Acoustical and architectural history of the Thomaskirche in Leipzig

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Abstract
The Thomaskirche in Leipzig has a rich musical and cultural history, marked not only by its association with the Lutheran Reformation in the 16th century but especially by the tenure of J.S. Bach as cantor from 1723-1750. The church’s interior has undergone several renovations of differing magnitudes since the earliest building constructed in the 12th century. In the 20th century, acoustician Hope Bagenal and Bach biographer C.S. Terry argued that the architectural modifications made by the Lutheran Reformers in the 16th century directly affected Bach’s compositional palette by reducing the reverberation time and allowing more polyphonic and temporal variation in the liturgical works composed for the space. The space was measured acoustically in the 1950s, but this captured the response of the church under the 19th century renovations which had some large differences with the church in Bach’s era. Here the history of the building and its renovations are presented, as well as acoustical measurements in the current church, which has been renovated since Bagenal’s time to more accurately match the interior as it existed in Bach’s time. Some comments are provided Bagenal’s theory as well as the effect of the material and geometric changes made by the Reformers on the performance of Bach’s music during his lifetime.

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