

THE VOCABULARY OF METALS IN LATIN INSCRIPTIONS FROM DACIA*

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Abstract: The present study tackles the vocabulary of metals in the Latin inscriptions from Roman Dacia. Four metals are attested: gold, silver, bronze, and iron, either as base words *aurum*, *argentum*, *aes*, and *ferrum*, or in substantival and adjectival derived forms. As expected, given the importance of Dacia as a gold-mining province, the richest word family is that belonging to “gold”, with five members (the nouns *aurum*, *auraria*, *aurarius* and the adjectives *aureus*, *aurarius*), followed by that of “bronze”, with four (the nouns *aes*, *aerarium* and the adjectives *aeneus*, *aereus*), that of “iron”, with three (the nouns *ferrum*, *ferraria* and the adjective *ferratus*), and lastly, that of “silver”, with only two words (the noun *argentum* and the adjective *argenteus*).

Keywords: Dacia; inscriptions; vocabulary; metals.

Rezumat: Articolul își propune să examineze vocabularul metalelor documentat în inscripțiile latine din Dacia romană. Sunt atestate patru metale: aur, argint, bronz și fier, fie în cuvinte de bază (*aurum*, *argentum*, *aes* și *ferrum*), fie în cuvinte derivate, atât substantive, cât și adjective. După cum este de așteptat, ținându-se cont de importanța Daciei ca provincie producătoare de aur, cea mai bogată familie de cuvinte este cea a aurului, care cuprinde cinci membri (substantivele *aurum*, *auraria*, *aurarius* și adjectivele *aureus*, *aurarius*), urmată de cea a bronzului, cu patru membri (substantivele *aes*, *aerarium* și adjectivele *aeneus*, *aereus*), cea a fierului, cu trei (substantivele *ferrum*, *ferraria* și adjectivul *ferratus*) și, în cele din urmă, cea a argintului, care are numai doi membri (substantivul *argentum* și adjectivul *argenteus*).

Cuvinte cheie: Dacia; inscripții; vocabular; metale.

Four metals are attested in the Latin inscriptions from Dacia: gold, silver, bronze, and iron, either as base words *aurum*, *argentum*, *aes*, and *ferrum*, or in substantival and adjectival derived forms. Taking into account Dacia's importance as a gold-mining province, it is not surprising that the largest word family is that belonging to “gold”, with five members, followed by that of “bronze”, with four, that of “iron”, with three, and lastly, that of “silver”, consisting only of two words.

This paper will use the extent of the word family as criterion for presenting and discussing the epigraphic material that documents words denoting or pertaining to each of the four metals.

1. The noun *aurum*, *-i* (“gold”; in the ablative form *auro*) has multiple occurrences in a fragmentary inscription¹ from Sarmizegetusa documenting a *votorum*

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¹ IDR III/2, 241: [*astu ea ita faxis tunc tibi bovem cornibus auro decoratis / v*]ovem[us esse futurum Iuno Regina quae in verba I(ovi) O(ptimo) M(aximo) bovem cornibus auro] / decorat[is] vovimus esse

nuncupatio. The gods attested are not only the ones invoked in *vota annua pro salute Imperatoris* (i.e. *Iuppiter Optimus Maximus*, *Iuno Regina*, *Minerva* and *Salus publica*), but also *Mars Pater Gradivus* and, probably, *Fortuna* or *Mars Ultor*, therefore, most assuredly the vows were *vota extraordinaria*, taken at the beginning of a military expedition². Unfortunately, little information³ is preserved in the left corner of the marble block that was found: only an incomplete list of the deities and the *hostiae*. The fragment details the sacrifices promised to different gods, if they will grant victory and safe return to the emperor. The promised sacrificial victims are bovine (*boves* for all – *bos mas* for Jupiter, *boves feminae* for the goddesses –, except Mars, who will receive a *taurus*⁴) and are mentioned as having “horns adorned with gold” (*cornibus auro decoratis*).

The dative *auro* is found only once, in an honorific monument⁵ set up by Colonia Ulpia Traiana Sarmizegetusa to C. Curtius Rufinus, from the senatorial order. Before coming to Dacia as a tribune of the *legio XIII Gemina*, he was one of the *IIIviri* responsible for minting the coin or, in a more precise translation, “one of the three men responsible for casting and striking gold, silver and bronze”: *III vir a(ere) a(rgento) a(uro) f(lando) f(eriundo)*. In the full official title three nouns denoting metals are present, *auro* being coordinated by juxtaposition with *aere* and *argento*.

Not surprisingly, many inscriptions referring to gold are related to gold extraction and come from the mining district of Dacia Superior, situated to the south and south-east of the Apuseni Mountains.

A wax tablet⁶ found in Alburnus Maior (now Roșia Montană) and consisting of a miner’s work contract, of the *locatio-conductio* type, attests the expression *opere auri*. In this tablet (IDR I 42), Aelius (or Iulius?) Restitutus is renting to Titus Beusantis, a *conductor* of illyric origin, his own work force for the extraction of gold (*[l]oca[v]it oper[as] suas opere auri*).

A somewhat similar expression is used in IDR I 41⁷, where the adjective *aurarius*, *-a*, *-um* (“concerned with, used for, gold”⁸) is used instead of the genitive *auri*

futurum quod hodie vovimus astu ea ita faxis tunc] / tibi in ead[em verba bovem cornibus auro decoratis vovimus esse futuram] / Minerva qu[ae in verba I(ovi) O(ptimo) M(aximo) bovem cornibus auro decoratis vovimus esse futurum / q]uod hodie vo[vimus astu ea ita faxis tunc tibi in eadem verba bovem corni/b]us auro decorati[s vovimus esse futuram Salus publica p(opuli) R(omani) Q(uiritium) quae in ver/b]a I(ovi) O(ptimo) M(aximo) bo[vem cornibus auro decoratis vovimus esse futurum / q]uot hodie vovim[us astu ea ita faxis tunc tibi in eadem verba bo/ve]m cornibus auro [decoratis vovimus esse futuram Invicte / Ma]rs Pater Gradive [quae in verba I(ovi) O(ptimo) M(aximo) bovem cornibus / auro] decoratis vov[imus esse futurum quod hodie vovimus astu ea / ita fa]xis tunc tibi in e[adem verba taurum conibus auro decoratis / vove]mus esse futur[um Fortuna Redux quae in verba I(ovi) O(ptimo) M(aximo) / bovem] cornibus au[ro] decoratis vovimus esse futurum quod hodie / vovim]us astu ea [ita faxis tunc tibi in eadem verba bovem / cornib]us au[ro] decoratis vovimus esse futurum.

² Piso 1974, 724.

³ Although neither the magistrates undertaking the *vota*, nor the identity of the emperor for whom they were pronounced is to be found in the preserved fragment, the former were probably the *duumviri* of Sarmizegetusa, while the latter may well have been the emperor Trajan, going to war against the Parthians (Piso 1974, 728–732).

⁴ See Piso 1974, 725 discussing specific victims to different deities and also Gradel 2002, 21–22.

⁵ CIL III 1459 = IDR III/2, 110.

⁶ CIL III p. 949 = IDR I 42.

⁷ CIL III p. 948 = IDR I 41.

⁸ The definitions of the words are those found in OLD 1968, with the exception of *aurarius*, *-ii*, where L&S 1891 was used.

(*locavit operas s[ua]s opere aurario*). The tablet documents the employment contract between Memmius Asclepi and the *conductor* Aurelius Adiutor, the former renting his labor power for activities concerned with gold (extraction).

The noun *aurarius*, *-ii* (“a worker in gold, a goldsmith”) is only once⁹ found in Dacia, and even this occurrence is uncertain. On a votive altar set up for Hercules by a certain Aelius Ties (or Theseus?), he probably documents his occupation as that of *aur(arius?)*.

The most frequently attested member of this word family is the noun *auraria*, *-ae* (“gold mine”), but only in the genitive plural form, *aurariarum*. Different officials, both high- and low-ranking, responsible for the administration of the Dacian gold mines¹⁰ appear in these inscriptions: *procuratores*¹¹, *subprocurator*¹², *tabularius*¹³, *dispensator*¹⁴, *praepositus*¹⁵.

At Ampelum¹⁶, the empress Annia Lucilla is honoured¹⁷ by the *lib(erti) et familia et leguli aurariar(um)*. While the imperial freedmen and slaves (*liberti et familia*) are part of the gold mines’ administration, the *leguli*¹⁸ are to be understood as denoting the individuals really involved in the extraction of gold (i.e. the miners)¹⁹.

The adjective *aureus*, *-a*, *-um* (“made of gold, golden”) is only once attested, in an honorific inscription²⁰ from Sarmizegetusa listing the military decorations (between them, the gold crown, *corona aurea*) the senator M. Claudius Fronto, governor of Dacia, received from the emperors Marcus Aurelius and Lucius Verus: *coron(a) mural(i) item vallar(i) item classic(a) item aurea item hast(is) puris IIII item vexill(is)*.

⁹ CIL III 1292 = IDR III/3, 305 = ILD 332.

¹⁰ For detailed information on the administration of the Dacian gold mines see the following works: Mrozek 1968; Noeske 1977; Wollmann 1996; Hirt 2010; Pundt 2012.

¹¹ One *proc(urator) aurar(iarum)* of equestrian rank (CIL III 1311 = IDR III/3, 359) and two imperial freedmen: *proc(urator) aurariarum* (CIL III 1312 = ILS 1593 = IDR III/3, 366), *proc(urator) aurar(iarum)* (CIL III 1622 = ILS 1532 = IDR III/3, 347).

¹² The office of *subprocurator auraria[r(um)]* (deputy to a *procurator*) is held by an imperial freedman (CIL III 1088 = IDR III/5, 228).

¹³ An accountancy office usually held by an imperial freedman - *tabul(arius) aur(ariarum)* - attested by the inscription CIL III 1297 = ILS 1594 = IDR III/3, 314.

¹⁴ This financial administration office - *disp(ensator) aurar(iarum)* - held by an imperial freedman is attested by the inscription AE 1959, 308 = IDR III/3, 292 = AE 2003, 1512 = ILD 331.

¹⁵ AE 1989, 629 = ILD 346. See Piso 2013, 348 for more information on Aurelius Ursus and his extraordinary function as *[pr]aepos[itus] au[raria]r[um]*. According to Piso, this is not (as previously thought) the only instance where a *praepositus aurariarum* is recorded in Dacia: at page 341, the author proposes a new reading of the inscription CIL III 1333 = CIL III 7842 = IDR III/3, 334 = AE 2007, 1182: *[V]ictoria[e] / Commod[i] / Ant[on]i[n]i A[u]g[usti] / [U]lp[ius] Maxim[us] / p[raep]os[itus] / aur[a]r(iarum) / [---]*.

¹⁶ Most of the epigraphical monuments attesting *aurariarum* were found in Ampelum, where the headquarters of the gold mining administration was found.

¹⁷ CIL III 1307 = IDR III/3, 283.

¹⁸ *Leguli*, rarely attested in the Latin literary texts and only in agricultural context with the meaning of “pickers (of fruits)”, is to be interpreted here, as Wollmann 1996, 99 indicates, as “pickers of gold nuggets”. However, the actual text of the inscription specifies only that they were connected to the gold mines, without detailing what were they picking, probably because this was inferred through *aurariarum*.

¹⁹ Noeske 1977, 349; Wollmann 1996, 98-99 discusses more amply this inscription. See also the commentaries of Hirt 2010, 271-272.

²⁰ CIL III 1457 = ILS 1097 = IDR III/2, 90.

2. *Aes*, *aeris* with the proper meaning of “bronze”, is found only in the honorific monument discussed here above, set up for C. Curtius Rufinus, once a *IIIvir* superintending the coinage of money in Rome: *IIIvir a(ere) a(rgento) a(uro) f(lando) f(eriundo)*²¹.

Five inscriptions²² attest the use of *aes* with the secondary meaning of “money”, more precisely the expression *aes conferre* (“to raise money”) in the *ablativus absolutus* construction (*aere conlato*). This formula must be related to generosity, “one of the most attractive features of the Roman world”, and records the communal munificence displayed by groups of individuals or communities²³.

Two testimonies of such generosity were discovered in Apulum: the public subscription comes, in the first case, from a religious association²⁴, and, in the second, from the *collegium fabrum*²⁵. The latter inscription specifies that the money was raised in accordance with a decision (*secundum decretum*) of the *decuriones* and *principales collegii* for the funerary monument of P. Aelius Valerianus, who was *patronus* and *decurio* of the same association. The community (the *populus*²⁶) of Sarmizegetusa generically named *plebs* honoured one of its important members, a *IIvir* and *praefectus collegii fabrum*²⁷. We do not have information about who raised the money for the honorific monument²⁸ of Sex. Attius Secundus, who received the *ornamenta decurionalia* from *ordo coloniae Sarmizegetusae*. He was also *patronus collegii fabrum* and probably a rich and influential *Augustalis* and a freedman²⁹ (which would explain why he was not an actual decurion, but enjoyed prestige in his community)³⁰. The last of these inscriptions is fragmentary and gives us very little information; therefore no further discussion is possible³¹.

In a wax tablet³² (IDR I 44) from Alburnus Maior documenting the founding of a *societas danistaria* (a money lending association) is attested the expression *aes alienum* (“debt”), in the *ablativus absolutus* construction: *de[duc]to aere alieno*, “after the deduction of debt”.

Both adjectives *aeneus*, *-a*, *-um* and *aereus*, *-a*, *-um*³³ (“made of bronze”) occur in ablative singular in the military diplomas found in Dacia, in the expression *ex tabula aenea*³⁴ or *ex tabula aerea*³⁵. The adjective *aereus* is also documented as a plural

²¹ CIL III 1459 = IDR III/2, 110.

²² CIL III 1493 = AE 1978, 667 = IDR III/2, 105; IDR III/2, 116 = AE 2003, 1514; AE 1983, 804 bis = IDR III/5, 452; CIL III 1210 = IDR III/5, 486; IDR III/5, 661.

²³ Ferguson 1918, 515.

²⁴ AE 1983, 804 bis = IDR III/5, 452 - [*aere*] *collato*.

²⁵ CIL III 1210 = IDR III/5, 486 - *aere conlato*.

²⁶ Piso 2002–2003, 216.

²⁷ IDR III/2, 116 = AE 2003, 1514 - *a[e]re conlato*.

²⁸ CIL III 1493 = AE 1978, 667 = IDR III/2, 105 - [*ex a*] *ere conlato*.

²⁹ Mihailescu-Bîrlița 2007, 72.

³⁰ Langhammer 1973, 200–201; Jacques 1984, 391; Kleijwegt 1992, 136; Ardevan 1998, 245, 257.

³¹ IDR III/5, 661 - *aere [conlato]*.

³² CIL III p. 950, 13 = IDR I 44.

³³ Roxan 1978, 65 notes that from February 138, with few exceptions, the words *aenea* is replaced with *aerea*.

³⁴ e.g. CIL XVI 160 = AE 1944, 57 = AE 1946, 131 = AE 1947, 31 = IDR I 1; CIL XVI 57 = CIL III p. 868 = ILS 2004 = IDR I 2; CIL XVI 163 = AE 1944, 58 = AE 1946, 131 = AE 1947, 31 = IDR I 3; AE 1958, 30 = AE 1959, 31 = AE 1960, 336 = IDR I 5 = RMD I 17; AE 1962, 391, 1 = IDR I 28 = RMD I 26 = IDR III/5, 695.

³⁵ e.g. CIL III p. 882 (p. 1989) = CIL XVI 107 = IDR I 15; CIL III p. 1989 (p. 2328) = CIL XVI 108 = ILS 2006 = IDR I 16; IDR I 26 = RMD I 7 = IDR III/5, 693.

accusative in a marble plaque³⁶ from Sarmizegetusa recording the donation of two bronze chandeliers (*[can]delabra aerea duo*) to a *collegium*.

Also attested is the noun *aerarium*, *-ii* (“treasury”) in the genitive case. More precisely, two inscriptions mention a *praefectus aerarii militaris*, where *aerarium militare* denotes the military exchequer for the payment of veterans: *pr(a)efectus aerarii militaris*³⁷, *praef(ectus) aerarii militaris*³⁸.

3. The word *ferrum*, *-i* (“iron”) is found only in one votive inscription³⁹ from Apulum attesting a dedication to *Iuppiter Optimus Maximus Dolichenus, natus ubi ferrum exoritur*. The phrase *nato ubi ferrum exor[itur]* is referring to the native town of this Jupiter, Doliche, situated in the iron-bearing district of Commagene⁴⁰.

An inscription⁴¹ from Teliucu Inferior documents the noun *ferraria*, *-ae* (“iron mine”), also in the genitive plural form, as the above discussed *aurariarum*. The marble votive altar is set up for the “divine power” (*numen*) of the emperor Caracalla by two *cond(uctores) ferrar(iarum)*. One of the contractors of the iron mines is C. Gaurius Gaurianus, *sacerdos coloniae Apulensis*, while the other is a freedman⁴², Flavius Sotericus, *Augustalis coloniae Sarmizegetusae*.

A block of calcareous stone found in Sarmizegetusa Regia certifies the presence of a *vex(illatio) leg(ionis) VI ferr(atae)*⁴³ in Dacia, during the military campaigns against Decebalus. The adjective *ferratus*, *-a*, *-um* is translated in OLD as “clad in armour; armoured” when referring to a *legio*, but, more probably, in this instance the reference to iron is made figuratively, the metal being considered a symbol of strength and resistance. The epithet of the legion is also thus accounted for in Real-Encyclopädie⁴⁴.

4. The noun *argentum*, *-i* (“silver”) is found in votive inscriptions, mostly in the genitive form and in the presence of *pondo*. With the exception of *[statuam ex ar]genti p(ondo)*⁴⁵, where a statue is given (as the editors reconstructed the missing part of the text), the type of gift to the deity is not specified, only its weight in Roman pounds: *[ex ar]gent[i] pondo --j*⁴⁶; *ex arg(enti) p(ondo) III*⁴⁷; *a(rgenti) p(ondo) X*⁴⁸.

The ablative is attested only two times in the epigraphical texts. One of these (CIL III 1459 = IDR III/2, 110), concerning a *IIIvir a.a.a.ff.*, was already previously discussed. The other is a funerary inscription⁴⁹ detailing the military career of

³⁶ AE 1977, 667 = IDR III/2, 4 = AE 1982, 831 = AE 2006, 1154.

³⁷ CIL III 1072 = IDR III/5, 365.

³⁸ CIL III 1071 = IDR III/5, 195.

³⁹ CIL III 1128 = ILS 4303 = IDR III/5, 222.

⁴⁰ Turcan 1998, 185.

⁴¹ AE 1909, 112 = IDR III/3, 37.

⁴² Ardevan 1998, 245, 258; Piso 2006, 104, 106; Mihailescu-Birliba 2007, 74.

⁴³ IDR III/3, 270 = AE 1983, 825 = AE 2001, 1716.

⁴⁴ RE XII 2, 1925, s.v. *Legio*, 1588 (Ritterling): “der Name *ferrata* erinnert an ihre unzerstörbare Widerstandskraft”.

⁴⁵ ILD 211 = AE 1999, 1300.

⁴⁶ AE 2006, 1176.

⁴⁷ CIL III 1616 = IDR III/3, 146.

⁴⁸ CIL III 7860 = IDR III/3, 131.

⁴⁹ CIL III 1193 = ILS 2746 = AE 1967, 644 = IDR III/5, 542.

C. Iulius Corinthianus and listing the *dona militaria* he received: *coronam muralem, hastam puram et vex[il]lum argent(o) insigne*⁵⁰ (a mural crown, a spear without iron tip and a replica of a military banner, made of silver).

The adjective *argenteus*, *-a*, *-um* (“made of silver, silver”) appears only in the feminine accusative form, on a statue base⁵¹ discovered in Apulum, that records L. Aninius Firminus, *primus pilus* of the *legio XIII Gemina* as dedicating a silver eagle: *aquilam argenteam posuit*.

The vocabulary of metals attested in Latin inscriptions from Dacia comprises fourteen words, eight of which are nouns and six adjectives. The epigraphic texts record four metals: gold, silver, bronze, and iron, either as base words *aurum*, *argentum*, *aes*, and *ferrum*, or in substantival and adjectival derived forms. Taking into account the importance of Dacia as a gold-mining province, it is not surprising that the word family belonging to “gold” is the richest one, containing five members (the nouns *aurum*, *auraria*, *aurarius* and the adjectives *aureus*, *aurarius*). This family is closely followed by that of “bronze”, with four members (the nouns *aes*, *aerarium* and the adjectives *aeneus*, *aereus*), that of “iron”, with three (the nouns *ferrum*, *ferraria* and the adjective *ferratus*), and lastly, that of “silver”, with only two words (the noun *argentum* and the adjective *argenteus*). These terms denoting or pertaining to metals are attested in different types of epigraphic monuments (votive, honorary, official, funerary) and even in three wax tablets, two of them recording work contracts and one the founding of a money lending association.

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⁵⁰ As *vexillum* is of the neuter gender, the form *insigne*, instead of *insigne*, is incorrect.

⁵¹ AE 2007, 1199.

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