

Helsinki Music Centre Completion and the Orchestra's First Rehearsal in the Hall

By Dr. Yasuhisa Toyota

In Finland's capital city, Helsinki, the long-extended project to build a new concert hall (Helsinki Music Centre) was recently completed and, on May 5, 2011, I listened to the first orchestral rehearsal in the hall. For this project, I first visited Helsinki in April, 1998 to participate in planning the architect's competition that was to be held in 1999-2000. Thirteen years have passed since my first visit. After being repeatedly put on hold and surviving various twists and turns, the project has finally achieved completion.

The new, 1,700-seat hall was planned and designed as a concert hall specifically for the performance of classical music. With seating on all sides of the stage, the so-called vineyard configuration of the hall is a salient characteristic of its design. Finland's two major orchestras, the Finnish Radio Symphony Orchestra and the Helsinki Philharmonic Orchestra will use the new concert hall as their home hall.



Figure 1: The Orchestra's First Rehearsal in Helsinki Music Centre Concert Hall

Opening Galas and First Rehearsals – An Acoustical Consultant's Perspective

In general, when a new concert hall comes into being, everyone focuses on the new hall's acoustical characteristics. Reviews, critiques and discussion about how the hall sounds abound. Mass media representatives crowd the audience for the hall's inaugural concert and generate a great flurry of commentary. Whether a new concert hall has good or bad acoustics is a matter of supreme importance for any hall and it is natural for this question to attract intense scrutiny and discussion. However, from an acoustical perspective, a different milestone event ranks even above the hall's gala opening in determining the hall's initial reputation among both the acoustical design team and other key project stakeholders. For us, the day we always look forward to with anticipatory jitters is the first day an orchestra rehearses in the new hall.

Concert halls are like homes to the orchestras that perform-or more aptly "take up residence"-in them, and the analogy of a concert hall being like a home extends to a new concert hall being like a newly built, not-yet-lived-in house. Just as a family needs time to accustom itself and truly feel at home in new surroundings, so orchestras need time to become intimately familiar with a new hall's acoustics.

To ask the simple, thumbs up or thumbs down question of whether a hall's acoustics are good or bad does a disservice to the complexity of the situation. At first, an orchestra's musicians may assert that they cannot get used to their new hall, or during the period while they are acclimating to their new hall assorted rumors about the hall's acoustics may begin to circulate. As time passes, these same musicians become comfortable in their hall and, as a result, they praise its acoustics. I've experienced this cycle multiple times.

The Process of Becoming Comfortable in a New Concert Hall

For musicians to become comfortable performing in a new hall requires time. Typically, after the substantial completion of a concert hall's construction, we make minor adjustments to the hall's measurable and quantifiable physical acoustical characteristics. The duration allotted for this task usually ranges from a week to, at most, 10 days, after which can begin the necessary time period for the orchestra to become accustomed to performing in its new concert hall. We refer to these tasks as "tuning the acoustics" and we aim to reserve several months before a concert hall's gala opening to accomplish the hall's acoustical tuning.

Concert hall stakeholders often ask me to define the ideal duration required to tune the acoustics of a new concert hall. From the acoustical consultant's perspective, the more time we have the better. I even know examples of halls that took two to three years to reach their ultimate stable acoustical conditions. However, it would be unrealistic to suggest that at the end of the construction phase of a concert hall project the schedule include two to three years' duration for acoustical tuning. In practice, three to six months' duration is the norm.

The Helsinki Music Centre schedule provided a duration of four months for the hall's acoustical tuning. The first rehearsal took place on May 5, 2011.

Helsinki Music Centre's First Rehearsal Day

What were the orchestra's impressions on that important first day? Reassuringly, the first music they played sounded far above average. The hall delivers rich, full-bodied sound and individual notes sing clearly throughout the hall as well. The two very important acoustical characteristics of richness and clarity can sometimes be antithetical goals, and I place strong emphasis on achieving a high level of performance for both of these acoustical elements.

Often, the lower-range string instruments, specifically the cello and double bass, cannot be sufficiently heard during the initial tuning period. However, in the Helsinki Music Centre Hall these instruments sounded strong from the very first day. Also, the musicians reported being able to hear each other well on stage.

Comparing the first and last pieces played on the first day of rehearsal, the ensemble sounded decidedly better at the end of the day. The musicians were already becoming accustomed to their new acoustical environment and the results could be heard in how the hall sounded to a listener (me) sitting in the audience seating. The more the musicians spend time playing in the hall, the better the hall will sound. I look forward with eager anticipation, and with no jitters, to the gala concert hall opening on August 31, 2011.