

A Comparative Study of European Terrazzo and Tibetan Arga Floor Making Techniques

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Abstract : The technique of making terrazzo has been known since ancient times. During the Roman Empire, known as opus signinum, at the time of the Renaissance, known as composto terrazzo marmorino or at the turn of the 19th and 20th centuries, the use of terrazzo experienced a common use in Europe. In Asia, especially in the Himalayas and the Tibetan highlands, a particular floor and roof manufacturing technique is commonly used for about 1500 years, known as arga. The research question in this contribution asks for technical and cultural-historical synergies of these floor-making techniques. The making process of an arga floor shows constructive parallels to the European terrazzo. Surface processing by grinding, burnishing and sealing, in particular, reveals technological similarities. The floor structure itself, on the other hand, shows differences, for example in the use of hydraulic aggregate in the terrazzo, while the arga floor is used without hydraulic material, but the result of both techniques is a tight, water-repellent and shiny surface. As part of this comparative study, the materials, processing techniques and quality features of the two techniques are compared and parallels and differences are analysed. In addition to text and archive research, the methods used are results of material analyses and ethnographic research such as participant observation. Major findings of the study are the investigation of the mineralogical composition of arga floors and its comparison with terrazzo floors. The study of the cultural-historical context in which both techniques are embedded will give insight into technical developments in Europe and Asia, parallels and differences. Synergies from this comparison let possible technological developments in the production, conservation and renovation of European terrazzo floors appear in a new light. By making arga floors without cement-based aggregates, the renovation of historical floors from purely natural products and without using energy by means of a burning process can be considered.

Keywords : European and Asian crafts, material culture, floor making technology, terrazzo, arga, Tibetan building traditions

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