A New Concert Hall Plays Up the Sound and Celebrates the Science

By JAMES R. OESTREICH

TROY, N.Y. — The concert hall of the 21st century has arrived. And the building that encases it would be remarkable if it had only that.

The 1,200-seat hall in the Curtis R. Priem Experimental Media and Performing Arts Center at Rensselaer Polytechnic Institute here (Empac, to its friends), which opened over the weekend, seemed a notable acoustical success on brief early exposures. The hall is also fitted for audio and video with a surround-sound system, a digital film projector and a large retractable screen. A hoist mechanism can fly any object through the space, whether it be a theatrical lighting truss or, say, a pianist complete with instrument. Wall banners can be lowered to dampen the acoustics for rehearsal in an empty hall or for amplification. The stage can be extended or covered with a sprung dance floor.

But in addition, the huge building, laid out on a hillside, houses a 400-seat theater with comparable versatility; two black-box studios, one geared more toward sound, the other toward sight; and space for rehearsals and other uses. And for their electronic and data needs, all these components have access to one of the world’s biggest supercomputers.

Why any of this, you might ask, at what was once chiefly a school of engineering, albeit a great one? Though the institute had already begun to diversify in the decades before her arrival, the answer lies mostly in the person of the physicist Shirley Ann Jackson, who became president of the school in 1999 and quickly started to expand its horizons exponentially. To realize Empac, one of her early visions, she imported Johannes Goebel, a German composer with experience in architecture and acoustics, as director in 2002, and ground was broken for the building the next year.

At its simplest, Dr. Jackson’s idea, as she is fond of saying, is to engage the activities of both hemispheres of the human brain: the verbal, analytical left half and the creative, artistic right half. This notion was greatly elaborated in the presidential colloquy that began the festivities on Friday morning, formidably titled “Photons, Sound Waves and Data Bytes: Creativity at the Nexus of Science, Technology, Media and the Arts.” Dr. Jackson was joined by prominent figures in business, media and entertainment: A. Preetham Parigi, an Indian executive; Walter F. Parkes, an American film producer; and Peter Schwartz, an American futurist and alumnus of the institute.

The words that kept coming up in the discussion were “dichotomies,” usually accompanied by the adjective “false,” and “collisions.” To oversimplify the consensus grossly, there is relatively little distinction to be made between art and science, at least at their frontiers. Both involve sensory data and
intellectual processes. In an era of convergence, some of the most fruitful discoveries may emanate from those frontiers, as art and science collide to produce results as unknowable beforehand as was the discovery of new subatomic particles produced by collisions in atomic accelerators.

How appropriate, then, that the weekend’s artistic centerpiece, a concert in the new hall given privately on Friday night and publicly on Saturday, began with Ives’s “Unanswered Question.” This was surely no accident, for Mr. Goebel seems intent on carrying the idea of experimentation into the programming as well. This concert, weaving “70 minutes of eternity,” as Mr. Goebel intoned at the end of his welcoming remarks while the Ives welled up under him, followed with works by Gyorgy Kurtag, Gyorgy Ligeti, Robert Schumann and Thomas Tallis, all performed without interruption.

David Allen Miller conducted the Albany Symphony Orchestra in the Ives and in Schumann’s Piano Concerto; Gregory Vajda, the International Contemporary Ensemble in Kurtag’s “Grabstein für Stephan”; and George Steel, the Vox Vocal Ensemble in Ligeti’s “Lux Aeterna” and Tallis’s “Spem in Alium,” written for 40 independent voices and sung from stations surrounding the main body of the audience.

All the deployments worked well in the rich acoustical setting, designed by the firm of R. Lawrence Kirkegaard, which already has to its credit an acoustical gem in the region, Seiji Ozawa Hall, across the Massachusetts border at Tanglewood. Unlike that hall, in which wood predominates, Mr. Kirkegaard here used precast stone on the upper walls, with dimples and bulges for greater diffusion, and, in the most unusual touch, a canvasklike fabric of his firm’s devising for the ceiling, with tracks left open for those lifting devices.

The positive acoustical impression was bolstered on Saturday afternoon during a little recital given by Per Tengstrand, also the pianist in the Schumann. Here Mr. Tengstrand played works by Esa-Pekka Salonen, Ravel and Liszt, using three pianos owned by the center: a Bösendorfer, a Fazioli and a Hamburg Steinway. The characteristics of each came through vividly, and the sound was perhaps most impressive in the lower reaches of Liszt’s “Dante” Sonata, where what can easily turn into pitchless, rhythmless murk came through as a rushed profusion of distinct notes.

Most of the weekend’s other events were more unconventional and, yes, even experimental. Two came with earplugs for the fainthearted. The mighty ruckus of “Voyage,” a stage work by the Japanese collective Dumb Type, certainly spoke well for the sound-production devices and acoustics in the theater. It also made a battered listener wonder whether the next assault, “Louder,” by the Norwegian ensemble Verdensteatret in one of the studios, could possibly live up to its name. It did.

Kudos to the Empac facilities, but what ever happened to those European Union rules about noise in the workplace?