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New design tendencies in modern concert hall design

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New concert hall design trends are emerging as seen from recently completed halls around the world and recent international architectural competitions. Analyzing the current situation, the paper starts by differentiating the acoustical characters of major traditional concert hall forms such as the large shoe-box, the Vineyard and the surround hall. It discusses in particular the balance of acoustical energy that characterize these different basic hall shapes, the sensation of intimacy in relation to the listener's distance to the performance area and the different early reflection patterns inherent from these hall shapes. As an example of modern concert halls design tendencies, the paper then describes a design option chosen by Arup Acoustics for the Paris Concert Hall Architectural design competition with Zaha Hadid architect. The paper describes the development of the form and shape of the hall in response to the brief, the concept chosen for the design of sending/receiving surfaces to improve the early reflection "efficiency" and "stability" and the use of an overhead reflector to improve the balance between soloist and orchestra and the balance between the orchestra and the reverberation in the hall.