a southern city did not immediately lead to a dramatic

increase in that region's presence on the national scientific stage, the 1927 Nashville meeting nonetheless drew attention to a recognizable scientific community in the South.

Acknowledgments

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