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Bernardo Antonio Vittone: acoustics and architecture in the XVIII century

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Contemporary critics have identified Savoy architect Bernardo Vittone as a major contributor to the establishment of the concept and experience of architecture as the "art of construction" in the 18th century. Vittone grew and worked under the guidance of mathematician Guarino Guarini, whose mastery of theoretical and scientific aspects he was never credited to have matched. Vittone's approach to architecture was mainly practical, his plans chiefly derived from the rules of mechanics and descriptive geometry. Experience was his main source of inspiration. Designs, plans, domes and vaults are but ways to achieve balance and harmony and so are precision and control of the relation between geometry and acoustics, architecture and music. In his book "Alternative instructions on the civil Architecture" moreover he included in the second appendix the "Armonic instructions", within a dissertation on the nature of sound, its propagation in open spaces, in closed ones and its relation with music. In this paper a commented overview is given matching his description of acoustics with present-day knowledge.