

Plaster Nails: an Unexplored Aspect of Construction History

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The case study of the Noisy Grotto

The grotto of the Château de Noisy was built around 1580 for Albert de Gondi [18]. It was a large pavilion built on two levels in the middle of the gardens. The first floor included a reception room decorated with frescoes, while the ground floor was converted into a grotto with a shell and rockery decoration. The architect of this building is still undetermined, but there is no doubt about the Italian influence. The grotto is known by engravings made by Jean Marot around 1650 and by a long description written around 1732 at the time of its demolition. Archaeological excavations began in 2017 have already uncovered many remains of the building and its decoration [19].

The interior walls and vaults of the grotto were entirely covered with gypsum plaster. After a narrow vestibule, a large central lounge connected with three three-lobed rooms with a total surface area of about 150 m² and a height of about 5.50 m. The walls were punctuated by numerous niches framed by moulded cornices, the vaults decorated with gilded and painted plaster boxes. Among the remains, about fifty nails were found, either among the demolition backfill (complete or fragmentary) or among the structures still in place. Observation of all these nails reveals a series of well-preserved nails measuring about 160 mm in length (Fig. 4) and a series of broken nails with an ornate head. (Fig. 5) These heads consist of two hollow parts, fitted at their edges, forming a kind of floral bud. Despite the corrosion, it seems that these decorative heads are found on the nails located in the remains of the uncovered decorations.

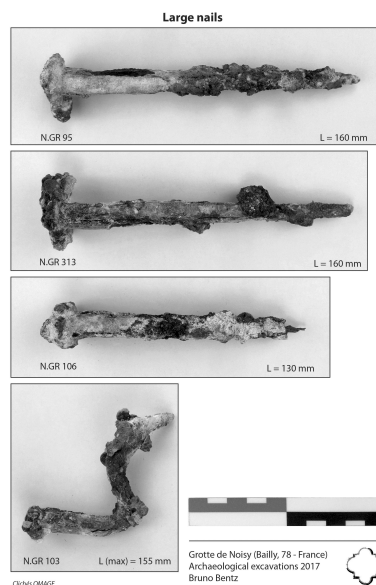


Figure 4. Large nails (about 160 mm) from the grotto of Noisy (Bailly, 78 – France). Archaeological excavations 2017 (inv. N.GR 95, 103, 106, 313). © Omage.

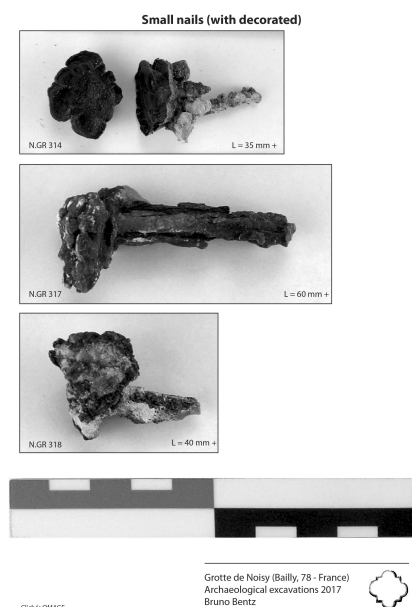


Figure 5. Small nails (incomplete, > 60 mm) with decorated head from the grotto of Noisy (Bailly, 78 – France). Archaeological excavations 2017 (inv. N.GR 314, 317, 318). © Omage.

These gypsum plaster decorations are still at the base of a niche in the central living room. They comprise an architectural motif of alternating palms drawn with the aid of moulds, and baskets covered with millstone and calcite appliques. The decorated blocks are still fixed to the wall with nails. One of the blocks was detached at one of them so that it can be observed in cross-section; another symmetrical block has exactly the same fixing system. Another block could also be observed from behind, allowing the end of three nails of a length comparable to the large nails found in the backfill to appear.

The use of nails to fix the decorations in the Noisy grotto shows that the decorative plates were prefabricated, then transported and fixed on site. The meticulousness and fragility of this ornamentation required the intervention of specialized craftsmen for the composition of motifs with shells and rockerries. This is why Albert de Gondi asked a worker who had already experimented with this technique in Pratolino (near Firenze) to work for the Grand Duke of Tuscany, Francis I de Medicis. At the same time, Montaigne visited these grottos and noticed in his Travel Diary how, the rockery decorations were fixed, "nails were imperceptibly sewn to everything" [20]. Built a few years earlier, the Animals Grotto of the Villa Médicis de Castello still has many nails fixed in the wall. Nevertheless, this is a process of reinforcing the mortar [21]. Thus, the nails from Noisy testify to a manufacturing process inherited from the construction of the Florentine grottos and they illustrate the technical exchanges between Italy and France in the second half of the sixteenth century. The nail sizes are nevertheless remarkable and mainly confirm the expected typology. Other smaller nails suggest that a recourse to more available common types was adopted. A third type shows how in a limited number of cases some decorative heads were supplied. The discoveries improve our understanding of how plaster decorations were made and of how they sit within the history of construction.

[18] B. Bentz, 'La grotte du château de Noisy (1682)' in M. Calafati, (dir.) *Ville e giardini dei Gondi in Francia i castelli di Versailles e Noisy nel Cinquecento*, Florence: Leo S. Olschki, to be published.

[19] B. Bentz, 'Le décor de la grotte de Noisy: résultat des fouilles de 2017', actes du colloque de Florence, 22 février 2018, *Opus Incertum*, to be published.

[20] A. d'Ancona, *Journal de voyage de Michel de Montaigne en Italie par la Suisse et l'Allemagne en 1580 et 1581*, Revised edition : Castello: S. Lapi, 1889. p. 164.

[21] The assistance of Valerio Tesi, architect in charge of the restoration of the Castello grotto, with respect to this observation is hereby acknowledged.