

# The development of pictorial image in the domes of Russian churches XII – XVI centuries

Jean-Louis Taupin

**Abstract** Architecture historians usually say that 12th century rib vaulting was built by intersecting two nearly cylindrical surfaces. Further observation however reveals that such understanding is wrong, especially concerning archaic monuments. Their vaults actually fit a spherical shape in as much as three quarters of their height. In 1883 Auguste Choisy, a civil engineer from the Ecole des Ponts et Chaussées, explained how to design a vault of the kind. Choisy studied a great number of works, and watched new ones being built, as at Mount Athos. The process implies having a string turn around a horizontal rope, in order to locate the point where to add the next amount of material over the vacuum. Again and again Choisy would repeat that this allowed to do without heavy temporary scaffoldings and props. The construction of the vault, as being based upon a square bay, proves close to the building technique of a cupola.

**Keywords** Choisy - Byzantins - Voûte sans cintre - Accrétion