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Edited by  
Dávid BARTUS – Zsolt MRÁV – Melinda SZABÓ

Budapest, 2024

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# Raetia resumed: Between iconography and context

## An introduction

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**Abstract:** This paper's title, "Raetia resumed," is largely intended to reflect the fact that earlier research on the Raetian bronze fragments was interrupted and subsequently resumed by a project entitled *Römische Großbronzen am Limes – Fragmente im raetischen Raum*.

Herein, we shall offer a panoramic perspective on several case studies that demonstrate the variety of the contexts and the fragments as well as aspects of their chemical and isotopic composition. Analysis of these fragments from an interdisciplinary perspective yielded archaeological and historical, iconographical, and archaeometallurgical data that encapsulate the complexity of Raetian culture.

**Keywords:** Roman Raetia, bronze statuary, *limes*, alloy

## Introduction

The title of this paper, "Raetia Resumed," highlights its connection to the project *Römische Großbronzen am Limes – Fragmente im raetischen Raum*, developed during the biennium 2019/2021 at the KU Eichstätt-Ingolstadt and funded by the Fritz Thyssen Stiftung. A previous international project (*Großbronzen am Limes*)<sup>1</sup>—as mentioned in the introduction to our session V with Nadin Burkhardt, which we organized during the International Bronze Congress in Budapest 2022 and which carried the title *Bronze sculpture: technique, motifs, context and re-use in the Roman provinces*—investigated the bronze fragments that were unearthed along the Limes of the northern and western Roman provinces. This region along the *Limes Germanicus* comprises the ancient Roman provinces of Germania Inferior, Germania Superior, Gallia Belgica and Raetia. The present project resumes earlier research on Raetia that focused on settlements both along the Limes and in the province's hinterland.

Thousands of fragments of bronze statues were discovered in twenty-five contexts of various kinds (Fig. 1).<sup>2</sup> Over the course of the project, the fragments were evaluated with respect to their iconography, with attempts to reconstruct their original display contexts. Selected pieces from various

1 On the topic, cf. the contributions in GEBROCHENER GLANZ 2014; KEMKES 2017 and the database: <http://grossbronzenamlimes.de/>.

2 For this, cf. the recently appeared monograph on the topic: *Römische Großbronzen am Limes – Fragmente im raetischen Raum* (Oxford 2023). See also PICCIONI 2020, 327–329.

centres were also subjected to chemical analyses with the aim of determining their alloy and thus their mutual provenance from the same statue—and the lead isotopy—to determine the lead’s provenance.<sup>3</sup> Almost 160 samples from fourteen different localities in Raetia were chemically analysed, and more than thirty were analysed with regard to their isotopic composition.

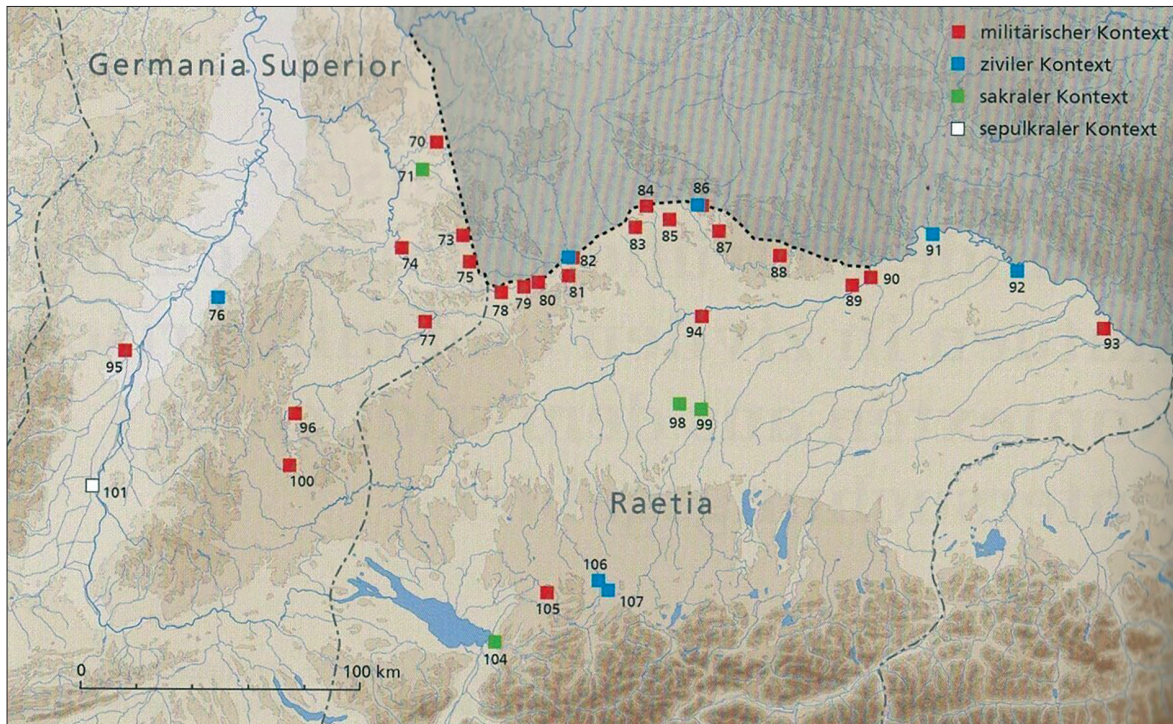


Fig. 1. Findings on early Roman bronze statues in civilian and military contexts from the southern study area (after HECKMANN 2017, 41–53, Part 42, Fig. 1).

The first part of the present paper will focus briefly on several case studies with the aim of demonstrating the richness and variety of the province’s bronze statues and exploring their potential interpretations.

### Case studies: the destruction of the statues and the recycling of the fragments

The first noteworthy observation to emerge from the research on the fragments was the omnipresence of the original bronze statues in every type of context of Raetia.<sup>4</sup> The archaeological, historical, iconographical, and compositional complexities of the fragments reflect the cultural complexity of Raetia.<sup>5</sup> No archaeological evidence has been found to attest to specific in Raetia, but if we consider the ancient statue founders as analogous to modern bell founders as itinerant workers who source their material locally for the most part, material analysis emerges as a crucial source of information for merchandise systems. At this juncture, it is worth noting that large Roman statues are invariably made of leaded or highly leaded bronze alloys, with copper, lead, and tin as the only major components.<sup>6</sup> Indeed, the impurity pattern of minor components varies, and—with regard to Raetia

3 On the methodology, see WILLER et al. 2016, 59–73.

4 Cf. HECKMANN 2017, 41–42.

5 See, for instance, the case of Aalen: KEMKES 2014, 131.

6 AZÉMA et al. 2012; CALEY 1970; ODDY et al. 1990; JANIETZ SCHWARZ – ROUILLER 1996; JANIETZ 2000; LAHUSEN – FORMIGLI 2001; LAHUSEN – FORMIGLI 2007; WILLER et al. 2016, 74–79.



in particular—from region to region and also over time.<sup>7</sup> Some minor elements, such as zinc or gold, may serve to indicate recycling, since these metals are not normal components of ancient copper, lead, or tin.<sup>8</sup>

Almost all areas of the province were razed to the ground around the mid-3rd century AD during the raids of the Germanic tribes. The small fort of Künzing, however, has yielded several key findings.<sup>9</sup> The main findspots at this settlement included a pit at the entrance of the wooden amphitheatre, which yielded fragments that were likely deposited there for recycling purposes.<sup>10</sup>

The fragments found at the amphitheatre (Fig. 2) permitted the reconstruction of a standing statue of the emperor Trajan.<sup>11</sup> The fragment bearing the serial number LfdNr. 239<sup>12</sup> (= Künzing, Inv. no. R2001,1–4) is particularly meaningful for this reconstruction.<sup>13</sup> Its peculiar iconography distinguishes it as a highlight of the assemblage: it depicts a man being attacked by a griffin, suggesting the myth of the Arimasps and the griffins.<sup>14</sup> This motif was developed in several variants that alluded to the Roman dominion, which extended to the furthest extremities of the known world, as Cadario has demonstrated.<sup>15</sup> In any case, several examples of statues (not necessarily made of bronze) representing the emperor Trajan are attested, and Pfeifroth attempted to reconstruct the Künzing example based on the similarities between such statues<sup>16</sup> and the fragment. However, the Künzing piece does not constitute an isolated fragment; rather, several other fragments that are chemically identical and iconographically related have been found.<sup>17</sup> Künzing is the only site in Raetia at which several statues show traces of zinc, which entered the alloy through the ad-



Fig. 2. View of some fragments from Künzing. Permission: Museum Quintana, Künzing (photo: Aura Piccioni).

7 WILLER et al. 2016.

8 WILLER et al. 2019, 193–195.

9 Cf. FISCHER 1991, 169–173.

10 For this and the other findspots, as well as their interpretations, cf. PICCIONI 2023, 4–5.

11 Thanks to the support of Roman Weindl and the work of Burkhard Pfeifroth. Cf. that which has already been established with respect to the statue's iconography by a previous researcher of this topic, S. Heckmann, in the database *Grossbronzenamlimes.de*: <http://grossbronzenamlimes.de/database/node/1294> (generated on 9th January 2023).

12 In the database [grossbronzenamlimes.de](http://grossbronzenamlimes.de).

13 Cf. S. Heckmann, <http://grossbronzenamlimes.de/database/node/1294> (generated on 9th January 2023).

14 CADARIO 2004, 251. Cf. S. Heckmann, <http://grossbronzenamlimes.de/database/node/1294> (generated on 9th January 2023).

15 Cf. again CADARIO 2004, 251.

16 Cf. Heckmann, LfdNr. 239 in the database: <http://grossbronzenamlimes.de/database/node/1294> (generated on 17th February 2023). See also the reconstruction by Burkhard Pfeifroth.

17 Cf. Heckmann, LfdNr. 240 [<http://grossbronzenamlimes.de/database/node/1295>, generated on 18th February 2023] and 242 [<http://grossbronzenamlimes.de/database/node/1297>, generated on 18th February 2023] in the database.

dition of brass scrap.<sup>18</sup> Indeed, 23% of all examined fragments from all provinces along the Limes Germanicus, with an emphasis on the northern area of investigation, have measurable proportions (>0.2%) of zinc, while zinc is detectable as an impurity in just five percent of the analysed samples from Raetia. The analysed objects from Künzing included two brass alloy appliquéés in the shape of Medusa.

The same picture emerges for gold, which enters the alloys as an impurity through the re-melting of statues' gilded fragments.<sup>19</sup> Gold has been detected in approximately 20% of the fragments from large bronze statues analysed from the region along the Limes Germanicus so far, while only 8% of the analysed finds from Raetia contain gold.

Let us now turn to the western part of the Limes—the Ostalbkreis—and particularly to Aalen (Fig. 3), which is meaningful not only as a military fort—in comparison to the smaller Künzing, for instance—but also in light of the number of the bronze fragments discovered there (2035 alone in the settlement) as well as the findspot for most of them: the *aerarium* located under the sanctuary in the *principia*.<sup>20</sup> Several bronze pieces discovered in Aalen belong to the decoration of a cuirassed statue, such as the *pteryges* (i.e., the fringes of the cuirass) bearing a representation of the head of Jupiter Ammon.<sup>21</sup> One fragment of a plinth from Aalen shows a remarkably high percentage (2.6%) of antimony and a tin content below the percentage mark. Antimony-bearing alloys are relatively typical of late Iron Age Celtic objects from southern Germany, and it is assumed that older local materials, such as the 'Potin coins,' were used as an additive in statue production.<sup>22</sup> Only a handful of samples from the entire series exhibited such high antimony contents.



Fig. 3. A view of the Aalener fort (photo: Aura Piccioni).

Find deposits, such as those from Aalen with small, fragmented statue pieces ready for melting, clearly indicate that materials were hoarded for recycling. However, the analysis suggests that recycling was less pronounced in Raetia than in the other provinces for reasons that remain unclear.

18 Appendix by R. Schwab in PICCIONI 2023.

19 WILLER et al. 2019, 194.

20 Cf. PICCIONI 2020, 329. On the other findspots in Aalen, cf. PICCIONI 2023, 22–23.

21 Cf. Heckmann, LfdNr. 1605 in the database [<http://grossbronzenamlimes.de/database/node/2660>, generated online on 20th February 2023].

22 WILLER et al. 2019, 194–195.

In the case of Möggingen, not far from Aalen, as well as those of Rainau-Dalkingen (Ostalbkreis) and Straubing (on the eastern side of the Limes), new evidence highlighting similarities to findings from other settlements has come to light since the conclusion of the international project on the bronzes from the Limes, from which the database and research project had originated.<sup>23</sup> The similarities are sufficiently compelling to suggest that these decorations were cast by the same workshops or at least based on the same models.<sup>24</sup> The question of workshops and the circulation of models is key to understanding the interactions and relationships between settlements along the Limes and in the province.

In Rainau-Dalkingen (nr. 82 on the map, in today's Baden-Württemberg), in the western part of the Raetian Limes, a gate and later, perhaps, a triumphal arch was built on a prehistoric road reused in Roman times (Fig. 4).<sup>25</sup>



Fig. 4. View of the so-called “Dalkinger Tor” at Rainau-Dalkingen (photo: Aura Piccioni).

Research on the gate has revealed six construction phases, during the first four of which it was made of wood. Its final phase occurred during the reign of Severus Alexander, and the building appears to have been destroyed during the incursion of the Alemans around the mid-3rd c. AD (233 AD).<sup>26</sup> The gate likely originally served as a wardpost.<sup>27</sup>

Around 140 bronze fragments of an over-life-sized statue, first analysed by Sascha Heckmann (one of the researchers who previously studied the bronze fragments from Raetia), have been dated to the reign of Caracalla.<sup>28</sup> Heckmann's analyses led to the hypothetical reconstruction of a standing cuirassed statue dated to the beginning of the 2nd century AD. Given the date, it could not originally have portrayed Caracalla but may have portrayed Trajan, for example, with the portrait head of Caracalla perhaps later substituted for the original.<sup>29</sup>

23 Cf. PICCIONI 2023, 1–4, 11–13.

24 Cf. PICCIONI 2023, 30–32, 47–56, 211–212, 241–245.

25 Cf. PLANCK 2014, 76.

26 Cf. PLANCK 2014, 56–69, 76–83.

27 Cf. PLANCK 2014, 76–80.

28 Cf. HECKMANN 2014a, 92–100.

29 Cf. HECKMANN 2014a, 135.

Cuirass parts are recognizable among the fragments from Rainau-Dalkingen. These include, for example, fragments depicting *pteryges* with the decorative heads of Jupiter Ammon and Medusa as well as *kalathoi* (baskets) of acanthus leaves.<sup>30</sup> The analysed fragments from Rainau-Dalkingen are chemically similar and likely originate from a single statue.<sup>31</sup> The similarity is not only important with respect to the symbolic meaning but also because of the iconography that can be recognized on the fragments and, above all, their visual style. The depiction on these *pteryges* constitutes a vivid example of a hybrid Romano-Celtic tradition and illustrates the extent to which Roman models influenced indigenous Celtic art.<sup>32</sup>

Among the more impressive fragments is a hilt in the form of eagle head that originates from a parade sword (*parazonium*), for which Heckmann had already identified several comparanda from the same province of Raetia, such as two hilts from Weißenburg in Bayern.<sup>33</sup> Research into this topic has intensified in the context of the present project, and details of its findings appeared in the monograph.<sup>34</sup>

From an analytical perspective, the findings indicate that the use of scrap in Raetia can be verified only in a limited manner, and the results from Raetia also differ from the other provinces along the Limes with regard to the lead isotope ratios. It has been shown that the so-called *plumbum Germanicum*, which was produced in the area of the Rhenish Massif, was used almost exclusively for statues in the vicinity of these lead deposits (i.e., in the provinces of Germania Inferior, Gallia Belgica, and Germania Superior), while only a saddle cloth fragment from Isny containing *plumbum Germanicum* can be securely attested for Raetia.<sup>35</sup> Figure 6 illustrates the isotope ratios of all the analysed bronze statues from the Germanic provinces and the Raetian statues compared with the lead deposits used during the Roman period. For the majority of the statues from Raetia, both lead from the Pennines in northern England and lead from Gaul's Massif Central are possible.

## Conclusion

To conclude this brief presentation about fragments of Roman bronze statues from Raetia (as already mentioned in the introduction to session V of the Bronze Congress 2022 in Budapest, it should be emphasized that not all settlements in the province were militaristic in character; some, such as Augsburg (*Augusta Vindelicum*), had developed in a civil sense and had attained city status in all respects. Their different nature imposed no limitation on the diffusion of bronze statuary. Indeed, settlements such as Kempten have yielded extraordinary examples of bronze statues of different kinds; the horse head discovered in Augsburg (LfdNr. 1346 in the database) constitutes a monumental example.<sup>36</sup> However, the Raetian fragments generally highlight the complex nature of their decoration and display contexts. In the case of cities such as Augsburg, Kempten, and Bregenz, we might imagine that the original bronze statues were displayed in the forum or at other strategic points, easily recognized and widely visible.<sup>37</sup>

Regarding the alloys used in Raetia's statues, the main components – copper, tin, and lead – do not

30 Cf. HECKMANN, LfdNr. 1019 in the database [<http://grossbronzenamlimes.de/database/node/2074>, generated on 20th February 2023].

31 WILLER et al. 2016, 167; Schwab in PICCIONI 2023, 261–263.

32 Cf. PICCIONI 2023, 231–235.

33 Cf. HECKMANN 2014c, 138–139.

34 Cf. PICCIONI 2023, 51–56, 241.

35 WILLER et al. 2016, 93 and 14.

36 Cf. Heckmann, his entry in the database [<http://grossbronzenamlimes.de/database/node/2401>, generated on 21st February 2023].

37 Cf. HAHN 2014, 49; WILLER 2014, 30–31; OBERHOFER 2019, 345–374.

differ from those attested throughout the empire. Some differences have emerged in the practice of recycling for reasons that are as yet undetermined; more striking, however, is the obvious deviation in the supply of raw materials from the Germanic provinces. Most of the bronze statues found in the provinces of Upper and Lower Germania and Gallia Belgica contain lead from deposits in the German low mountain range zone and thus from the immediate vicinity.<sup>38</sup> This lead, the so-called *plumbum Germanicum*, can be isotopically traced up the Rhine to present-day Switzerland and further across the Rhône to the coasts of southern France and Sardinia,<sup>39</sup> making it even more puzzling that lead from the Germanic provinces was not delivered to a neighbouring province, such as Raetia. Isotopic analyses suggest that the lead within the statues may be linked to deposits in the British Isles or, more likely, to the deposits in Gaul's Massif Central. Robust contact between Gaul and Raetia is evident in the high quantity of materials from Gaul discovered in the latter province as archaeological confirmation of the archaeometallurgical analyses.<sup>40</sup>

The present study has offered a brief panorama on the settlements in the province of Raetia and the bronze fragments that they have yielded, with a particular focus on several case studies that attest to the richness and variety of both the contexts and the fragments themselves.

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38 WILLER et al. 2016, 91–94.

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40 Friendly note by Markus Scholz; thanks to Martin Kemkes for his support.

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