The early medieval metalwork of the Carpathian Basin is best known for the high-quality bronze casts of the Late Avar age. The finds and the casting techniques have been analyzed typologically and in terms of production techniques and alloys employed. It had become clear that instead of a uniform technology, there were in fact multiple casting techniques during the Late Avar age. Scholars have therefore focused more on the Late Avar metalworking than on that of any other period of the Avar age. Particularly neglected have been the Early and Middle Avar periods. From a technological point of view, the Avar-age metalwork may be divided into two main groups: pressed metalwork during the Early and Avar periods, and cast metalwork during the Late Avar age. The distinction has long been used as a chronological one, mostly to separate early from later assemblages. The Early Avar age also offers unique opportunities to study manufacturing techniques, given that all known burials of craftsmen known so far can only be dated to that age. Combining the analysis of the artifacts themselves with the study of the metalworking tools found in craftsman burials is the key methodological path followed in this chapter.

1 “Late Avar” is a *terminus technicus* going back ultimately to Ilona Kovrig’s seminal monograph of the Alattyán cemetery (Kovrig 1963), in which she first advanced the idea of dividing the chronology of Avar-age archaeological assemblages into three phases: Early (ca. 570 to ca. 650), Middle (ca. 650 to ca. 700), and Late (ca. 700 to ca. 830). For the most recent contribution to the refinement of Kovrig’s tripartite scheme, see Stadler 2005 and in this volume.


3 The distinction ultimately goes back to Hampel 1905a. But Hampel actually believed that the pressed artifacts post-dated the cast metalwork. The distinction nevertheless was a key component of Ilona Kovrig’s chronological model for the Avar age (Kovrig 1963).
At the source: craftsman burials and workshops

Besides craftsman burials, excavated workshops may also be used as evidence for understanding Avar-age metalworking techniques. Craftsman burials can only become an important source for the understanding of the Avar-age metalwork if taking into consideration their independent and critical analysis. They are after all our only source for both the tools and the end-products of the manufacturing process. Most studies of craftsman burials have so far focused on the typological analysis of the associated grave goods, with little or no concern for technology. The analysis of Avar-age craftsman burials is therefore in dire need of a boost of confidence similar to that injected into the current research by the pathbreaking re-examination of the sixth-century Poysdorf smith burial.

To be sure, the value of the information provided by craftsman burials depends upon the circumstances of their discovery and the state of preservation for the associated tools. It is only the most recently found burials that benefited from a careful recording of the position of both tools and artifacts within the burial. Older finds lack such information. As a consequence, scholars tended to focus mostly on molds, in an attempt to link them to known artifacts from the same or other finds. Molds are typically made of bronze, with one convex side, and were used to work on the decoration of thin sheets of metal. There is so far no match between any artifact manufactured in the pressing technique and dies discovered in craftsman burials. Most dies have not been found in association with the dress accessories they may have produced.

In sharp contrast to craftsman burials, the archaeological record of the Avar age is not very rich in workshops. Recent excavations on a set-

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4 Many craftsman burials were known from an early stage in the development of Avar archaeology. For Adony, see Hampel 1905a, 391–92 and 1905b, pl. 284; Fettich 1926, 63 pl. 6; Stadler 1985a, 175–82. For Felnac, see Hampel 1905a, 392–96 and 747–51 and 1905b, pl. 446, Fettich 1926, 62–63 and pls. 4–5; Stadler 1985a, 168–75. For Gátér, grave 11, see Kada 1905, 368–70. For Kunszentmárton, see Csallány 1933. For Jutas, grave 166, see Rhé and Fettich 1931, pl. 4.12–20. For more recent finds, see Nagy 1959, 57 and pl. 5 (Aradac, grave 18); Bunardžić 1978–1979, 51 and pl. 13.6 (Čelarevo); Selmeci and Madaras 1979, 146 and pl. 7b (Rákóczifalva-Kastélydomb, grave B); Kiss 2001, pls. 24–27 (Kőlked-Feketekapu B, grave 80). Grave 322 of the Csákberény cemetery is still unpublished.

5 Typical in this respect is Rácz 2004. See also Csallány 1933.

6 Daim, Mehofer, and Tobias 2005.

7 Heinrich-Tamaska 2002, 251.