

CLUES FROM COINS: STYLISTIC COMPARISONS OF VISIGOTHIC DIE ENGRAVING AS EVIDENCE FOR MINT ADMINISTRATION*

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From the last quarter of the sixth century until the successful Arab invasion of Hispania in 711, Visigothic minting expressed a monarchical character that departed in various ways from the phases of Roman imitation of the previous century and a half. Encircling the king's bust in the center of the obverse of the tremissis, soon the only confirmed regal denomination, was his name and title, "Rex". The variety of styles of the royal bust "type" – the essential form of the central image – and the extensive network of mints at which the gold coins were struck are two interrelated aspects. The matter is highly complex, however, and has not been studied extensively.

Close examination of the rendering of busts as well as of diversity in epigraphical style offers undeveloped potential. The thousands of remaining Visigothic coins, a still only partially tapped material source, disclose information about the minting scheme, a major part of the administration of the kingdom.¹ From here new deductions and questions can be generated.

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¹ On the monetary system and the value of coins as a historical source see Andrew Kurt, *Minting, State, and Economy in the Visigothic Kingdom: From Settlement in Aquitaine through the First Decade of the Muslim Conquest of Spain* (Amsterdam, 2020); Ruth Pliego Vázquez, *La moneda visigoda*, 2 vols. (Sevilla, 2009); Sebastian Steinbach, *Imitation, Innovation und Imperialisierung Geldwesen und Münzprägung als wirtschaftshistorische Quellen zur ethnischen Identität und Herrschaftsorganisation des spanischen Westgotenreiches* (ca. 572-714) (Berlin, 2017); and Rory Naismith, *Making Money in the Early Middle Ages* (Princeton, NJ, 2023), esp. pp. 246-53 on coinage of the Visigoths.

Much more readily in the “regal series” inaugurated by Liuvigild in the 570s, as monarch and mint are named on tremisses and soon (in 584) a new Facing Bust type appeared universally on both sides, we can trace the geographical contours of style groups to gain a good sense of mint associations by way of engravers of the dies behind all tremisses struck in these centuries in the Visigothic kingdom. The evidence reveals an operational framework that associates numerous peripheral mints with the royal capital and others with provincial centers. What this means is that mobile die cutters from key mints were responsible for most of the coinage issued in the first seventy-five years of the “regal series,” and their general movements can be mapped.

As minting developed in the maturing Visigothic and Merovingian kingdoms of the sixth century, the Roman pattern of striking gold at extremely few, highly central mints was flipped on its head. Visigothic tremisses were churned out now at two or more dozen mints at any one time, always in the capital city of each of the six provinces but also at peripheral mints, mostly in a wide stretch well south of Toledo. Most of the great gains of the scholarship to this point have revolved around the work of proper identification of the coins (reign and place of issue), charting this information (enabling conclusions to be drawn about minting on a broad scale or more minutely), and recording the vast array of bust sub-types and their significance. It is my assertion that elaborate study of the style of the royal busts at the center of the gold pieces and the inscriptions surrounding them provides a basis for recovering aspects of the operations of the mint network that would remain unknown in the absence of contemporary documentation.

In the past a provincial organization has been thought to have governed the minting apparatus, based on some obvious similarities in coins coming from within each of the six territorial divisions and an evident provincial structure in the kingdom’s administration.² Such a minting organization can now be called into question.³ The particular bust forms and general

² On the kingdom’s provinces as a basis of territorial and minting administration see Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 130-34, 148, 182f. See Pablo C. Díaz, “El esquema provincial en el contexto administrativo de la monarquía visigoda de Toledo,” *Mélanges de la Casa de Velázquez* [online], 49-2 (2019), accessed November 30, 2023. <https://doi.org/10.4000/mcv.11009>. Díaz takes a refined look at the development of provinces into administrative units rather than merely geographical markers; he sees this occurring during the period of Liuvigild and Reccared, although he does not view provinces as having clear administrative power. I view their role between center and locality as more robust, not least in monetary matters broadly compassed.

³ The concept of provincial types governs much of the perspective of the main works before recent decades: Aloïss Heiss, *Description générale des monnaies des Rois Wisigoths d’Espagne*

appearance of tremisses were not determined by a tight provincial supervision that controlled the mints within each administrative enclave but instead were dependent on peripatetic die engravers who frequently ranged across the sectional borders. Around nine permanently active mints can be seen as primary sites, with special administrative importance involving tax collection and treasury dispersal.⁴ Since minting in the many secondary – ultimately impermanent – mints can usually be associated with war and conquest, engravers can be seen as an indispensable part of the success of the Visigothic monarchy revived by Liuvigild (r. 568–586) and his son Reccared (r. 586–601), who undertook sizeable campaigns and greatly increased emissions.

Charting stylistic traits allows us to accompany in some way the busy path of the craftsman directly responsible for the emission of gold currency in a territory taken from the rival peninsular kingdom just after the Facing Bust design had been introduced. The annexation in 585 of the Suevic lands in the northwest, comprised of upper Lusitania and what became the province of Gallaecia, involved the services of the engraver from the royal city of Toledo (Toledo on the coins, thus labeled the “Toledo hand”). War-related inscriptions with “Victor,” “Victoria,” or “in” (such as “in Tude”) on Reccared’s coins in the area are likely to be associated with the actual presence of Reccared in the conquest and immediately afterward. More remarkably, the same engraver can be associated with military minting well south of the capital. And this same engraver will move between large tracts for decades, while continuing

(Paris, 1872); Pío Beltrán Villagrasa, *Las monedas visigodas acuñadas en la Suevia española (Diócesis de Iría, Lucus, Aureense, Tude y Asturias)*, in *Boletín de la Comisión Provincial de Monumentos Históricos y Artísticos de Orense*, 101–106 (Mar. 1915 to Jan.–Feb. 1916); Felipe Mateu y Llopis, *Catálogo de las monedas previsigodas y visigodas del Gabinete numismático del Museo arqueológico nacional* (Madrid, 1936); George C. Miles, *The Coinage of the Visigoths of Spain: Leovigild to Achila II* (New York, 1952). Also M. Ruíz Trapero, “En torno a la moneda visigoda,” *Documenta & Instrumenta* 1 (2004), 179–201 at 183. <https://revistas.ucm.es/index.php/DOCU/article/view/DOCU0404110179>. A. Pliego, *La moneda visigoda* follows this framework but facilitates a nuanced approach with an index of types corresponding to minting sites (see v. 1, 29–35) and a continual reference to type forms through coverage of the many reigns. See Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 144–49.

⁴ Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 173–245. *Ibid.*, 135–44 discusses the overall network of mints as well as ways of categorizing them in terms of longevity and output; the criteria of minting during five reigns in a row qualify a site as a major as opposed to minor mint, and of these there were over twenty.

to make dies for the coins of Toledo.⁵ This essay primarily expands the author's case for the identifiable styles of several other engravers busy at multiple mints, still a new area of research in Visigothic studies. It incorporates style attributions from the outstanding collection of Visigothic tremisses (or trientes) at the Museo Arqueológico Nacional in Madrid (MAN).⁶

I. Investigation of coin styles to perceive minting habits

Minting operations is a field of significant inquiry regarding the dominant barbarian regime in Hispania where, apart from minor considerations in the late Roman period and the Suevian kingdom along the northwestern coast, the actual creation of coinage was introduced in most of the peninsula by the Visigoths starting in probably the early sixth century. From the early decades of their kingdom established in 419 in southwestern Gaul the Visigothic monarchy had taken up monetary administration including minting. In the fifth century the kingdom's emissions, almost exclusively gold coins, directly imitated Roman currency in standards and appearance. No written record describes actual minting operations by the Visigothic realm at any point from the settlement in Aquitaine until the loss to Muslim invaders starting in 711. Never the less, loads of circumstantial evidence rooted mostly in the coinage itself suggests that the employment of a small minting apparatus in the early decades of the Visigothic settlement in Gaul developed into a much fuller system over many decades, guided by the Roman coinage model both past and present yet forming its own stylistic rendering on gold issues – from closely imitative to “pseudo-imperial Visigothic” emerging in the sixth century – and establishing a novel network of multiple mint sites. The “regal” series began in stages of experimentation as part of the state formation accelerated during the rule of Liuvigild. A valuable question is how the Visigothic state would carry out the making of currency in the new heartland of their kingdom that eventually claimed the entire Iberian Peninsula together with the Provence region, a rule that continued to endure there for over two centuries.

⁵ Ibid., 151-53; more fully developed in Andrew Kurt, “Forging a New Minting Apparatus Under Leovigild and His Son Reccared,” in *Coins and Money in the Middle Ages: Studies in Honor of Alan Stahl*, American Numismatic Society (New York, 2026).

⁶ The American Numismatic Society (ANS) in New York City, which holds the preeminent collection of Visigothic coins, served as the main basis for specific observations and conclusions regarding style in Kurt, *Minting, State, and Economy in the Visigothic Kingdom*.

Stamped currency leaves a visual trace of the artisan at the core of the actual functioning of minting. Coin-making required the preparation of gold blanks and dies, for obverse and reverse, with which to stamp them into coins (see Fig. 1 below). Die cutting of Visigothic tremisses was performed with the aid of punches.⁷ In the absence of direct evidence on minting personnel, it cannot be known whether the engraver was also the minter, meaning the chief of the emissions site. We may suppose from general practice reaching back to Roman precedents that workers with separate skills and tasks worked in tandem. Thus the men who prepared blanks, or flans, after smelting, and the hammerer who stamped coins by striking dies into blanks were simple laborers whose work must be seen as separate from die cutting at least where large-scale production took place.⁸



Fig. 1. Simulation of a die (on right) used for the obverse side of a tremis, Reccared – Elvora, ANS 2015.48.56

In a general survey of the sort of information numismatics can yield, Andrew Burnett noted that by detailed study of style “it is possible to establish an objective physical link between different coins.”⁹ In fact when so-called die linkage is verifiable, one potential reading is that it “provides

⁷ All features were carved or punched into the iron or possibly steel dies in “intaglio,” i.e., into the smoothed surface, so that when gold blanks were hammered between the die faces an impression in low relief emerged on coins.

⁸ On mint staff see Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 124-30 and Rory Naismith, *Making Money in the Early Middle Ages* (Princeton, NJ, 2023), 48-50. See also the contribution by David Yoon in this volume.

⁹ Andrew M. Burnett, *Coins: Interpreting the Past* (Berkeley, CA, 1991), 16, specifically referring to examination of punches used in cutting dies.

evidence that they were made at the same place and time.”¹⁰ Another reason is possible: dies could be transported for use in stamping coins elsewhere. Fifth-century Western imperial gold coinage was almost always tied to the presence of the emperor and his court. Minting of gold, and the dies or die workmanship underpinning that activity of prime interest to the state, sometimes shifted geographically because the court was in movement. Under Placidia (r. 423-437) the same dies were used to create some gold pieces at Rome as well as at Aquileia.¹¹ Yet even when distinct dies were used for obverse as well as for reverse in the vast majority of coin issues, similarities in surviving coins often manifest the same hand behind the engraving. Meticulous observation of repeated unique characteristics together with differentiation from other styles gives grounds for associating coins with a specific die sinker.

Among the several thousands of remaining Visigothic tremisses, the coin style on each – and the collective variety of style groups that can be formed from the corpus – is not merely an incidental element of possible relevance for understanding minor artistic expression but more significantly offers a clue to the mint organization. Hypothetical relation can then be made to other activities such as the exercise of taxation or war or perhaps to royal movements. While a specialized field, numismatics opens doors to aspects of money and administration that have considerable ramifications. Since it can easily be accepted that production of money was crucial in the intertwined political, economic, and religious dimensions of the kingdom, greater knowledge of it has the potential to yield further insights into broader aspects of administration and life.¹²

¹⁰ Ibid., 17f. Die linkage occurs when two or more obverses or reverses are from the same die.

¹¹ Ibid., 18; also Kenneth Atkinson, *Empress Galla Placidia and the Fall of the Roman Empire* (Jefferson, NC, 2020), 132. The year was 425. The dies in question are necessarily obverse dies, since the reverse side is where reference is made to the place of minting, here two different cities.

¹² In addition to the literature in n. 1 above, other treatment of the role of coinage in Visigothic society includes: Santiago Castellanos, “The Political Nature of Taxation in Visigothic Spain,” *Early Medieval Europe* 12 (2003), 201–28; *ibid.*, “Tributa and *Historiae*: Scale and Power at a Turning Point in Post-Roman Spain,” in *Scale and Scale Change in the Early Middle Ages: Exploring Landscape, Local Society, and the World Beyond*, ed. Julio Escalona and Andrew Reynolds (Turnhout: Brepols, 2016), 187–214; Santiago Castellanos and Iñaki Martín Viso, “The Local Articulation of Central Power in the North of the Iberian Peninsula (500–1000),” *Early Medieval Europe* 13 (2005), 1–42; F. Retamero, “La moneda del *regnum gothorum* (ca. 575–714). Una revisión del registro numismático,” in *Between Taxation and Rent: Fiscal Problems from Late Antiquity to Early Middle Ages*, ed.

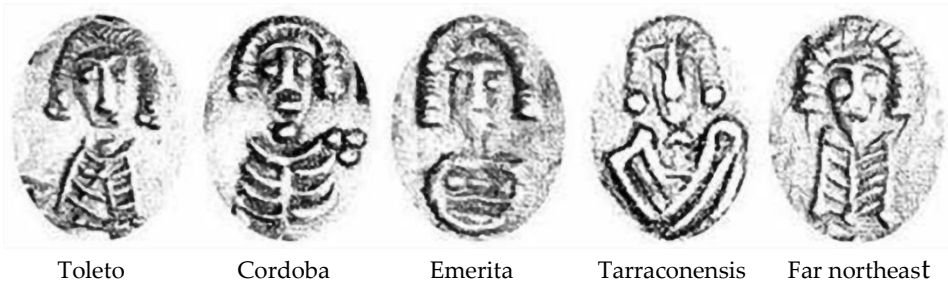


Fig. 2. Principal facing bust type forms. The examples shown are:

Liuvigild – Toledo, ANS 2016.29.9;

Reccared – Cordoba, ANS 2015.48.41; Liuvigild – Emerita, ANS 2015.48.20;

Sisebut – Tarragona, ANS 2013.40.1; Liuvigild – Rodas, ANS 2016.29.4¹³

Starting in Liuvigild's final years, the Visigothic tremisses themselves had become regularized in terms of standards of weight and fineness and the constituent imagery of the dual facing bust.¹⁴ Since the royal bust **sub-types** in the regal series – variations of the general bust form – were not part of a parallel regularization of minting in an essentially provincial schema, it leads us to ask how minting operations were run.¹⁵ (Fig. 2 below displays the principal facing bust type forms, of which there is a range of execution

Pablo C. Díaz and Iñaki Martín Viso (Bari: Edipuglia, 2011), 189-220; and Ruth Pliego, "Figura et potentia. Coin and Power in the Visigothic Kingdom," in *The Visigothic Kingdom: The Negotiation of Power in Post-Roman Iberia*, ed. S. Panzram & P. Pachá (Amsterdam, 2020), 235-55.

¹³ The examples correspond to type categories 2 through 6 in Ruth Pliego, *La moneda visigoda* (Seville, 2009), v. 1, 29-34, 157. Photos in this chapter from the collection of the American Numismatic Society (ANS) are from MANTIS, the Open Access online database of the ANS, with permissions granted for the publication of this work. Photos from the Museo Arqueológico Nacional (MAN) in Madrid are the copyright of Andrew Kurt.

¹⁴ Facing busts were replaced by profile bust on obverses during the joint reign of Chindaswinth and Recceswinth (649-653), then later a variety of types emblazoned the gold pieces. The usual reverse starting under Recceswinth was the cross-on-steps taken up at one stage by Liuvigild. Reigns of the period under consideration are as follows: LIUVIGILD (568-586) ~ RECCARED (586-601) ~ LIUVA II (601-603) ~ WITTERIC (603-610) ~ GUNDEMAR (610-612) ~ SISEBUT (612-621) ~ RECCARED II (621) ~ SUINTHILA (621-631) ~ SISENAND (631-636) ~ IUDILA (632-633), usurper ~ CHINTILA (636-639) ~ TULGA (639-642) ~ CHINDASWINTH (642-649/joint rule 649-653).

¹⁵ In the literature "type" is often used when it is clear from the context that the reference is not to the broad categories (profile bust, facing bust [FB], etc.) for which this term applies but instead specific forms of facing bust type, for instance. For this reason I refer to sub-types or specify that a specific form of the basic type is indicated. I follow the index of types (= sub-types of FB) in Pliego, *La moneda visigoda*, v. 1, 29-35.

constituting sub-types.) Close examination of the various bust sub-types and particular execution of inscriptions reveals that die cutting, a key facet of minting, does not strictly exhibit such a jurisdictional system based on provinces. Instead, regional sub-types and stylistic patterns dominated, some staying within province boundaries but some dispersed in parts of more than one province. Why? It is due to the labor of several individual die engravers or their teams detectable across several reigns at various cities sometimes hundreds of kilometers away, at other times in a smaller circuit. This is a significant point because it draws a direct connection between the places where currency was pounded out.

Mint names can be confidently deemed to represent the places of issue, as confirmed by the preponderance of local or relatively local single finds and by hoard evidence. The variety of epigraphic and bust styles also implies die cutting was not carried out centrally for the distribution of dies to each respective mint throughout the realm. Rather, the production of dies right at the city or town proclaimed on reverse by engravers who often moved around between mint-sites is strongly suggested by the combination of stylistic variation yet at the same time regional likenesses, characteristics that can more naturally be construed as reflecting vicissitudes of craftsmen traveling about and at times working in some conjunction with workers in the area, such as local goldsmiths. It is also suggested by the fact that no obverse die links (with the king's name) between different mints have been noted. Furthermore, centralized sinking of dies is improbable given the evidence, for several reasons: (1) It would entail a very cumbersome practice of some official and engraved dies having to travel back and forth to a central point of die-making; (2) named minting sites would have to be known ahead of time at the Toletum mint, for example, which belies the fluidity of the conquest scenario in Gallaecia alone, where numerous mints opened up under Liuvigild, Reccared, and subsequent rulers; (3) victory slogans have an immediacy about them and often imply the king's own presence – "VICTORIA IN TVDE," "IN TVDE," "IN LVCO VICTOR," and similar in the far northwest, or "SISEBVTVSREꝰ - ꝰVICTORBARBI" in the mid-south. Accompaniment of a royal treasure on campaigns as hinted in the contemporary record conforms to a common custom of the age, whether in late Roman or Germanic contexts.¹⁶ The present ongoing study implies that the presence of die engravers was just as important. Locally targeted

¹⁶ See further in Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 202 n. 612. Kurt, "Forging a New Minting Apparatus" discusses the correspondence of die making and military engagement.

propaganda, channeling of revenue in gold, and a convenient medium of expenditure combined in the hands of this skilled laborer.

The absence of obverse die links among separate mint sites is a synchronic point, giving us some sense of coin production across numerous sites at a given time, in this case during the reign of Liuvigild or Reccared or any early seventh-century Gothic king. Neither have die links been noted diachronically – across different reigns – even from the same mint (i.e., linked reverses exist only within individual reigns but not beyond). Both facts can be explained as a result of a policy of destroying engraved dies after their immediate use. This harmonizes with the assessment of frequent travel by die sinkers as well as with the surprisingly large number of Visigothic dies considered further below.

II. The main engraving styles and the engravers behind them

Ten separate engraving styles emerge from the research to date surrounding the first half of the “regal” series. Each attributed “hand” has an abbreviated form for convenience.

- 1) The “southern engraver” (“So.”) worked exclusively in the center-south.
- 2) The “Ispali engraver” (“Isp.”) started at the mint in Seville and traveled eastward and southward.
- 3) “Baetica/Carthaginensis” (“B/C”), who worked along both sides of the border between these two provinces, is now posited to have begun at Seville and subsequently to have journeyed to the far southeast corner of the realm.
- 4) The “Cordoba engraver” (“Cord.”) was active at Cordoba and possibly a few other mints not very far away.
- 5) The “Toledo engraver” (“Tol.”), or perhaps workshop, has left the greatest trail of work, from the central region of the kingdom to certain southern mints and far into the west and northwest.
- 6) The “Barcinona engraver” (“Barc.”) labored in late ancient Barcelona and surrounding cities.
- 7) The “Narbona engraver” (“N”) was presumably based in that provincial capital of the distant northeast province of Narbonensis. His movements were probably quite limited.
- 8) The “Cesaragusta engraver” (“Ces.”) traveled from ancient Zaragoza to a few nearby mint-sites.
- 9) The “Tarrocona engraver” (“Tarr.”) made fairly limited treks along the coast but labored mostly at what is today Tarragona.

10) The “Emerita engraver” (“Emer.”) worked at the extraordinarily important mint of ancient Mérida in the southwest, but also had a significant influence in the western region of the kingdom now in today’s Portugal.

A small visual sample here of the results of this study illustrates emissions from individual engravers in numerous places. The full table of attributions at the conclusion of this essay contains a large array of coins with detailed points of comparison.¹⁷ A single engraver naturally can manifest some variation in letter formation, and periodically this will be observed even on the same coin. For example, for the R in the Witteric-Eliberri coin of the “B/C” hand below (Fig. 12, MAN 2008.115.40), the diagonal stem can meet the vertical stem either halfway up or at the top, which in other specimens of this engraver tends to lead to the top loop being more detached. The key is to look for patterns, particularly with ideosyncratic details.



Fig. 3. Suinthila – Acci, MAN 2008.115.210



Fig. 4. Suinthila – Tucci, ANS 2015.48.230

¹⁷ The table enlarges the one in Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 344-67. It represents a careful, broad survey extending from Liuvigild through Sisesand and in some cases beyond, but is not meant to be exhaustive. It provides explanations of stylistic assignments and at the same time an opportunity for others to test and perhaps expand on the conclusions offered.



Fig. 5. Sisenand – Mentesa, ANS 2016.29.80¹⁸



Fig. 6. Sisenand – Eliberri, MAN 2008.115.226¹⁹

Above: **The “Southern engraver” (“So.”).** From the corpus at present, this hand can be said to have started in the time of Suinthila’s rule, much later than the others. Of the southern engraving styles analyzed in this essay, “So.” is the most easily recognizable by its forked cuirass (military vestment), thin face usually with V-shaped mouth, eyebrows unconnected with eyes or a nose, and thick wedges and letters. The S is top-heavy and usually descends below the line of letters, L’s horizontal stem is formed with a tiny triangular punch, R and E have detached parts. More notes on the distinctiveness of this hand as well as others are provided in the full table at the end and in the sections following the illustrations.

¹⁸ The inscription reads ✠SISENAND:SR – ✠PIVSMENTES.

¹⁹ The inscription reads ✠SISE[NA]NDVSI – [P]IVSELBERI.



Fig. 7. Wittheric – Ispali, MAN 2008.115.44



Fig. 8. Gundemar – Ispali, MAN 2008.115.58



Fig. 9. Suinthila – Tucci, ANS 2015.48.227²⁰



Fig. 10. Suinthila – Acci, MAN 2008.115.209

²⁰ This coin is identical to Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 340f, pl. IV, (F).

Above: The “Ispali engraver” (“Isp.”). Note similarities in the busts, including the cuirass, although there is diverse execution over the years by this craftsman of lengthy tenure. A repeated pattern of this engraving style is the left lean of letters. Also common here is a peculiar cutting of A/V (with diagonal stems meeting high on the top/bottom wedge, giving that wedge an exaggerated scale in the letter, and the base of ending wedges at an angle); E formed very neatly; S (typically taller than other letters and larger on the top half); on reverse a similar P-I-V (P normally with detached loop, as also D). Careful observation confirms several differences from other hands examined.



Fig. 11. Suinthila – Acci, MAN 2008.115.209



Fig. 12. Witteric-Eliberri, MAN 2008.115.40



Fig. 13. Sisebut – Mentesa, MAN 2008.115.125



Fig. 14. Sisebut – Mentesa, MAN 2008.115.126

Above and below: The “Baetica/Carthaginensis engraver” (“B/C”). Immediately notable are the resemblance in face and bust, often imperfectly centered, and the backward lean of letters. In all of the examples, A/V have uneven stems and a prominent, squared wedge at top or bottom, unstable S, distinctive R (diagonal stem sometimes touching toward the center of vertical stem, sometimes higher up and with smaller loop). In the photos below, examples from MAN are admixed with coins in the ANS collection.²¹ Though displaying variant forms, they have enough similarity to assign them to the same engraver. Although the letters are thicker and the wedges more detached, they exhibit similar A/V and R. In the less careful letter forms – at some points even backwards or upside down – one can sense a hastiness commensurate with wartime minting, a circumstance signified by the VI for VICTOR at the end of the reverse legend of MAN 2008.115.70 (Fig. 15).



Fig. 15. Sisebut – Barbi, MAN 2008.115.70

²¹ ANS 2015.48.109 and 110 (Figs. 17 and 18) are identical to *ibid.*, 340f, pl. IV (C) and (D).



Fig. 16. Sisebut – Barbi, MAN 2008.115.71



Fig. 17. Sisebut – Eliberri, ANS 2015.48.109



Fig. 18. Sisebut – Eliberri, ANS 2015.48.110



Fig. 19. Reccared – Toledo, ANS 2015.48.38



Fig. 20. Reccared – Toledo, MAN 2008.115.26



Fig. 21. Reccared – Senabria, MAN 2008.115.29²²



Fig. 22. Sisebut – Calapa, MAN 2008.115.138



Fig. 23. Sisebut – Semure, MAN 2008.115.140

Above (Figs. 19-23): The “Toledo engraver” (“Tol.”). Fig. 21, MAN 2008.115.29, is either from a die worked by this hand or perhaps is in a style heavily

²² The inscription reads ✠RECCAREDVSRE – SENABRIAVICTOR (starting at 2:00).

influenced by this hand (see comments in concluding table). The obverse seems particularly close to the images and epigraphy of the other tremisses from Reccared's reign; as for the reverse, in considering its different letter sizing one must observe that more letters had to be included to accommodate the mint name. The triens of the Gallaecian mint Calapa (Fig. 22, MAN 2008.115.138) exhibits the same characteristics as Toledo coins both contemporary and going back to Reccared, as illustrated here. I have deemed the Sisebut-Semure tremissis (Fig. 23, MAN 2008.115.140) "possibly by the Toledo engraver". Singularity of the cuirass form and the face on reverse produces doubt, yet other aspects (esp. S-I-S, B, later S, R, final E, and reverse P-I-V) resemble contemporary Toledo coins in addition to others seen in this selection. At very least "Tol." appears to be a guiding hand. A much fuller focus on this die sinker in a separate publication elucidates the vast extent of his travels from center to south to northwest.²³

Adding a style study of MAN Visigothic tremisses to published results of a similar study based on the collection of the American Numismatic Society has allowed the author to broaden the assignment of certain "hands" to more mints and to a longer span of engravers' activity. The MAN collection confirms the start of the "Baetica/Carthiginensis hand" ("B/C") under Reccared. It also helps corroborate my previous attributions to the "Toledo hand." The museum's many Toledo emissions and greater number of Gallaecian tremisses bring further to light the handiwork of this exceptionally active engraver. (See the map of the artisan's overall itinerary in Figs. 24 & 25.) MAN's collection also clarifies that two separate hands were active at the great mint of Emerita, a discovery expounded later in this essay.

²³ Kurt, "Forging a New Minting Apparatus."

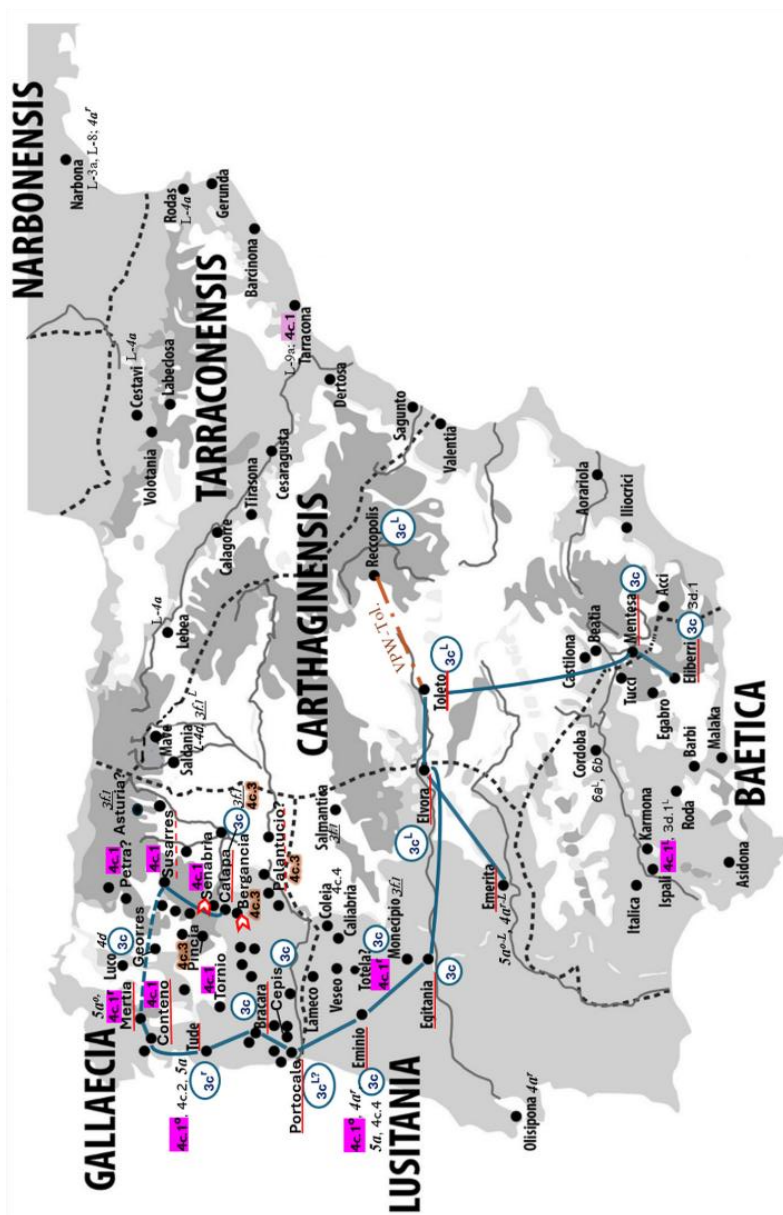


Fig. 24. Map of the route of the “Toledo engraver” and selected early Visigothic Facing Busts sub-types he employed during the reign of Reccared²⁴; map ©Andrew Kurt

²⁴ Reproduced from Kurt, “Forging a New Minting Apparatus” and based on attributions and sub-types elaborated therein. The map focuses on the reign of Reccared. Bust type designations are those found in Pliego, *La moneda visigoda*, v. 1, 29-35. See “L” for

are a strong clue, and the assignments correspond to an ensemble of data.²⁶ Inconsistent spelling of the king's name or the city may well result from local variations and engravers' frequent movements; this often occurred at the same mint and by the same hand.²⁷

On the first level, the geographical pattern that emerges of stylistic likenesses on the coins leads us to better understand how the engraving behind all issues was arranged. It was attested above that there is not a provincial configuration of sub-types and engravers' activity that could indicate an order of minting to that effect. We can only loosely refer to provincial styles, since provinces did not have their own specific type. There is only a more frequent sub-type within some provinces, such as the ones employed consistently at Emerita and frequently taken up at nearby mints.²⁸ Very few of the bust sub-types were associated with just one of the six provinces, or a region within a province.

It has been previously established that the actual striking of coinage was carried out at the locations labeled on the reverses. We have likewise noted above that local fabrication of the dies required for minting can be seen as part of the process.²⁹ The key point is that most mint-sites can be envisioned as positioned along the route of a traveling engraver playing an essential role in satisfying the need for issuing currency at each place. Almost two dozen minting places were relatively permanent, with a substantial output for the

²⁶ Based on early experience in determining style groups in order to arrive at individuated engravers, I had largely assumed an engraver always used the same bust sub-type. However, I have discovered that while this was sometimes true, it was not always so.

²⁷ Variant spelling of king's name: see Philip Grierson and Mark Blackburn, *Medieval European Coinage*, v. 1 (Cambridge, 1986), 52. Pliego, *La moneda visigoda*, v. 1 offers helpful observations concerning spelling (183-86) and some technical aspects, as well as the notion that goldsmiths were involved in minting (190-95).

²⁸ Octavio Gil Farrés, "Algunos aspectos de la numismática visigoda: consideraciones acerca del "tipo tercero" de Leovigildo," *Numisma* 5 (no. 17, 1955), 25-61 and *ibid.*, "La moneda sueva y visigoda," in *Historia de España*, v. 3, ed. R. Menéndez Pidal (3rd ed.; Madrid, 1963), 177-91 correctly pointed out a minting arrangement not merely following provincial boundaries, and referred to some "mobile mints." However, his assertions were based on inadequate notions and essentially on cuirass forms alone; he also mistakenly asserted that some dies were used in multiple mint-sites in Gallaecia. The study and accompanying maps in Mateu y Llopis, *Catálogo* are helpful in so far as they recognize specific styles carrying over into more than one province, although the work does not explicitly consider the class of engravers behind this.

²⁹ I also discuss this in Kurt, "Forging a New Minting Apparatus." On mint-names as signifying the actual locations where coins were struck: Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 128, 205, 243.

duration of the Visigothic kingdom, or at least for most reigns. These included capital cities of the six provinces and several other cities of significance (e.g., Cordoba and Barcinona). The trails of die cutters included one or several of these primary mints, and sometimes can be shown to have emanated from one of the more major workshops. As explained further below, the reason for the wide majority of mint sites and for the peregrinations of several engravers serving them was the engagement of Visigothic armies. Military fronts occasioned new minting sites staffed by itinerant personnel.

The engravers I have identified, normally on the move between cities and even provinces, were responsible for a panoply of bust sub-types, each artisan usually employing more than one. When an engraver crossed provincial lines he did not for that reason automatically change the sub-type he utilized; die cutters did not *adhere to* different particular types in that way. What have been characterized as provincial styles saw exceptions because engravers on a circuit were the determining factor, continuing a specific type they were used to using elsewhere or creating a modified form. For instance, this happened when the hand designated “B/C” active in Ispali at the turn of the seventh century later crossed from Baetica into Carthaginensis to begin work at Mentesa and eventually other sites further east (see Path of the “B/C” engraver below). “Tol.” used the same sub-type (3c in Pliego’s classification) in numerous places in his travels through practically the length of the realm, in which he traversed four provinces. But “Tol.” appears to have adapted to the local sub-type of the major mint at Emerita.³⁰ And die cutters did sometimes create a new sub-type. Occasions when the same worker or team can be tied to more than one bust sub-type, as with the “Toleto hand” in the northwest for instance, suggest either adaptation to new instructions for coin design or latitude in carrying out this work. What could have been the motivation for engravers to vary die designs as they traveled beyond one province? It would have served the immediate identification for easy counting in order to ensure control of production, as explored later in this essay.³¹

Both the minting apparatus and craftsmen’s movements correlate to warfare as known from the historical record.³² Engraver itinerancy and zones of conflict are connected at least on the border of the Justinianic occupation

³⁰ Associations between “Tol.” and “Emer.” are probed below.

³¹ Busts of differing sub-type can be identified as from a single hand by epigraphic features and perhaps some element in the face, hair, or cuirass.

³² For a broad discussion of military-related minting and references in others’ scholarship see Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 191-210.

zone in the southeast starting in the mid-sixth century and lasting around three quarters of a century, and also in the northwestern sector – northern Lusitania and what became the Visigothic province of Gallaecia, annexed in 585 but with some Suevic reverberations afterward. Precisely in these large areas gold coin was issued at numerous cities and towns. Often a single hand crafted dies for multiple places in these zones.

III. Specific conclusions from style study

A new attribution, only implied in my previous research, can be assessed for coins coming from the singularly productive mint of Emerita. The “Emerita hand” (abbrev. “Emer.”) carved dies in the early Facing Busts period solely for that city’s tremisses, it seems, yet its unique styles of cuirass were occasionally copied in the northwestern sector of the kingdom. All extant Emerita tremisses in Liuvigild’s name, both cross-on-steps and – more abundantly – Facing Busts, include “Victoria” or “Victor” on reverse. In Reccared’s trientes the epithet “Victor” continued, all of these coming from the “Emerita hand” as well. However, the style of some of the coins *without* the victory slogan on reverse, from Reccared’s day to the 640s, match the “Toledo hand.” In others also with “Pius” instead of “Victor,” the execution of busts and inscriptions suggests more copying of style than deriving from the engraver of the royal city. It will be evident to anyone on close inspection that “Tol.” and “Emer.” hands bear resemblance, if one looks beyond the quite distinct bust forms between them (details of the face are often alike).³³

A hypothesis may be offered. There are strong hints that Emerita was visited by the engraver from the royal capital. The die cutting at Emerita was sometimes carried out by these two (or more) engravers working in tandem, whereby cross-influences and yet certain distinctions resulted, though some of the coinage came from one engraver present in both places as well as in many others – i.e., the “Toledo hand” described above. If the “Tol.” engraver did in fact strike dies at Emerita, he used different sub-types than he was used to, adopting the Emeritan forms. This also was the case with the same engraver at times as he traveled through parts of Gallaecia.³⁴ In that new

³³ Besides the Reccared specimens, one can easily observe how all the coins at MAN in Sisebut’s name from Toledo (MAN 2008.115.130-137) and all those from Emerita (MAN 2008.115.143-155) have a verifiable resemblance (see details in the table concluding this chapter).

³⁴ See Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 152f and *ibid.*, “Forging a New Minting Apparatus.”

territory a good reason to have taken up the unique Emeritan sub-types would be to preserve a visual tool for quick identification, a practice elaborated below. At Emerita usage of the same sub-types by seemingly separate hands would negate this feature, though it is possible tucking a letter on the bottom of the reverse legend within the extension of the king's cuirass was meant as a distinguishing element of particular issues for the same purpose.³⁵



Fig. 26. Reccared – Toletum, MAN 2008.115.26



Fig. 27. Reccared – Emerita, MAN 2008.115.30



Fig. 28. Reccared – Senabria, MAN 2008.115.29



Fig. 29. Reccared – Emerita, MAN 2008.115.33

³⁵ As far as I have been able to verify at this time, this is not a habit of “Tol.” alone.

Above: Emerita tremisses paralleled with Toledo and other issues. While Figs. 26 and 27, MAN 2008.115.26 and 2008.115.30, reflect a very similar epigraphic rendering, the three other Reccared – Emerita issues in the MAN collection show wedges with wide serifs and other smaller distinctions (cf. Fig. 29, 2008.115.33). A and V of these Emerita specimens have angled wedges, not a characteristic of the “Tol.” style. On the other hand, a notable similarity is the sideways position of the final S on reverse at Emerita sometimes, a feature otherwise found almost solely at Toledo. Rather obvious likeness between 2008.115.30 from Emerita and 2008.115.29 of Senabria, Figs. 27 and 28, most especially the reverse letters, poses the possibility that the “Emerita hand” that I suppose to be behind the former coin was responsible for the die cut at Senabria in recently annexed Gallaecia. For the researcher the most difficult aspect in comparing between coins of Toledo and Emerita is not the difference in sub-type, which can be taken as an intentional distinction between products of the two prominent cities of the realm, but rather the similitude between these specimens on the one hand and yet how dissimilar certain emissions of Emerita begin to appear. Other samples in the table under “Emer.” are less alike and imply the labor of separate artisans in that busy workshop.



Fig. 30. Reccared – Emerita, MAN 1971.71.11



Fig. 31. Reccared – Egitania, ANS 2015.48.237

One more noteworthy addition to the “Emer.” attribution is the observation that Suinthila-Egitania trientes are from this same hand. (See photos above.) Numerous details in the table reaffirm the point. More study will have to be done to determine whether this die cutter traveled in previous

decades as well. It cannot be deemed extraordinary that the mint of Egitania, not far to the northwest within the same province of Lusitania, should have been in the operational orbit of the principal workshop at Emerita, especially while other engravers to the west were pulled further in that direction. Here is the first documentation of this extension of the unique Emerita attribution.

IV. New lights on currency in the kingdom's southern domain

One of several engravers circulating in the kingdom's southern parts was the "Baetica/Carthaginensis hand" (abbrev. "B/C"), so called because he operated largely among multiple mint-sites on either side of the provincial border area. The present study now extends the "B/C" style attribution formerly traced to the first decade of the seventh century back further in time, to the final decade or so of the sixth century, and entails a geographical expansion of the engraver's activity to Ispali, today's Seville, likely his original base (see the Path of the engravers below). Our findings point to this hand as a second die-cutter involved in producing gold coinage at that city's major mint. In a previous publication I identified a specific style of most engraving there, labeling it the "Ispali hand," or "Isp."³⁶ There is evident likeness between "Isp." and "B/C" engraving styles as the expansion of the minting system took off in the reign of Reccared, but two separate styles are in question.³⁷ The Madrid museum's Ispali issues from the reigns of Reccared and Liuva II (MAN 2008/115/20-25 and 35, cf. Fig. 32) correspond to the "B/C" hand previously assigned only for the provincial border area by way of numerous examples starting in the name of Witteric.³⁸ We can see both similitude and differentiation in comparing Witteric and Gundemar's Ispali issues of "Isp." (including MAN 2008/115/42-44 in the table at the end of this chapter, cf. Figs.

³⁶ Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 150f.

³⁷ MAN 2008/115/42-44 of Witteric-Ispali are close in appearance to my "B/C" attributions in *ibid.*, 340f, pl. IV(A-D) (Sisebut-Acci, -Barbi, -Eliberri), esp. the top-heavy S and the R, and these present a particularly challenging assignment. Tremisses of the "Ispali engraver" ("Isp.") exemplified in *ibid.*, pl. IV(E,F) are slightly neater and exhibit less likeness in the busts and faces (e.g., in the well-separated eyebrows). Early regal Toledo & Ispali emissions have a likeness suggesting at least a cross-influence. See *ibid.*, 336f, pl. II, G & H (Reccared-Toledo & -Ispali) and *ibid.*, 342f, pl. V, 1324 & 1325 (Reccared-Toledo & -Ispali) and 1328 (Liuva II-Ispali).

³⁸ Cf. Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 353. Toledo & Ispali emissions have a likeness suggesting at least a cross-influence. See *ibid.*, 336-37, pl. II, G & H (Reccared-Toledo & -Ispali) and *ibid.*, 342-43, pl. V, 1324 & 1325 (Reccared-Toledo & -Ispali) and 1328 (Liuva II-Ispali).

35 and 37) with these kings' Eliberri tremisses of "B/C" style (MAN 2008/115/40, 41, 55, cf. Figs. 34 and 36). Reccared's Ispali coins of the MAN collection have the fuller R of "B/C" (as also in no. 41 reverse, cf. Fig. 36); E with three detached punches for cross stems; awkward S; heavy left lean of letters starting around 5:00; irregular letter size and uneven positioning for a less neat appearance than the "Isp." hand.³⁹ The reverses of nos. 21 (Fig. 32) and 22 (see the table) are good examples of the tall, etched-in letters of "B/C," as well as the eyebrows flowing directly into the nose; the ends of the hair have the typical several small dots.⁴⁰



Fig. 32. Reccared – Ispali, MAN 2008.115.21 ("B/C")



Fig. 33. Gundemar – Ispali, MAN 2008.115.58 ("Isp.")

³⁹ E.g., Ispali specimens in *ibid.*, 340-41, pl. IV, E & F.

⁴⁰ Compare MAN 2008/115/40, 41 (Witteric – Eliberri) of the "B/C" engraver to MAN 2008/115/42-44 (Witteric – Ispali) assigned to the "Isp." engraver: Varying styles of the cross at the top of the legend are shared by both mints, and busts and letters often seem of the same style. In general, however, coins assigned to "B/C" such as Eliberri's have taller letters in which there is more etching between stems, contrasting with letters formed more from wedge punches with little or no etching between in the "Isp." attribution. The letter P of "B/C" is usually thin with a small attached loop, versus a wider P with detached loop; R has fuller loops and stems.



Fig. 34. Witteric-Eliberri, MAN 2008.115.40 ("B/C")



Fig. 35. Witteric-Ispali, MAN 2008.115.42 ("Isp.")



Fig. 36. Witteric-Eliberri, MAN 2008.115.41 ("B/C")



Fig. 37. Witteric-Ispali, MAN 2008.115.44 ("Isp.")

Ispali tremisses nos. 42 and 44, Figs. 35 and 37, assigned to "Isp." have a longer face as well as eyebrows separated from each other and from the nose; R is less fully formed and the diagonal stem usually lands slightly lower; A/V

have angled ending wedges, the horizontal stem of E bends backward a bit; C is slightly tilted and its ending wedges are not straight. Inclusion of a second cross at the end (11:00) standing for X may signify a separate worker, though this may just as easily be a control mark used by a single hand for a later or earlier issue. The obverse cross of nos. 40 & 41 of Eliberri ("B/C") in Figs. 34 and 36 is tilted and begins just left of center; a strong leftward lean and different look of P on reverse is typical of this style. On the whole the differentiation is subtle.

The likeness between the styles must have to do with the proximity of the artisans. By Witteric's reign at the latest, the engraving patterns of "B/C" show up far to the east of Ispali at Eliberri and soon Mentesa, where previously "Tol." was responsible for sinking dies; thus the different style discloses a shift of responsibility for this area to an artisan from the mint at Seville. Then under Sisebut this die sinker traveled to Acci, Barbi, and towards the southeastern coast at Iliocrici and Aorariola.⁴¹ The distant travel to these two new sites of minting near the Byzantine headquarters at Carthago Spartaria (Cartagena) is a unique contemporary witness to the beginnings of an assault not reaching its completion until the next reign. Under Suinthila (621-31), the "Isp." engraver was active at Acci and Mentesa (see the Path of the engraver laid out below). From the several engravers in evidence at Acci, Mentesa, and Tucci during Suinthila's reign, we can perceive a shifting of mint personnel during these decades toward the central-southern region of the kingdom when the war against Byzantine occupation was reaching its climax. As Acci, Mentesa, and Tucci each had three engravers active during Suinthila's reign, the reasonable conclusion points to that area as a zone with a special urgency for coinage.⁴² Coin evidence in conjunction with the contemporary narrative record implies that the surge in temporary minting correlates best to military expenditure, for both soldiers' salaries and supplies.⁴³ In the next reign the "Isp." engraver may have retreated – likely with a small minting team – from Acci and Mentesa, as the research to date has not revealed this style apart

⁴¹ It is possible new finds would alter this picture, but the contours should still remain intact.

⁴² Cordoba also had three engravers during this period. The "Cordoba hand" ("Cord.") had long represented the only style there, but in the reign of Suinthila the "Southern hand" ("So.") and "Isp." also appear.

⁴³ See Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 191-210; see also *ibid.*, 161-72 on how this could affect metallurgical standards. Other possible motives for such remarkable short-term emissions include the opening of taxation in recovered territory and the conversion of foreign currency.

from Tucci (a small proportion of its output) and Seville itself, in the five years Sisenand reigned (631-636), at which time the war had been concluded.

In the immediately following years (Chintila, r. 636-639) the “B/C” hand took over the engraving role of “Isp.” at Tucci in what can be viewed as a post-war consolidation (though “So.” continued making dies there for at least a short time, as revealed by a single surviving example, and “Isp.” was amply engaged at Cordoba and Ispali). Already the travels of “B/C” had been decreasing. His activity at Barbi distinguishes this artisan from others in the south in the climax of the war. Ispali is identified also as his place of origin.

Path of the “B/C” engraver	Path of the “Isp.” engraver
RECCARED: Ispali	RECCARED: Ispali
LIUVA II: Ispali	LIUVA II: Ispali
WITTERIC: Mentesa – Eliberri	WITTERIC: Ispali
GUNDEMAR: Mentesa – Eliberri	GUNDEMAR: Ispali
SISEBUT: Mentesa – Eliberri – Barbi – Acci – Iliocrici – Aorariola	SISEBUT: Ispali – Tucci?
SUINTHILA: Mentesa – Eliberri – Barbi	SUINTHILA: Ispali – Cordoba – Tucci – Mentesa – Acci – Asidona
SISENAND: Barbi	SISENAND: Ispali – Cordoba – Tucci – Asidona
CHINTILA: Tucci	CHINTILA: Ispali – Cordoba

While more comprehensive stylistic study will be useful, and absolute conclusions cannot be drawn from engraver movements, it fits the sum of the evidence to view Ispali’s second engraver as supporting the engagements of the army further east by adding mint personnel there. After Reccared’s and Liuva II’s reign, this “B/C” engraver never returned to Ispali, as the substantial surviving corpus implies. He enjoyed great longevity in the center of what is modern Andalucía.⁴⁴ Happenstance modern discoveries have brought us particularly close to his labors. The chance unearthing in 1891 of the giant “La Capilla” hoard and the find in the 1980s of a hoard of several thousand Visigothic gold pieces have rendered a high number of die links among Suinthila’s Barbi coins, which derives from the burial of the treasures

⁴⁴ So also regarding regional work in parallel, observations in the appended table that connect the “Isp.” hand to coins of Gundemar and more than a single example from Witteric fill a chronological gap that helps to reconfirm this as one of the prolific die-sinkers through decades.

nearby in that reign and the next (La Capilla during the rule of Sisenand, 631-636, and Fuentes de Andalucía during the rule of Suinthila, 621-631), before the coins struck at that mint had a chance to disperse more widely.⁴⁵ We do not find such a clustering of the hoard's coins attributable to the "Isp." engraver. Presumably a few years prior to burial a sizeable set of Barbi coins from dies by the "B/C" hand went into the hoards not long after issue.

The work of the "Southern hand" ("So.") only surfaces in the 620s, but this hand accounts for a good deal of coinage in at least five cities: Acci, Cordoba, Eliberri, Mentesa, and Tucci. He continued under Sisenand to have a central role in the minting at all of these towns, and at this time also cut dies at Castelona and far-away Ilici on the southeast coast, then in Chintila's reign produced dies at a host of mints including Barbi and Egabro. The erratic spelling (e.g., at Mentesa) and execution of bust are commensurate with a heavy workload. A reasonable deduction is that in this period of pressing need for coinage he emerged from Cordoba, from which he traveled eastward and maintained his essential work zone in the border area between eastern Baetica and lower Carthaginensis.

This third engraver that I suppose was an offshoot likely from Cordoba traveled amid numerous cities where final confrontation against Byzantium and the war's aftermath were occurring. A conjecturable itinerary can be laid out (underlined mint names denote emissions also from the "Isp." hand, italicized mint names from "B/C"):

Path of the "So." engraver

SUINTHILA: Cordoba – Tucci – Mentesa⁴⁶ – *Eliberri* – Acci

SISENAND: Cordoba – Castelona – Tucci – Mentesa – Eliberri – Acci – Ilici

CHINTILA: Cordoba – Tucci – Mentesa – Egabro – Barbi – Eliberri – Acci

TULGA: Cordoba – Beatia – Tucci – Barbi – Eliberri

⁴⁵ See Pliego, *La moneda visigoda*, v. 2, 234-41 on La Capilla; for Fuentes de Andalucía see Ruth Pliego, "Visigothic Currency: Recent Developments and Data for Its Study," in *Framing Power in Visigothic Society: Discourses, Devices, and Artifacts*, ed. Céline Martin and Eleonora Dell'Elicine (Amsterdam, 2020), 181-216. Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 354f lists nearly forty Suinthila-Barbi issues, noting die links.

⁴⁶ Easily observable is the erratic character of the inscriptions, including spelling, and the heavy use of marks. These traits continue during Sisenand, when the engraving of a cross sometimes replaces the monarch's face. See the photos above of examples of "So.," specifically the obverse of ANS 2016.29.80 in Fig. 5.

Although the attribution to Cordoba is made less certain by that mint's distinct bust styles and more pronounced letter forms (such as R), crosses substituting for faces at several of the "So." sites listed mimic the cross used in place of the cuirass sometimes at Cordoba. I sense a meshing of style elements and take the numerous similarities to denote a single craftsman. Other fusing of elements occurred. A surviving Sisenand–Tucci tremissis appears unmistakably as the vestige of two engravers' work. The obverse is from a die of "Isp.," whereas the reverse is from a die clearly from "So.," as discerned from bust sub-type, spelling, and execution of the letters.⁴⁷ Some Sisebut–Eliberri issues matching the "B/C" style enclose busts of Emerita type, otherwise absent in the south.

There is no doubting the considerable movement of the engravers in the southern zone, as well as adaptability. A further clue in this regard is the working of dies by the "Southern hand" for Sisenand at Iliocrici, when a decade or two earlier "B/C" performed the task there. One other point should not go without remarking. Iudila, a failed usurper during an early stage of Sisenand's rule, minted currency at Eliberri from dies by this "Southern hand."⁴⁸ It makes sense that a challenger would co-opt the local mint workers to produce his own currency. It would be the most obvious way to carry out minting. He also secured the services of the engraver at Emerita temporarily. The occurrences further attest to the cutting of dies locally, since it is hard to imagine a centralized or controlled regionalized engraving that would allow the making of an obverse with Iudila's name.

Multiple hands and mixing of hands noted at numerous southern mints is not a phenomena found almost anywhere apart from wartime. Elaboration of the currency production is what the coins reveal on this more intricate level of inspection that goes beyond the mere tallying of surviving coins, always fraught with the dangers of hoard bias or other coincidence which might not reflect the reality of the time accurately. Spans of intensified minting are when symbols or abbreviation marks could be apt as control marks. Three separate engravers show activity at Mentesa and Acci – "B/C," "Isp.," and "So.," from the 610s to the 630s. When we come to Suinthila's reign two separate engravers are in evidence at Tucci, Mentesa, and Acci – "Isp." and "So." At

⁴⁷ Pliego, *La moneda visigoda*, v. 2, 463.1 (p. 297). Ibid., pp. 296-97, series 462 through 465 of Sisenand–Tucci are mostly "Isp." designs, but the "So." hand was involved in 463-465. The spelling matches the latter engraver's custom, never the less the reverse epithet has IVSTVS used by "Isp." and not the usual PIVS of the "Southern engraver."

⁴⁸ Iudila also minted at Emerita, these coins apparently from the "Emerita hand." See Pliego, *La moneda visigoda*, v. 2, 303. The few extant coins may correspond to very sparse emissions.

Tucci the "Isp." hand used symbols (•• on obverse as substitute for A and between one and three stacked dots either as abbreviation or not; and ••• on reverse as abbreviation).⁴⁹ The fact that the same bust sub-type was used and the letter forms are similar at the three places renders these coins not easily distinguishable. This opens the possibility that the symbols may have served at least in part to distinguish the emissions of the different engravers in that city then, perhaps to keep track more easily of coins struck for distinct purposes. At Castelona the minting in Sisenand's reign entailed the labor of two engravers, "So." and another hand, possibly "Isp."⁵⁰ Some of the coins deriving from both die cutters contain symbols, primarily a dot or dots at the end of one of the inscriptions. This makes sense from an administrative perspective, during a period of relatively huge output in the central-southern area 100-200 km north of the coast, where Visigothic troops were at the height of a decades-long series of offensives to remove the Byzantine troops occupying an enclave stretching from their main base at Carthago Spartaria. Once more we can recognize a concerted effort at keeping order in a complex monetary and political environment.⁵¹ A coordinated, in some way centralized plan must lie behind the minting mechanics.

In the extreme south issues from Asidona during Suinthila's rule (621-631) come from the die cutter labeled "Isp.," also active at Ispali, Cordoba, Tucci, Mentesa, and Acci; the last three were also on the path of other minters in the same period⁵² (see mint-lists above). Asidona and Tucci emissions have similar use of dots as abbreviations. Dies assumably by this engraver for Sisenand (r. 631-636) continued to be made at least at Ispali, Asidona, and Tucci.⁵³ However, some question of the attribution remains because at Asidona the form of D is different, as is R (short, punched stem is positioned low, and the loop of P is detached), yet otherwise similar forms and the same neat look and bust-type provide a basis for the attribution. The changes in letter D occur at Asidona, but not at Tucci.

Suinthila-Barbi issues, all from the "B/C" hand,⁵⁴ sometimes had one or two dots but not as a letter substitute. In the next reign use of dots accelerated.

⁴⁹ See Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 340f, pl. IV, F and H.

⁵⁰ Pliego, *La moneda visigoda*, v. 2, 280f.

⁵¹ On easy identification for purposes of minting control see Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 105, 129f, 139 n. 409, 156, 183, 365.

⁵² Cf. *ibid.*, 340f, pl. IV, E & F.

⁵³ For known specimens and numerous photos see Pliego, *La moneda visigoda*, v. 2, 286 and 296f.

⁵⁴ Typical characteristics include: Obv. – left lean, small A, A/V stems meet before the horizontal-punch serif, D is backwards, R is formed as a tall, left-slanting A with small

Sisenand–Barbi tremisses often included two or three dots (sometimes ••), not usually as abbreviation, a fact that once again implies an addition with intended meaning. Given the variety this engraver employed in the same years at Barbi as well as Eliberri, there must have been a need to easily identify different issues as well as different mints. Limited literacy could have been a factor in this custom.

Other, lesser discoveries emerge through extant specimens from this very time. Yet another engraver was behind the coins issued at Malaka under Sisenand. Its style is close to the “B/C” hand but is unique. The engraving and the mint itself was only temporary, known only from this five-year reign.⁵⁵ One or two additional short-term mints in the southern quarter give the immediate impression of being *sui generis* in style. They require a closer look than has been afforded at this time.

V. Observations on engraving work in Gallaecia

The impressive itinerary of the “Toledo hand” (“Tol.”) that reached well into Gallaecia has been explored in a separate publication.⁵⁶ In that study the MAN collection permitted northwestern mints to be newly added to the “Tol.” attribution – Calapa with certainty, Senabria and Georres with less confidence but demonstrating at least a copying of the Toledan style. A small but possibly significant observation regards spelling variations from the norm: ✠WITTIRICVSRE (e.g., MAN 2008/115/48, Senabria), ✠SESEBVTVSRE (MAN 2008/115/141, Senabria), ✠SISIBVTVS*RE (MAN 2008/115/139, Georres).⁵⁷ Additionally, special marks were employed, such as: Witteric-Senabria (no. 48, an X at the end of rev.), Sisebut-Georres (no. 139, * on obv.), Sisebut-Semure (Fig. 23, MAN 2008/115/140, : in place of the final S on rev.), Sisebut-Calapa (Fig., 22, MAN 2008/115/138, •• on rev. between the two words), Sisebut-Emerita (an X at the end of rev.).⁵⁸ These could be privy marks or some

loop. Rev. – The cuirass slants downward on the left; P is wide and lightly attached, A is small.

⁵⁵ See Pliego, *La moneda visigoda*, v. 2, 296. The four coins bear resemblance to “So,” but not closely in the rendering of the face and the S. It is close to the “B/C” sub-type (but not face) and epigraphy (✠, use of large triangular wedges, A-N, D, R, but at Malaka the S is straight and neat).

⁵⁶ Kurt, “Forging a New Minting Apparatus”; see Figs. 24 and 25 above.

⁵⁷ See respectively Pliego, *La moneda visigoda*, v. 2, 147, no. 209.2; 203, no. 323.2; 199, no. 307.2.

⁵⁸ See respectively *ibid.*, 147, no. 209.2; 199, no. 307.2; 202, no. 321.1; 199, no. 303.1; 193, no. 286c.1.

other control devices like those that appear on roughly a third of the Visigothic gold currency.⁵⁹ Perhaps these served the same purpose of facilitating accounting that I suppose for marks used heavily in the south. A general point worth reiterating is that Gallaecian bust sub-types were sometimes that of "Tol." and in other cases were unique, reflecting a few different local engravers, perhaps goldsmiths. Some of these also were peripatetic, but in a much smaller circuit than "Tol." or the die-cutters in the south.

VI. Conclusions from the different numismatic vantage point

What prompted the activity of engravers through a course leading them to multiple cities? The answer at a simple level would be that their habits were in response to a need for coinage, whether that was driven by an authority above or was propelled by forces at a local level. The need might be for new coinage or for re-minting of pre-existing currency. And because frequently engravers were on the move between cities, we can say their function was intermittent. Perhaps die-engraving and stamping of new coins lasted just a few weeks or months in a single place, then a circuit was followed until at some point these sites were revisited. The timing would have to allow for periods of travel. What dictated this specific engraving, and presumably the entire minting cycle, is unrecorded. Some of the movement of the person or team responsible for emitting coins can be clearly associated with war zones.

If engraving and minting sometimes coincided with the collection of taxation, the question arises how that timing was determined. Areas may have established different dates for the gathering of taxes, given the limited availability of minters, or at least of engravers. If not, collected revenues in stamped coin or unstamped precious metal must have been kept for some time under guard until the engraver arrived. The old gold was melted down for new coin. One more clue of operations is the phenomenon already observed above, that dies apparently were not reused in later years even by the same engraver, as indicated by the complete absence of links across reigns in mint-places where the same stylistic peculiarities over a long span are quite

⁵⁹ A highly useful if necessarily limited study of marks was first offered in Peter Bartlett, Gonzalo Cores Uria and Maria Cruz Cores Gomendio, "The Use of Dots as Control Marks in the Coin Legends at the Visigothic Mint of Ispali During the Reign of Sisebut (612-21)," *XIII Congreso Internacional de Numismática* (Madrid: Ministerio de Cultura, 2003), 1127-33. Late Roman and Byzantine use of control marks, although in forms different from Visigothic, is a likely inspiration.

clear. There is no indication that dies circulated. No Visigothic dies are extant, as holds true throughout the early medieval centuries broadly, yet the number of dies made was very large. The natural conclusion would be that dies were regularly destroyed, perhaps immediately after a sole period of use. Research has shown the relatively short circulation of tremisses (10–20 years), corresponding to frequent re-minting and therefore rapid creation of dies.⁶⁰

It is well established in the scholarship that the minting of gold in the kingdom was not only a royal prerogative but was also centrally directed. This attestation is based on maintenance throughout the realm of denomination (tremissis), basic standards, general type (Facing Bust on both sides from late in Liuvigild's reign up to Recceswinth's), the fixed set of inscriptions.⁶¹ The present study can add to this in some way in exposing a system that at one level established the general mint operations in administrative capitals and major cities but at another level responded aptly to an extraordinary need for coin for many years in war zones with shifting, sometimes new, personnel. In the process the engraver of the *urbs regium* had a direct role, as witnessed in his movements in the southern and northwestern conflict areas. But his involvement appears to extend even beyond this. Resemblance between the "Tol." and "Emer." styles is noted above. Furthermore some of Emerita's emissions may have come from the "Toledo hand"; if so, he adapted to the local mint's bust form, possibly an identification aid. Emissions of "Toledo" and "Ispali" also have a likeness

⁶⁰ David Yoon, "Modelling the Lifetime in Circulation of Visigothic Gold Coins," in *Proceedings of the XVI International Numismatic Congress, 11–16.09.2022, Warsaw*, vol. 3: *Medieval Numismatics*, ed. Jarosław Bodzek, Aleksander Bursche, and Anna Zapolska (Turnhout: Brepols, 2025), 107–14; a version is also available as *ibid.*, "The Lifetime in Circulation of Visigothic Coins," *Pocket Change* (blog), *American Numismatic Society*, May 12, 2020, <https://numismatics.org/pocketchange/visigothic/>. Yoon utilizes hoard data to demonstrate a fairly short period of circulation, a fact commensurate with currency in the very early medieval period. Cf. Bartlett et al., "Use of Dots," where it is estimated for Ispali during Sisebut's reign that more than 20 dies per year were used. Pliego, "Visigothic Currency," 181 observes the rapid die turnover in the kingdom; see also *ibid.*, *Moneda visigoda*, v. 1, 191 on the contemporary melting down and recycling of the gold coins.

⁶¹ Royal control, albeit with localisms, is demonstrated in Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 76, 105, 156f, 231–45. See also Pliego, *La moneda visigoda*, v. 1 and Steinbach, *Imitation, Innovation und Imperialisierung*. In Kurt, "Forging a New Minting Apparatus" I explain that ongoing use of several bust designs from Reccared's day alone implies an organized framework of the developing minting system at a key stage of Hispania as it united under Visigothic rule.

suggesting at least a cross-influence.⁶² Who directed all the minting activity? A supervisor at the court had to have provided direction on the essentials, and possibly mint-places, even levels of production. There is reason to believe it was an official called the *comes thesaurorum*.⁶³ One more hint at central direction is the fact that mobile minting does not remain a constant in the long period of the “regal series.” In the vast reduction of mints during the coinage reforms completed during Recceswinth’s rule the itinerancy of engravers ceased, possibly to be taken up again later at a small number of peripheral mint-sites.⁶⁴

In sum, careful style examination allows us to put several important pieces together to form a clearer understanding of how coin production functioned.

1) The Visigothic monetary system utilized numerous engravers from the 580s to around 650, but not as many as the number of mints, which came to a little over 100 in total or a few dozens at any given time.

2) The itinerant character of engraving is detectable when style comparisons are made across the wide spectrum of mints and reigns. Taking into account variations in spelling on coins by the same engraver, and sometimes spelling errors, one is led to suspect engravers were illiterate.⁶⁵ This was likely true even of the Toletto die cutter.

3) In working backward from Visigothic coins known today, when traveling die cutters can be traced to a starting point it is to a major mint. Toledo was the origin of “Tol.,” Ispali the origin of “Isp.” and “B/C,” Cordoba the origin of “Cord.” and “So.”

4) Not only huge spikes in mint output but also the setting of engravers in motion can be associated with known zones of military confrontation. As

⁶² See Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 336-37, pl. II, G & H (Reccared-Toletto & -Ispali) and *ibid.*, 342-43, pl. V, 1324 & 1325 (Reccared-Toletto & -Ispali) and 1328 (Liuva II-Ispali).

⁶³ *Ibid.*, 55, 131-34, 155-57, 205, 233. When it comes to specific bust-types and legends, it is useful to keep in mind Philip Grierson’s observation: “[...] one suspects that despite the general “regal” appearance of the coinage [at peripheral mints] much really depends on local initiative.” Grierson and Blackburn, *Medieval European Coinage*, v. 1, 53.

⁶⁴ The question merits further study, though a superficial review indicates a different organizational model without mobile die cutters and whatever crew traveling with them. Scholarship has discerned in the same decades a turning point as taxes were less efficiently collected and some degree of a standing army including garrisons employed earlier all but disappeared, and recourse was made to private armies.

⁶⁵ Among many examples by which illiteracy is suspected, see the spelling variations in Reccared – Emino coins in Pliego, *La moneda visigoda*, v. 2, 111f, esp. no. 121.1, which is correctly rendered “RECCAREDAES” (see photo). See also Sisenand – Eliberri (MAN 2008.115.226) of the “Southern engraver” illustrated above in Fig. 6.

was the practice in late Roman minting, personnel were sent out from an established workshop. Evidence suggests the "Toleto hand" accompanied the king when he took part in campaigns.⁶⁶

5) The "Toleto hand" had some place in the direction of minting coming from the center. Apart from the direct activity of "Tol." at numerous mints, its stylistic influences hint at interactions, although the role of this engraver is hard to work out precisely. He should be regarded as an agent of centralization in some degree, even if that is not fully clear and his influence is not evident in the northeast of the kingdom, which appears to have had a separate development.

6) In the vast majority of the minting of the south and perhaps throughout the kingdom in the first half-century of the Facing Bust type, individual engravers used very few distinct sub-types. The dots often added between letters may have been used when engravers occasionally crossed over into a different sub-type, though this point is inconclusive at this stage of study. Assorted distinguishing symbols may be surmised to have assisted in easy identification and thereby careful administration of the currency.

7) Those involved in minting in the Visigothic realm never used the same obverse die in two or more places, and there is no known instance of a reverse die used for more than a single reign. The use of dies was often quite extensive but also brief, and the itinerant pace of die cutters was rapid enough to comprise several mints perhaps in few years, possibly even in a single year. The more the system of die working is explored, the more it instills a sense of the considerable volume of Visigothic gold of the regal series. Reminting and new die cutting go together, and both encourage the idea that contemporary output was greater than what the limited extant coinage suggests and what the preponderance of the scholarship has supposed. Many dies and huge production also reinforces the need for a foresighted mint administration that incorporated both regular mints and their crews as well as adaptability in setting up new places of emissions.

8) Future work may be able to draw a connection between cycles of both minting activity and taxation. This entails the query of how mints obtained gold.

Mint administration had an organizing principle combining an overall centralized direction and territorial responsibility revolving around provincial centers, but hinging operationally around the function of engravers. Once the sharp condensing of mints was carried out when Recceswinth took the throne, a different way of operating was put in place

⁶⁶ For further discussion see Kurt, "Forging a New Minting Apparatus."

that may have utilized itinerant engravers only very occasionally in later decades, when a few other mint-sites issued gold temporarily.



Index of Visigothic die engraver attributions

This study augments the numerous engraver attributions in Andrew Kurt, *Minting, State, and Economy in the Visigothic Kingdom: From Settlement in Aquitaine through the First Decade of the Muslim Conquest of Spain*, published by Amsterdam University Press in 2020. A complete explanation of the methodology of the stylistic analysis that comprises Appendix II of the book can be found in the early pages of that lengthy section.⁶⁷ Abbreviations, several plates of illustrations, and a substantial table detailing many engraving styles in the first half-century of “regal” Visigothic currency are furnished in that appendix.

The following set of symbols and abbreviations appear in the table:

- > = the reasons for an attribution to a particular engraver
- * = very similar; the resemblance suggests the work of a single engraver
- ** = extremely similar; the resemblance strongly indicates the work of a single engraver
- obv. = obverse
- rev. = reverse
- + = the cross at 12:00 on facing-busts tremisses
- pl. = plate
- incl. = including
- esp. = especially

Institutional and bibliographical references in the table:

ANS	American Numismatic Society (New York, NY)
Aureo	Auction catalogs of Aureo, S. A., under the title of <i>Subasta Numismática</i> .
BM	British Museum, coins as referenced in Pliego 2009.
Chaves	Rafael Chaves and María José Chaves, <i>Acuñaciones previsigodas y visigodas en Hispania, desde Honorio a Achila II</i>

⁶⁷ Kurt, *Minting, State, and Economy in the Visigothic Kingdom*, 329-33. The complete Appendix II is in 329-86.

- (Madrid, 1984).
- CNV** Jesús Vico Monteoliva, María Cruz Cores Gomendio, and Gonzalo Cores Uría, *Corpus Nummorum Visigothorum: ca. 575-714, Leovigildus-Achila* (Madrid: the authors, 2006).
- Ensaaios** Mário Gomes Marques, J. M. Peixoto Cabral, and J. Rodriguez Marinho, *Ensaaios sobre história monetária da monarquia visigoda* (Porto, 1995).
- GNC** J. Amorós and Antonia Mata Berruezo, *Catálogo de las monedas visigodas del Gabinete Numismático de Cataluña* (Barcelona, 1952).
- Heiss** Aloiss Heiss, *Description générale des monnaies de rois wisigoths d’Espagne* (Paris, 1872).
- HSA** Hispanic Society of America; until recent decades it owned most Visigothic and other coinage on loan at ANS.
- IVDJ** Instituto de Valencia de Don Juan (Madrid), coins as referenced in Pliego 2009.
- Kurt 2020** Andrew Kurt, *Minting, State, and Economy in the Visigothic Kingdom: From Settlement in Aquitaine through the First Decade of the Muslim Conquest of Spain*. Amsterdam: Amsterdam University Press, 2020.
- Leu Photos** Photos of four hundred Visigothic tremisses obtained by Bank Leu (now Leu Numismatik) in the 1980s, the originals of which were given to the ANS and carefully consulted by the author in the 1990s.
- M.** George C. Miles, *The Coinage of the Visigoths of Spain: Leovigild to Achila II* (New York, NY, 1952). It contains thirty-eight plates of black-and-white photos of coins from the American Numismatic Society’s collection. For each coin there is a corresponding catalog number; plate numbers in the table are from Miles where ‘M.’ is referenced.
- Madrid 1936** Felipe Mateu y Llopis, *Catálogo de las monedas previsigodas y visigodas del Gabinete Numismático del Museo Arqueológico Nacional* (Madrid, 1936).
- MAN** Museo Arqueológico Nacional, Madrid.
- MEC** Philip Grierson and Michael Blackburn, *Medieval European Coinage* (vol. I: *The Early Middle Ages [5th-10th centuries]*) (London, 1986).
- NAC** *Numismatica Ars Classica* (London-Zurich-Milan), coins as referenced in Pliego 2009.
- Pliego 2009** Ruth Pliego Vázquez, *La moneda visigoda*, vol. 2 (Seville,

2009). Includes photos from many private collections cited in the table by name and item number followed by Pliego's catalog number.

SB 42

Swiss Bank Corporation, *Gold- und Silbermünzen: Auktion 42* (Basel, 21-23 January 1997). Visigothic tremisses: 2548 to 2709.

'SOUTHERN ENGRAVER' ('So.')

King	Mint	Coin	Reasons for attribution of obverse	Additional comments about style of reverse
Suinthila	Acci	M. 218(a) / ANS 2015.48.138 = HSA 16236 (pl. XI.4); in Kurt 2020, 340f, pl. IV (G).	Prototype.	
"	Acci	MAN 2008/115/210		
"	Acci	MAN 2008/115/211		
"	Cordoba	SB 42, no. 2630		
"	Elberri	M. 227(b) / ANS 2015.48.194 = HSA 16239 (pl. XIII.2)	Prototype. See ANS 2015.48.231 (Suinthila-Tucci).	
"	Mentesa	M. 219(b) / ANS 2015.48.147 = HSA 16213	(Mentesa coins listed here) > Bust **; letters **, esp. A/V (angled wedges), T, L, R, E, P-I-V-S.	
"	Tucci	M. 229(a) / ANS 2015.48.230 = HSA 16230 (pl. XIV.12); this coin with photo is Pliego 2009, 387a.1. In Kurt 2020, 340f, pl. IV (H).	All Pliego 2009, 387 and 388 series with photos are of 'So.' Spelling is somewhat erratic; king's name is usually without H.	
"	Tucci	M. 229(g) / ANS 2015.48.231 = HSA 16290 (pl. XV.4)	Prototype. Note the formation of cross and letters almost solely by the use of triangle wedges, the left lean of letters, the top-heavy initial S, the dot or triangle horizontal stem of L, the distinctive R, the use of small punches for all parts of the face, the forked cuirass.	
Sisenand	Acci	M. 257(b) / ANS 2016.29.64 = HSA 16300 = Pliego 2009, 279, 438a.1 See many examples in Pliego, v.2, 279f	All aspects **	All aspects **
"	Acci	GNC, pl. VIII.92 & pl. IX.93	As with all the coins listed on this page, these Sisenand tremisses are distinct from 'lsp.' coins > cf. top-heavy S, lack of neat execution, minimal D, less neat R (more a separated right wedge, with no connector drawn to main stem; detached loop).	

"	Castelona	M. 258(b) = Pliego 2009, 281, 441d.2	All aspects **	All aspects **
"	Castelona	M. 258(f) / ANS 2016.29.72 = HSA 16305 (pl. XVII.9)	Cf. ANS 2016.29.116 (Sisenand-Tucci) > All aspects **, esp. bust, letters S and R.	
"	Castelona	GNC, pl. IX.96 (probably 97 also)		
"	Eliberri	(Ex Pinto, private coll.) = Pliego 2009, 291, 457b.1 <i>See many examples in Pliego, v.2, 291f</i>	All aspects **	All aspects **
"	Eliberri	M. 268(c) / ANS 2013.40.34 = HSA 16318 (pl. XIX.13)	Probably 'Southern engraver' > Bust **: + **: letters, esp. S, R, E (wide wedges for stem, tiny wedges to the right).	
"	Eliberri	GNC, pl. IX.102, 103		
"	Eliberri	MAN 2008/115/226		
"	Illocrici	SB 42, 2658 = Pliego 2009, 282, 442.1	Cf. esp. ANS 2016.29.116 (Sisenand-Tucci) > All aspects **, esp. S-I-S, S-R.	All aspects **
"	Mentesa	CNV 353.2 = Pliego 2009, 283, 445c.2 <i>See many examples in Pliego, v.2, 282-84</i>	All aspects **	All aspects **
"	Mentesa	M. 262(b) / ANS 2016.29.80 = HSA 16378 (pl. XVIII.2)		
"	Mentesa	MEC, no. 246		
"	Tucci	M. 271(i) / ANS 2016.29.116 = HSA 16400 = Pliego 2009, 298, 465.1	Prototype. Mint spelled with on Cas at Acci, e.g., Pliego 2009, 279f	All aspects **
Iudila	Eliberri	M. 278 = Pliego 2009, 303, 471.1	All aspects **	All aspects **
Chintila	Acci	M. 283(a) / ANS 2016.29.121 = HSA 16455 = Pliego 2009, 306, 476b.1	All aspects **, incl. large wedges, lopsided S	All aspects **
"	Acci	M. 283(b) (pl. XXII.13)	Obverse probably by this engraver > Bust **: + **: letters **, though backwards here.	All aspects **, esp. bust, letter S.
"	Barbi	Chaves 1992, 51 = Pliego 2009, 309, 485.1	All aspects **	All aspects **
"	Egabro	M. 292(c)	All aspects **	All aspects **, except face has cross in middle (as at Mentesa)

"	Eliberri	Christie's 62 = Pliego 2009, 310, 491a.2	All aspects **	All aspects **
"	Eliberri	M. 290 / HSA 16457 (pl. XXII.16)	Probably the 'Southern engraver' > All aspects * or **, though less neat here.	
"	Eliberri	MEC, no. 248	All aspects **	All aspects **, except face
"	Mentesa	CNV 375.2 = Pliego 2009, 307, 481.1		has cross in middle (as at Egabro). Note: cross instead of cuirass at Cordoba, Pliego 2009, 310, 488.1
"	Tucci	M. 292(b) = Pliego 2009, 312, 494.1	All aspects *	All aspects *
Tulga	Barbi	M. 305(b) = Pliego 2009, 319, 513b.1	Probably the 'Southern engraver' > All aspects* except bust is smaller, face thinner	Same as obv.
"	Beatia	M. 303 = Pliego 2009, 318, 511b.1	All aspects *	All aspects *
"	Cordoba	See many examples in Pliego, v.2, 320f.	Probably the 'Southern engraver' > face and most letters *, but bust sub-type is unique and R is fuller and neater	
"	Eliberri	CNV 393 = Pliego 2009, 322, 516a.1	Bust **: backward lean of letters, A (slanted wedges), R, E (faint horizontal stems)	Face, except has cross in middle (as at Egabro, Mentesa); bust is Cordoban type.
"	Tucci	Ruth Pliego, 'Visigothic Currency: Recent Developments and Data for its Study' in <i>Framing Power in Visigothic Society</i> , ed. E. Dell'Elicine and C. Martin (Amsterdam, 2020), 192, pl. 18.	Bust: face *: letters * (mostly of thick wedges), L without horizontal stem (an infrequent trait of this hand), R.	Bust: face *: fuller C than 'B/C' hand.

'ISPALI ENGRAVER' ('Isp.')

King	Mint	Coin	Reasons for attribution of obverse	Additional comments about style of reverse
Reccared	Ispali	M. 86(a) / ANS 2015.48.48 = HSA 16509 (pl. V.18); in Kurt 2020, 336f, pl. II (H)	Busts** have the typical long, thin face of this engraver. Drawn-in letters use wide and neat wedges. E (with arched back) and S are thin.	
"	Ispali	NAC 25, 662 = Pliego 2009, 105b.11 Note: See Kurt 2020, 336f, pl. II: 'Isp.' 'Tol.' have subtle differences.	Cf. Pliego 2009, 98a.16 (Reccared-Toledo) > Face*, letter forms * esp. R, A, D.	
"	Ispali	CNV 69.2 (b/2) = Pliego 2009, 105c.2	Cf. Pliego 2009, 98a.18 (Reccared-Toledo) > all aspects *, A and D **.	
Liuvia II	Ispali	Aureo, 16-17 Dec. 1997; in Kurt 2020, 342f, pl. V, 1328		
Witteric	Ispali	Aureo, 16-17 Dec. 1997; in Kurt 2020, 342f, pl. V, 1331		
"	Ispali	MAN 2008/115/42	N.b.: In these specific series from Ispali, S is often backwards (but not 60, 61), yet the same letter forms are employed, incl. frequent wide V (rev.) and distinctive G, D (faint loop). E, R. In the face the eyebrows are separate rather than continuing into the nose as in 'B/C' hand.	N.b. backward left lean of letters as on Eliberri coins ('B/C' hand).
"	Ispali	MAN 2008/115/43		Cf. ibid., pl. IV(D) of 'B/C' hand > * Letters esp. P.
"	Ispali	MAN 2008/115/44		Cf. 40 (Eliberri, 'B/C' hand) and 42 above (Ispali) > Bust; +*, P, L*.
Gundemar	Ispali	MAN 2008/115/56	Cf. nos. 40, 41 & 55 above (Eliberri) – 'B/C' engraver > Bust*; mostly similar letters, esp. E*, but not R.	Similar backward lean of letters. R and S differ (backwards on no. 56 obv.).
"	Ispali	MAN 2008/115/57		
"	Ispali	MAN 2008/115/58	Cf. Kurt 2020, 340f, pl. IV (E & F) (Suintila-Ispali & -Tucchi, attributed to 'Ispali' engraver) > Letter forms* (more drawn between wedges), A/V** but R more like 'So.' hand in ibid., G & H (Acci and Tucchi), as is the bust.	Cf. pl. IV(E & F) > Letters similar to this 'Isp.' style, but bust closer to G & H of 'So.' style.

"	Ispali	MAN 2008/115/59	series continued from above	Cf. nos. 58-60 with no. 55 (Eliberri, 'B/C' engraver) > Bust*, but minute differences; +** but letter forms differ, esp. P, L.	
"	Ispali	MAN 2008/115/60			
"	Ispali	MAN 2008/115/61		Bust is closest to other Ispali coins here, but similar also to MAN 2008/115/55 of Eliberri ('B/C' engraver); letters are * or **, esp. G (with tongue stroke), S, E. Cf. Pliego 2009, 334.1, 2 below (Sisebut-Ispali)**	
Reccared II	Acci	(Cores, private coll., Madrid) = Pliego 2009, 330a.1			
"	Ispali	(Cores, private coll., Madrid) = Pliego 2009, 334.1			
Sisebut	Ispali	(Cores, private coll., Madrid) = Pliego 2009, 274f.1		This and the Reccared II specimens share the typical characteristics of this hand, incl. the S-R sequence with S slightly larger and hanging low.	Note the heavy use of dots, presumably mint marks or distinctive accounting marks.
"	Ispali	(Lázaro, private coll.) = Pliego 2009, 184, 276d.5		All aspects **	All aspects **
"	Tucci	See many examples in Pliego, v.2, 178-86 CNV 220 = Pliego 2009, 186, 279.4		Probably 'isp.' (cf. Pliego 276d.5) > all aspects ** except R (more attached diagonal stem), hair ending in triangle	Same
Suinthila	Acci	(FAJO, private coll., Seville) = Pliego 2009, 347a.1; see also 347b.1, 347c.1-3, 347d.1, 347f.1		The vast majority of Suinthila-Acci coins are of 'So.', but these demonstrate characteristics of 'isp.' described below and under 'So.' above.	
"	Acci	MAN 2008.115.209			
"	Asidona	(Cores, private coll., Madrid) = Pliego 2009, 365a.2		Cf. Pliego 2009, 381a.56 (Suinthila-Ispali) > all aspects * or **, incl. wide eyebrows.	
"	Asidona	(FAJO, private coll., Seville) = Pliego 2009, 365a.10			
"	Cordoba	M. 226(a) / ANS 2015.48.181 = HSA 16155 (pl. XII.10)			
"	Ispali	M. 228(a) / ANS 2016.29.49 = HSA 16218 (pl. XIV.3)		Prototype.	
"	Ispali	M. 228(a) / ANS 2013.40.10 = HSA 16227		Cf. ANS 2016.29.49 (Suinthila-Ispali) > Bust *; + *; letters (esp. R, T, not formed only by wedges as with the 'southern engraver') and spacing.	

"	Ispali	M. 228(a) / ANS 2015.48.214 = HSA 16245	Prototype.		
"	Mentesa	M. 219(a) / ANS 2015.48.142 = HSA 8100 (pl. XI.7)	Cf. ANS 2015.48.224 (Suinthila-Tucci)	Cf. ANS 2015.48.224	
"	Tucci	M. 229(c) / ANS 2015.48.224 = HSA 16256	Cf. esp. ANS 2015.48.142 (Suinthila-Mentesa) > All aspects **, incl. letter height (3.6mm), band width (17.5mm), large flan size; same letter forms, esp. peculiar L followed by . . Cf. ANS 2015.48.181 (Suinthila-Cordoba)** > Bust * (on all 3 coins the hair ends even with the chin, formed in a wedge shape - Ispali coins have a dot instead; cuirass: form *, bottom has connected dots); see letter forms and position of S-V, N-T-H-I, R-E; L with dots, omits final A of Suinthila; + y wedges connected by thin lines in the center.	Cf. esp. ANS 2015.48.142 rev. > Bust** ; + *; size, spacing and form of letters, esp. T. Cf. ANS 2015.48.181 rev. > See esp. size, spacing and form of P-I-V-S.	
"	Tucci	MAN 2008.115.202			
"	Tucci	MAN 2008.115.203			
Sisenand	Asidona	Bode Museum, Berlin = Pliego 2009, 286, 451b.2	Cf. esp. Pliego 2009, 459m.1 and 460b.3 (Sisenand-Ispali) > Bust **; letters, esp. awkward S-R sequence with S larger	P-I-V-S very similar to these Ispali coins and those in the series.	
"	Cordoba	M. 267(k) = Pliego 2009, 289, 455e.1 See many examples in Pliego, v.2, 288-90	Bust ** (incl. slightly curved line below cuirass), face **: letters* incl. backward lean, S-I-S-E-N* (some backwards S as at Ispali), R (less detached than 'So.'). A/V	A *, P-I-V-S *. Note variations of R, D at Cordoba.	
"	Ispali	M. 269(g) / ANS 2015.48.299 = HSA 16428	Cf. esp. ANS 2015.48.214 (Suinthila-Ispali) > Bust *; + **: esp. letters S, N, V, R-E. Also cf. ANS 2015.48.208 (in Kurt 2020, App II, pl. IV).	Bust *; + *; all letter forms **	
"	Tucci	M. 271(h) / ANS 2016.29.114 = HSA 16402 = Pliego 2009, 297, 462h.1 See many examples in Pliego, v.2, 296f	All aspects **	All aspects **	

Chintila	Cordoba	M. 288 / ANS 2016.29.122 = Pliego 2009, 309, 487d.1 See many examples in <i>Pliego</i> , v.2, 309f.	Probably the 'Southern engraver' > All aspects *, except Cordoba sub-types differ from usual 'So.' types, and R is fuller and neater	All aspects *
"	Cordoba	CNV 365 = Pliego 2009, 309, 486b.1 See many examples in <i>Pliego</i> , v.2, 309f	Cf. Ex Pinto 74 and LBZ (14-10-1986) 46 (both Ispali) > All aspects * or **	All aspects * or **
"	Ispali	Ex Pinto 74 = Pliego 2009, 311, 492b.4		
"	Ispali	LBZ (14-10-1986) 46 = Pliego 2009, 311, 492c.2		

'BAETICA / CARTHAGINENSIS ENGRAVER' ('B/C')

King	Mint	Coin	Reasons for attribution of obverse	Additional comments about style of reverse
Reccared	Ispali	MAN 2008/115/20	Cf. Kurt 2020, 340f, pl. IV (D) (Sisebut-Eliberri) > +, bust *. R-E (bis). Cf. also BM 1849 in Kurt 2020, 353 (Witteric-Eliberri) > Bust, face. R-E-X *. Reverse > P-I-V-S*, second S, L *.	Bust *; position of P-I-V-S * (esp. S).
"	Ispali	MAN 2008/115/21	Cf. Kurt 2020, 340f, pl. IV (D) (Sisebut-Eliberri) > +*, V-S-R-E*.	Bust*; P-I-V-S*.
"	Ispali	MAN 2008/115/22	Cf. Kurt 2020, 340f, pl. IV (D) (Sisebut-Eliberri)	
"	Ispali	MAN 2008/115/23		
"	Ispali	MAN 2008/115/24		
"	Ispali	MAN 2008/115/25		
Liuva II	Ispali	MAN 2008/115/35	Cf. Kurt 2020, 340f, pl. IV (D) (Sisebut-Eliberri) > +, face *, letters esp. A/V, heavy look of wedges.	Cf. same > Bust *; all letters, esp. **P-I-V-S-I.

Witteric	Eliberri	M. 139(a) (pl. VII.11) = BM 1849, 0620.11, or 18A	Bust **: + **: letters ** (very tall, thin; typical leftward lean of 'B/C'), R (fully formed and as prototypes). Cf. coins of Mentesa (this coin = Pliego 2009, 198a.1 close to Witteric-Mentesa tremisses in ibid., esp. 183e.1).	
"	Eliberri	MAN 2008/115/40 N.b. Flans and letters of Eliberri tremisses are larger than at most mints. Spelling as Wittericus is common throughout kingdom.	Cf. Kurt 2020, 340f, pl. IV (D) (Sisebut-Eliberri) > **: All aspects incl. + (positioned just left of center at top of legend), thin face, V-S-R-E.	Cf. same > **: All aspects esp. P (small loop), L, R (leaning backward), B-E-R-R-I.
"	Eliberri	MAN 2008/115/41		
"	Mentesa	Yndias 1263 = Pliego 2009, 183e.1	Same as above.	
Gundemar	Eliberri	MAN 2008/115/55	Cf. MAN 2008/115/40, 41 (Witteric-Eliberri) > Bust **: + **: letter forms & positions * or **, esp. A-R-V-S-R-E. Cf. Kurt 2020, 340f, pl. IV (C & D) (Sisebut-Eliberri) > Bust **: + **: letter forms *.	Cf. nos. 40, 41 > Many similar features among these three coins. Cf. pl. IV(C & D) > Bust **: most letter forms **, esp. pl. IV(D).
"	Mentesa	MAN 2008/115/62	Cf. Kurt 2020, 340f, pl. IV (C & D) (Sisebut-Eliberri) > Bust*: backward lean of letters, lines drawn between wedges; S* (thin, awkward), R (like an A with loop scratched in). Shares tall letters of this engraver. Cf. no. 55 (Eliberri) above > eyebrows flow into nose; tall letters, similar form; G tongue stroke (as also no. 61 of Ispali, however).	Cf. no. 55 above > all aspects ** incl. heavy left lean of letters; P with closed, neat loop.
Sisebut	Acci	(Bartlett 54, private coll., Costa Rica) = Pliego 2009, 257c.5	Same as above.	

"	"	CNV 222 = Pliego 2009, 258.1	Cf. This coin and CNV 223 & 224 > Bust incl. face and hair*; +*; left lean of letters; S (variants, straight top). R esp. its angle and how bottom wedge meets next letter. Typical of 'B/C': letter sizes vary, E (awkward wedges), B (thin loops), T-V-S-R-E, A & V (wides wedges top & bottom), S hanging lower than neighboring letters.	
"	Aorariola	CNV 223 = Pliego 2009, 167, 259.1	Cf. CNV 222	
"	Barbi	(Bartlett 67, private coll., Costa Rica) = Pliego 2009, 269d.1	Same as above.	
"	Barbi	Ensaïos, pl. IV.72	Bust **; +* (see ANS 2015.48.109 rev.); all letter forms **.	All aspects **, esp. P-I-V-S, R.
"	Eliberri	M. 186(a) / ANS 2015.48.109 = HSA 16106 (pl. IX.8); in Kurt 2020, 340f, pl. IV (C)	Prototype. Note distinctive R of this hand, a slanted, complete A with a small wedge on top right. Busts of this hand possibly copied bust style of 'So.'	
"	Iliocrici	CNV 224 = Pliego 2009, 167, 260.1		
"	Mentesa	M. 181(a) / see Heiss, no. 8 (pl. IX.4)	Cf. ANS 2015.48.109 (Sisebut-Eliberri) > Bust*; +*; letter forms and position, esp. S-1-S, B-V, S-R; E's horizontal wedges go well beyond vertical stem, unlike Ispali coins on same pl.	Cf. ANS 2015.48.109 > Cuirass*; +*; most letter forms, esp. P (see also 2015.48.109 obv. T).
Suinthila	Barbi	M. 224(a) / ANS 2015.48.162 = HSA 16143 (pl. XII.4)	Prototype. Note the use of wide, thin wedges for the letters, while the stems rely less on wedges and more on engraved lines than those of other engravers. Cf. ANS 2015.48.109 (Sisebut-Eliberri) > Bust*; +* (cf. ANS 2015.48.109 rev.);	Cf. ANS 2015.48.109 > All aspects **, esp. letters B, R, I (very short).

"	Barbi	(Estrada, private coll.) = Pliego 2009, 366i.9. See many examples in <i>Pliego</i> , v. 2, 230-34	letter forms, esp. R, E, A/V, B (wedges unattached to stem); same severe left lean of letters.	All aspects **	All aspects **
"	Eliberri	(Corés, private coll.) = Pliego 2009, 240, 374f.1 All examples in photos in <i>Pliego</i> , v. 2, 240-41 are 'B/C'	All aspects **	All aspects **	All aspects **
"	Mentesa	Aureo (27-4-2000) 1192 = Pliego 2009, 350h.1 See many examples in <i>Pliego</i> , v. 2, 220-22 (series 350)	All aspects * or **	All aspects * or **	All aspects * or **
Sisenand	Barbi	M. 266(e) / ANS 2016.29.86 = HSA 16302 = Pliego 2009, 453d.1 See many examples in <i>Pliego</i> , v. 2, 286-87	All aspects **	All aspects **	All aspects **
Chintila	Tucci	CNV 371 = Pliego 2009, 312, 493.2	> Bust*, face ** (esp. brow); A (wide serif), R		

'TOLETO ENGRAVER' ('Tol.')

King	Mint	Coin	Reasons for attribution of obverse	Additional comments about style of reverse
Leovigild	Elvora	M. 37(a) / ANS 2015.48.17 = HSA 16010	Prototype	
"	Elvora	M. 37(a) / ANS 2016.29.16 = HSA 15984 (pl. III.5); in Kurt 2020, 336f, pl. II (F)		
"	Reccopolis	M. 23(a) / ANS 2016.29.7 = HSA 16006 (Profile/COS) (pl. II.9); in Kurt 2020, 336f, pl. II (A)	Cf. ANS 2015.48.6 (Toledo Profile/COS) > All aspects**, esp. letters L, S, R (but not B).	
"	Toledo	M. 29(c) / ANS 2015.48.10 = HSA 15995 (pl. II.14)	All aspects**.	
"	Toledo	M. 29(a) / ANS 2015.48.11 = HSA 15996 (pl. II.12)	All aspects**, but letters slightly larger here.	
Reccared	<u>Central</u> <u>Carthaginensis</u> Elvora	M. 90(a) / ANS 2015.48.53 = HSA 16022	All aspects**, but letters slightly larger here.	
"	Elvora	M. 90(c) / ANS 2015.48.56 = HSA 16025 (pl. VI.4)	Cf. ANS 2015.48.70 (Reccared-Emerita) > Bust (face)*; legend**.	Cf. ANS 2015.48.70 > Letters A, 1-V-S, R, E (tail)**.
"	Elvora	Ensaios, pl. I.15	Cf. Ensaios, pl. I.9 (Reccared-Toledo) & 1.20 (Reccared-Emerita) > Bust*; legend**.	Cf. Ensaios, pl. I.9 & I.20 > Bust (cuirass)*; letters T, E, L.
"	Toledo	M. 81(c) / ANS 2015.48.38 = HSA 16060, now ANS 2015.48.38	Prototype	
"	Toledo	M. 81(a) / ANS 2015.48.29 = HSA 16055 (pl. V.6)	N.b.: Close to Tude triens below (ANS 2016.29.36)*.	
"	Toledo	MAN 1971/18/8	Cf. Kurt 2020, 338f, pl. III (33) (Liuvia II-Toledo) > + (middle line angled), bust, hair (longer on right).	+ (lopsided); T-O-L-E-T-O* (wide T, small O, long L).
"	Toledo	MAN 2008/115/26	Cf. Kurt 2020, 356 – prototype (Leovigild-Elvora) > all letters incl. positions**, esp. C-A-R-E-D-V-S, X (backward slant). N.B. neat compass mark.	All aspects*, incl. exact position of cuirass.

"	Toledo	MAN 2008/115/27	All aspects **.	All aspects **.
"	Toledo	MAN 2008/115/28	N.B. neat compass mark.	
"	<u>Gallaecia</u> Bergancia	M. 103(a) / see Heiss, no. 4 (pl. VI.18) = Pliego 2009, 130.1	<i>Influenced by 'Tol.' hand but different engraver? > head, several letters *, incl. R (note two different forms), D (also formed in two ways), A (3 wedges), S (thin and larger than other letters; set apart and sometimes horizontal). Same hand as at Senabria and Susarres (cf. Pliego 2009, 147.1 & 148.1) > all aspects * or **</i>	
"	Bracara	(Orol, private coll., Madrid) = Pliego 2009, 132a.1	Cf. Pliego 2009, 98a.18, 98b.11 > all aspects * or ** except spelling (Reccaridus); however, Reccaredus was also inscribed at Braga.	
"	Calapa	CM.PG.11250-2006 (Fitzwilliam Museum) = CNV 80 = Pliego 2009, 134.1	Cf. Pliego 2009, 98b.77 (Toledo) > all aspects *	All aspects *
"	Conteno	M. 88 (pl. VI.1) = Pliego 2009, 136b.1	Cf. ANS 2015.48.56 (Reccared-Elvora) > Bust*; + **, all aspects of epigraphy **. Cf. Pliego 2009, 98b.58 (Toledo) > all aspects **	Cf. ANS 2015.48.56 > Letters T, S (large). Cf. Pliego 2009, 98b.58 > all aspects **
"	Mertia	(Alba, private coll., France) = Pliego 2009, 141.1	<i>Probably by 'Tol.' engraver. All aspects * or **, incl. face, although cuirass diverges in type on both sides (obv. is close to Emerita type and appears on a Tude coin) and diagonal stem of R touches baseline. Style of M is that on Eminio coins of 'Tol.' hand. Same hand as at Palantucio (cf. Pliego 2009, 142.1).</i>	Letters on rev. are larger here.
"	Palantucio	(private coll.) = Pliego 2009, 142.1	<i>Probably by 'Tol.' engraver. All aspects *, except face and cuirass seem adapted – but similar to a rare sub-type of Toledo (cf. Pliego 2009, 98e.1) associated with</i>	

"			Cordoba. <i>Same hand as at Mertia (cf. Pliego 2009, 141.1).</i> All aspects **	
"	Portocale	(Costa, private coll., Portugal) = Pliego 2009, 146a.1; also 146b.1, 146c.1,2		
"	Portocale	Ensaïos, pl. II.32; in Kurt 2020, 338f, pl. III (32).	Cf. Ensaïos, pl. II.33 (Liuva II-Toleto) > Letters *, esp. A, R, E, P.2 Cf. Ensaïos, pl. II.31 (Eminio) > +*; letters *, esp. D-V-S (S on this coin is larger).	Cf. Ensaïos, pl. II.33 > O and L are both small but positioned high, P-I-V-S*. Cf. Ensaïos, pl. II.31 > letters*; P-I-V-S**.
*	Senabria ('Victor' on rev.)	MAN 2008/115/29 (= P.147.1, p. 118)	<i>Influenced by 'Tol.' hand but different engraver?</i> Almost all aspects **, esp. + (backward slant), letters R-E, D. But not Δ, V (bottom of punches are at an angle), S (irregular, but not same tilt), R (perpendicular small stem). N.B. possible trace of compass mark above bust, as seen on many Toleto coins. <i>Same engraver as at Bergancia and Susarres (cf. Pliego 2009, 130.1 & 148.1) > all aspects **, except spelling and form of D at Susarres).</i>	T-O-R* (high, small O but less well formed)
"	Sussarres / Susarros	M. 101 / ANS 2016.29.35 = HSA 16061 (pl. VI.16) = Pliego 2009, 148.1	<i>Probably 'Tol.' engraver. Cf. Pliego 2009, 98 b.77 (Reccared-Toleto) > All aspects * or ** except spelling and D. Cf. Ensaïos, pl. 1.9 (Reccared-Toleto) * > Bust, letters. Cf. M. 103(a) (Reccared-Bergancia) ** > See busts, + (both coins omit reverse +), letter S.</i>	Cf. Ensaïos, pl. I.9 > Bust **
"	Tude	M. 113 / ANS 2016.29.36 = HSA 16062 (pl. VI.19) = Pliego 2009,	Several letters * > R (note two different forms), D (also formed in two ways), A (3	

		151.1	wedges), S (thin and larger than other letters; set apart and sometimes horizontal). Cf. Toileto trientes above. Cf. Pliego 2009, 98b.77 (Toileto) > all aspects * but bust type slightly different.	
"	Tude	M. 114 = Pliego 2009, 151.2	Cf. Pliego 2009, 98b.77 & other Toileto exemplars > all aspects ** but bust is <i>Emeritan</i> type.	
"	Vallesalsa	CNV 98 = Pliego 2009, 153.1	Cf. Pliego 2009, 98b.58 (Reccared-Toileto) & 43d.1 (Leovigild-Toileto) > all aspects * or **.	
"	<u>Lusitania</u> . Egitania	Madrid 1936, p. 358 (= Heiss, no. 10)	Cf. Ensaios, pl. II.28 (Reccared-Emerita) > Bust**, +**, all aspects of epigraphy *.	Cf. Ensaios, pl. II.28 > All aspects of epigraphy *.
"	Egitania	M. 89 = Pliego 2009, 111a.1	Cf. = Pliego 2009, 98b.77 (Reccared-Toileto) > Letters*; small differences in bust, but similar.	Typical unevenness of letter size and backward lean of 'Tol.' hand. P**.
"	Emerita	M. 93(b) (pl. VI.8) M. 94(d) (1/3) / ANS 2015.48.70 = HSA 16035 (pl. VI.13) N.b., Only Reccared coins in 'Emerita Plus' (rev.) series, not 'Emerita Victor' (rev.) series, are attributed to 'Tol.'; see modification in R (diagonal stem) and D (detached loop).	Some letters * > R (in two different forms, one of them the style found on most Toileto coins), D (loop very small or detached on Emerita coins), A, S. Cf. ANS 2015.48.70 (Emerita) & 2015.48.32, 2015.48.34 (Toileto) > All letters**, face*, but <i>Emeritan</i> sub-type.	P (detached loop), S (sideways)
"	Emerita	Ensaios, pl. II.28	Cf. SB 42, no. 2561 & M. pl. V.6, 7 (all Reccared-Toileto) > All aspects * except bust.	
"	Eminio	Ensaios, pl. II.30	Numerous letters * > R, E, A, D, D-V-S	Slanted S as in 'Tol.'
"	Eminio	Ensaios, pl. II.31 = Pliego 2009, 119.4; in Kurt 2020, 338f, pl. III (31)	See above.	
"	Eminio	M. 95(a) = Pliego 2009, 118.1	Cf. Pliego 2009, 98a.16 etc. (Reccared-Toileto) > face **, but different bust type; letters * or **.	

"	Eminio	M. 96(f) = Pliego 2009, 120b.2	Cf. = Pliego 2009, 98b.58 (Reccared-Toleto) > all aspects **.	
"	Baetica Barren Carthaginiensis Elberri	M. 83(a) / ANS 2016.29.31 = HSA 16065 (pl. V.13)	Cf. ANS 2015.48.39 (Reccared-Toleto) > Bust*; **; obv. letters and slant*; R, E, A, S-R-E. Cf. ANS 2015.48.29 (Reccared-Toleto) > All aspects *, though cuirass style is slightly different. Cf. ANS 2015.48.48 (Reccared-Ispali) > All aspects **	
"	Elberri	M. 83(c) / ANS 2015.48.44 = HSA 16023 (pl. V.14)	Cf. ANS 2015.48.50 (Reccared-Ispali) > All aspects**	
"	Mentesa	Madrid 1936, p.313	Cf. SB 42, no. 2561 (Reccared-Toleto) > All aspects **.	
"	Mentesa	IVDJ 3554 = Pliego 2009, 95b.1	Cf. Pliego 2009, 98a.9 and 98b.58 (Reccared-Toleto) > All aspects **.	
Liuvia II	Elvora	Madrid 1936, p. 304, pl. XXIX		
"	Elvora	NAC 25, 671 = Pliego 2009, 164a.8	Cf. MAN 105.298 (Liuvia II-Toleto) > All aspects **.	
"	Elvora	Barral 1976, 179, 66 = Pliego 2009, 112a.18	Cf. = Pliego 2009, 98b.11 (Reccared-Toleto) > all aspects **.	
"	Elvora			
"	Emerita	Ensaios, pl. II.36; in Kurt 2020, 338f, pl. III (36)		
"	Emerita	Ensaios, pl. II.37; in Kurt 2020, 338f, pl. III (37)		
"	Portocale	Ensaios, pl. II.38; in Kurt 2020, 338f, pl. III (38)	Cf. Ensaios, pl. II.32 (Reccared-Portocale) > +*; bust **; most letter forms *. Cf. Kurt 2020, 338f, pl. III.33 (Liuvia II-Toleto) > bust*, face*; but spelling and spacing differ.	
"	Toleto	M. 119 / ANS 2015.48.72 = HSA 16075 (pl. VII.2)	Cf. ANS 2015.48.38 (Reccared-Toleto) > All aspects **. Cf. ANS 2015.48.53 (Reccared-Elvora) > All aspects *.	Cf. ANS 2015.48.38 > All aspects**. Cf. ANS 2015.48.53 > All aspects**, esp. letters T, E.

"	Toleto	Ensaïos, pl. II.33; in Kurt 2020, 338f, pl. III (33).		
"	Toleto	MAN 105298 = Pliego 2009, 160b.2		Cf. Kurt 2020, 356, two prototypes: 1/ ANS 2015.48.38 (Reccared-Toleto) > Bust; +*; All letters** esp. O (small, elevated), S (sideways).
"	Toleto	MAN 2008/115/36 = Pliego 2009, 160b.3		N.b. scratches, re-punched Q(x2), possibly redrawn cuirass.
Witteric	Bergancia	M. 147 / ANS 2016.29.44 = HSA 16094 (pl. VIII. I)		Cf. Pliego 2009, 186 e.1 (Witteric-Toleto) > face, S* (backwards)
"	Bracara	Heiss, pl. IV.3		
"	Bracara	ANS 2016.29.45 = HSA 57.559		
"	Elvora	M. 142(a) / ANS 2015.48.83 = HSA 16081 (pl. VII.13)		Cf. ANS 2015.48.77 > All aspects ** esp. face, letters T, E, I-V, R (see ANS 2015.48.77 obverse).
"	Emerita	M. 143(e) / ANS 2015.48.85 = HSA 16085 (pl. VII.15)		Cf. ANS 2015.48.77 > +*; letters I-V-S (S on its side). Cf. M. 139(a) > Face; +*; letters P-I-V.

"	Eminio	M. 144 / Stuttgart, no. 1344 (pl. VII.16)	Cf. ANS 2015.48.83 (Witteric-Elvora) > Head; +; epigraphy. For similarities to Toletó coins see Pliego 2009, 186a.2 (note obv. face**) and 186e.1.	Reverse is more like ANS 2015.48.85 (Emerita).
"	Mentesa	M. 135(a) = Ensaios, pl. III.41 = Pliego 2009, 183a.1 Cf. Pliego 2009, 183f.1 (Mentesa) & 186b.23 (Toletó) > **	Probably 'Toletó engraver'; cf. ANS 2015.48.77 (Witteric-Toletó) > Bust; epigraphy* (except R). Appears definitely to be by the same engraver as M. 139(a) (Witteric-Elberri) > Bust; epigraphy**. Cf. this coin (= Pliego 2009, 183a.1) plus another of this mint (ibid., 183d.1) and Witteric-Iminio (ibid., 195a.1). Cf. also IVDJ 3554 above (Reccared-Mentesa).	
"	Toletó	M. 137(a) / ANS 2015.48.77 = HSA 16088 (pl. VII.10)	Later prototype	Cf. ANS 2015.48.72 (Witteric-Toletó) > All aspects**.
"	Toletó	MAN 1991/68/2	Cf. Kurt 2020, 338f, pl. III (33) > all aspects**	Cf. ibid. > all aspects**, esp. P-I-V-S (sideways).
"	Toletó	MAN 2008/115/46	Cf. Kurt 2020, 338f, pl. III (33) > all aspects**, esp. X and + (incl. tilt).	As above, no. 2
"	Senabria	MAN 2008/115/48	Cf. MAN 2008/115/29 (Reccared-Senabria), comparing both sides > Bust*, face*, letter forms, esp. R, E, D/P, S (backwards as on rev. of no. 29 of Reccared at Senabria). <i>Both coins are possibly from 'Toletó engraver', or show clear influence.</i> Spelling at both mints is 'Wittiricus'; busts bear close resemblance in form but not in minutia. Cf. MAN 2008/115/28 (Reccared-Toletó) rev. > E, A-B-R, A-R (back leaning). Cf. MAN 2008/115/46 (Witteric-Toletó) > Letter forms*, although letter size of no. 48 is larger.	Cf. MAN 2008/115/29 > most letter forms*, esp. E, A-B-R-I-A. Cf. MAN 2008/115/28 > esp. P-I-V-S. Cf. MAN 2008/115/46 (Witteric-Toletó) > Letter forms*, esp. slanted final S.

Gundemar	Elvora	Ensaios, pl. IV.61	Cf. Ensaios, pl. III. 59 (Gundemar-Toleto) > Bust**, +*; letters**, esp. S and backward lean of M-A-R.	
"	Mentesa	(Cores, private coll.) = Pliego 2009, 222d.1	Epigraphy by 'Tol.' engraver, but not face and bust? Cf. IVDJ 3554 above (Reccared-Mentesa, = Pliego 2009, 95b.1) > letter forms and spacing * or **. Face and bust seem to be by 'isp.' hand: cf. many examples in Pliego 2009, pp. 154-55.	
"	Toleto	Ensaios, pl. III.59		
"	Toleto	M. 167 / ANS 2015.48.90 = HSA 16089 (pl. VIII.9)	Cf. ANS 2015.48.83 (Witteric-Elvora) > Bust*, +*; letters V, R, E **.	Cf. ANS 2015.48.77 (Witteric- Toleto) > All aspects**, esp. epigraphy. Cf. ANS 2015.48.83 (Witteric-Elvora) > All aspects **; see T, E, L, S.
"	Toleto	MAN 2008/115/63		
Sisebut	Bracara	Leu photos, no. 320	Possibly 'Toleto engraver' (almost certainly the same engraver as the coin of Nandolas); cf. Leu photos, no. 113 (Sisebut-Toleto). Another Bracara triens (= Pliego 2009, 299.1) is possibly also a 'Tol.' coin: cf. ibid., 267f.13 > face *; bust; B, R, P-I-V.	
"	Calapa	MAN 2008/115/138	Cf. MAN 2008/115/137 et al. (Sisebut-Toleto) > Face; +*; letter forms** esp. S-I-S, S-R-E. The attribution to the same hand at work at Toleto can be made confidently. Cf. MAN 2008/115/143 (Sisebut-Emerita) > Head*, though cuirass is not of same type; letters* esp. S-R-E.	Cf. no. 137 > similar on the whole, esp. L, P like a D. Cf. no. 144 (Emerita) > Head*, rest of bust. +*; letters esp. *P-I-V-S, with P like a D.
"	Egitania	Leu photos, no. 229	Probably 'Toleto engraver'; appearance is closer to Emerita and Bracara than Toleto. Cf. Leu photos, no. 285 (Sisebut-Emerita) > All aspects **.	Cf. Leu photos, no. 285 > Reverse of no. 229 appears to have been made hastily, thus the comparison shows less similarity.
			Cf. Leu photos, no. 320 (Sisebut-Bracara) > +*; epigraphy *.	

"	Egitania	BNF 39 (= Pliego 2009, 281d.1)	Probably 'Toleto engraver' > face *, but not bust; letter forms * or **. Cf. Pliego 2009, 267a.42 and 267a.5 (Sisebut-Toleto), face *, but not bust. Ibid. 267e.1 (Sisebut-Toleto) is very similar to ibid., 281b.1 (Sisebut-Egitania).	
"	Elvora	M. 191(a) / ANS 2015.48.124 = HSA 16107 (pl. IX.17)	Cf. ANS 2015.48.83 (Witteric-Elvora) > Bust*; +**, all letters **. Cf. ANS 2015.48.90 (Gundemar-Toleto) > Bust*; +**, letter size and most forms**, esp. R, E.	Same as obverse.
"	Elvora	M. 191(a) / ANS 2015.48.126 = HSA 16372 (pl. X.I)		
"	Elvora	MAN 2008/115/142	Cf. MAN 2008/115/131, 132, 137 (Sisebut-Toleto) > Bust*; letters * esp. S-I-S-E. Final X of REX included on some Toleto coins as at Elvora. Note compass mark as seen on many Toleto coins. Cf. MAN 2008/115/135 & 136 (Toleto) > also close similarities Cf. MAN 2008/115/141 (Sisebut-Senabria) > Bust; letter forms * and most positions, esp. S, E, T (top slightly below line).	Cf. MAN 2008/115/135 & 136 > Bust*; +*; letters * (formed by large wedges), esp. T, S*, L, E, P/R* like a D; O (neat).
"	Emerita	Ensaios, pl. V.90-96	Possibly by 'Tol.' hand. Cf. Ensaios, pl. V.71 (Sisebut-Toleto) – compare both sides > All letters *, except X; S- I-S similar (angle and form in V.90-93 of Emerita **).	
"	Emerita	SB 42, no. 2596	Possibly by 'Tol.' hand. Cf. SB 42, no. 2615 (Toleto) > +**; epigraphy**.	Cf. SB 42, no. 2615 > epigraphy**, esp. E, T, P-I-V-S.
"	Emerita	MAN 2008/115/143-155	Possibly by 'Tol.' hand. Cf. MAN 2008/115/134-137 (Sisebut-Toleto) > Head similar, but cuirass of different type. Letter forms* or ** esp. S-I-S, R.	Compare no. 143 (Emer.) with no. 137 (Tol.) > most letter forms *.

"			Compare no. 143 (Emer.) with no. 137 (Tol.) > Letters** esp. S-I-S, S-R-E. Compare no. 143 with no. 142 (Elvora) – possibly by the same hand > Head*; +*; most letter forms * esp. S extending below the line of letters.	Compare rev. of no. 144 (Emer.) and no. 142 (Elvora) > similar, e.g. P like a D, though perhaps not same hand.
"	Eminio	Ensaios, pl. V.97	Possibly by 'Tol.' hand; at least probably same hand as at Emerita. Cf. Ensaios, pl. V.96 (Sisebut-Emerita) > Face?; +*; most letters**, esp. S-I-S-E-B, T (but V, R not very similar).	For a very similar cuirass on the reverse of an Emerita coin see Ensaios, pl. V.95.
"	Eminio	SB 42, no. 2602	Possibly by 'Tol.' hand; at least probably same hand as at Emerita. Cf. SB 42, no. 2614 & 2615 (both Sisebut-Toleto) > Face; +*; letters similar, with very slight differences.	Cf. SB 42, no. 2614 & 2615 > see esp. P-1-V-S** (esp. the distinctive S).
"	Georres	MAN 2008/115/139	Possibly 'Toleto engraver' but more likely copied elements. Cf. MAN 2008/115/133, 134, 135 (Sisebut-Toleto) > S-I-S, B, T (top is below line), R, E are all similar (note: R has variation on the two sides), and bust type is similar. But subtle distinctions prevent firm attribution. Cf. no. 140 (Sisebut-Semure) > Bust differs. *S-I-S, T.	Cf. nos. 133-135 > Bust is not similar. R, E, S bear similarity and differentiation; S (two) not quite sideways as the norm as Toleto. Cf. no. 140 > similarities, though not exact.
"	Mentesa	Ensaios, pl. IV.69	Possibly 'Toleto engraver'; cf. Ensaios, pl. IV.70 (Sisebut-Toleto) > +*; epigraphy * (except R, and Mentesa letters are larger). Cf. Ensaios, pl. V.85 (Sisebut-Elvora) > +*; letters similar, esp. A, V, T, E, X.	
"	Nandolas	Leu photos, no. 321	Probably 'Toleto engraver'; cf. Leu photos, no. 113 (Sisebut-Toleto) > Bust*; +*; epigraphy*. Cf. Leu photos, no. 232 (Sisebut-Elvora) > Bust*; +*; epigraphy**. Cf. Pliego 314.1 (Sisebut-Nandolas) and Ibid., 267a.43 (Sisebut-Toleto) > obv. face*; bust; letter forms; rev. similar letter forms, esp. L.	Cf. Leu photos, no. 113 > same as obverse. Cf. Leu photos, no. 232 > same as obverse, but epigraphy*.

"	Senabria	MAN 2008/115/141	A/V (but S on Toletó coins are usually sideways). Same engraver at Senabria, Recaredo to Sisebut. Cf. MAN 2008/115/29 (Recarred-Senabria) > Bust; letters esp. S** (thin, misshapen, extends below line), R. The same tendencies esp. of S as in Elvora and Toletó coins. Cf. MAN 2008/115/48 (Witteric-Senabria) > Bust**; wide T, S** (thin, here backwards), R. Possibly 'Toletó engraver'. Cf. MAN 2008/115/142 (Sisebut-Elvora) > Face*; same S, B, wide E, uneven letters, V-T-V incl. position of T below top line. Cf. MAN 2008/115/135 & 136 (Sisebut-Toletó) > Bust*; similar letters. Cf. MAN 2008/115/133 & 134 (Sisebut-Toletó) > Bust; +**; S-E** (S below line), B*, T*-V-S, R. No. 141 rev. compared to these two obverses > Bust; S-E**, B**, R*. In the various coins listed here: E is sometimes wide, sometimes not, and often has a longer top cross-stem. Toletó coins' S is only backwards in rev. final S, seemingly for reasons of spacing of letters.	Cf. nos. 29 & 48 > Bust – similar, but differentiated; face*. Letter forms and positions*. Cf. MAN 2008/115/142 > Bust*; +* (wide as in no. 142 obv.); S extends below line, R like a D. Cf. MAN 2008/115/135 & 136 > Bust*; P* like a D.
"	Semure	MAN 2008/115/140	Possibly 'Toletó engraver'. Cf. MAN 2008/115/134 & 135 (Sisebut-Toletó) > Bust differs, but face*; *S-I-S, B, R, final E (cf. no. 135). Cf. 141 (Sisebut-Senabria) – same hand? > Head similar, but cuirass differs greatly; letter forms and positions*.	Cf. no. 134 obv. > Face; S*-E (vertical stem bends backwards), R, I, P like a D as in 'Tol.' group – see no. 134 rev. But spacing and bust differ. See Ensaios, pl. V.82-85.
"	Toletó	Ensaios, pl. V.70, 71		See Ensaios, pl. V.82-85.

"	Toledo	SB 42, no. 2614		See SB 42, no. 2594 (Sisebut-Elvora).	
"	Toledo	SB 42, no. 2615		See Leu photos, no. 321 (Sisebut-Nandolas).	
"	Toledo	Leu photos, no. 113		Probably not from 'Tol.' hand, but same engraver as at Emerita and Eminio. Cf. Ensaios, pl. V.96 (Sisebut-Emerita) > Bust**;	Cf. Ensaios, pl. V.96 > see esp. E, P.1-V-S (S**).
"	Veseo	Ensaios, pl. V.98		+*; epigraphy*, esp. E-B, S-R-E. Cf. Ensaios, pl. V.97 (Sisebut-Eminio) > Bust?; +**;	
				epigraphy*, esp. E and S (irregular, sometimes backwards).	
Suinthila	Elvora	Ensaios, pl. VI.119		Cf. Ensaios, pl. VI.104, 105 (Suinthila-Toleto) > All aspects *; cf. the S after the *, E, L, R **;	
				and the thin horizontal line of H (unlike coins of Emerita at that time).	
"	Elvora	SB 42, no. 2635		Cf. SB 42, no. 2649 (Suinthila-Toleto) > All aspects *; position and form of +S-V **.	
				N.B.: both coins have a distinctive faint circle in the field.	
"	Georres	MAN 2008/115.217		Cf. MAN 2008/115/139 (Sisebut-Georres) > similar letter forms, more so on rev.; clearly both dies were from the same engraver, but letters in Suinthila's coins are larger and the bust type diverges.	Cf. no. 139 > Similar letter forms, esp. ** G, S, E, T.
				Possibly by 'Toleto' engraver. Cf. no. 216 rev. (Suinthila-Toleto, mislabeled in MAN Tray 9 as Mentesa) > E* (wide), I, V*, T.	Cf. no. 216 > Similar E, P.
				Cf. MAN 100427 (Toleto) > Completely different bust type; **;	Cf. MAN 100427 > Bust incl. head differs; smaller
				incl. S-V, T (bent vertical stem), A-R-E, but spelling differs (SVINJILA at Georres, TH at Toleto).	O the same, likeness in epigraphy.
"	Toledo	M. 223(a) / ANS 2015.48.159 = HSA 16271 (pl. XI.13)		Bust**;	Same as obverse.
				letters T, L, E (curved stem), final S (slanted), R **.	
				Obverse linked to ANS 2015.48.157.	

"	Toledo	M. 223(a) / ANS 2015.48.155 = HSA 16286		
Sisenand	Toledo	Ensaïos, pl. VII.137, 138	Cf. ANS 2015.48.159 (Suinthila-Toledo) > All aspects **.	
"	Toledo	SB 42, no. 2661	"Toledo engraver"? > Most aspects*. The style of Toledo coins seems to undergo change in this reign, perhaps due to a new engraver; cf. SB 42, no. 2662 > bust and several letters, esp. R, T, O, are different. Cf. also no. 2669 (Chintila-Toledo) > its fabric differs substantially from no. 2661, and is closer to no. 2662. So also M. 285(d) / ANS 2015.48.337 / pl. XXII.14 (Chintila-Toledo), M. 304(a, b) / 2016.29.126, 2015.48.338 / pl. XXIII.11, 12 (Tulga-Toledo), and Chindasvinth-Toledo coins in Miles > these differ from 'Toledo engraver' in the bust, incl. cuirass; in their thicker decorative rim; in letters N, S, O, and possibly P.	
Chintila	Toledo	M. 285(d) / ANS 2015.48.337 = HSA 16470 (pl. XXII.14)	Cf. 2015.48.275 & 2015.48.276 (Sisenand-Toledo) > Bust*; +*; see A and most letters on reverse.	

'EMERITA ENGRAVER(S)' ('Emer.')

King	Mint	Coin	Reasons for attribution of obverse	Additional comments about style of reverse
Reccared	Emerita (‘Victor’ on rev.)	MAN 2008/115/30	Nos. 30-34 here share similar R (short stem), E (tall, thin, arching back slightly on top). Cf. Kurt 2020, 338f, pl. III (36,37) (Liuvia II-Emerita) > Bust*; R, E. Cf. Kurt 2020, 334f, pl. I (e) (Leovigild-Emerita) > +*, bust; A & V forms, R (like a D with small punch added). Cf. Kurt 2020, 338f, pl. III (31,32) (Reccared-Eminio, -Portocale) > Bust and letters of both sides do not fully resemble nos. 30-34 from MAN, esp. obv. S (oversized) and rev. M of pl. III (31). <i>Possibly by Toletto hand, but probably ‘Emer.’ and certainly sharing influence. Compare nos. 30-34 of Emerita here to nos. 26-28 above of Toletto > Bust is different, but face and hair*; +** ; letters** (esp. details of R, D), except usually taller and with more serifs at Emerita, E stem does not bend, S is thin.</i>	Nos. 30-34 here: T* (very short). Cf. Kurt 2020, 338f, pl. III (36,37) > Bust*; letter forms** esp. E, M, R, P, sideways S. Cf. Kurt 2020, 334f, pl. I (f) (Leovigild-Emerita) ‘Victor’ > +** (tall; horizontal line placed very high). T-O-R (O placed very high); cf. esp. rev. R and obv. R of pl. I (f). Cf. nos. 30-34 and 26-28 of Toletto > Letters*, esp. P (detached loop), S (some are sideways as in ‘Tol.’ coins).
"	Emerita	MAN 2008/115/31		Bust*; E-M-E-R.
"	Emerita	MAN 2008/115/32	Prototype. Cf. Kurt 2020, 338f, pl. III (36) (Liuvia II-Emerita) > Bust*. All punches here have very wide serifs. Also cf. Kurt 2020, 342f, pl. V (1327) (Reccared-Emerita), esp. obv.*	Cf. Kurt 2020, 338f, pl. III (36) > +*, bust* incl. left lean. Almost all letter forms*.
"	Emerita	MAN 2008/115/33	Cf. no. 32 above > Bust* incl. hair slightly longer on right. Letter forms*, although here taller. Both coins heavily employ serifs. Also cf. Kurt 2020, 338f, pl. III (37) (Liuvia II-Emerita) > Bust** incl. hair slightly longer on right. Cf. nos. 32 & 33 above > similar but not so highly serifed letter punches. Cf. nos. 30 & 31 above > all aspects**.	All aspects** . N.b.: ‘S’ is on its side. Lacks huge serifs of obv.
"	Emerita	MAN 2008/115/34		All aspects** as others here in this series.

Liuva II	Emerita	MAN 2008/115/37	Cf. MAN 2008/115/36 & 105298 (Liuva II-Tol. by 'Tol.') > letters more forward-leaning than at Toletto, N formed differently, E is thinner.	Cf. idem > taller letters, P more detached than at Toletto.
"	Emerita	MAN 2008/115/38	Same characteristics as no. 37.	
Witteric	Emerita	MAN 2008/115/49-54 N.b.: Nos. 49 and 51 are spelled Wittericus, the rest Wittiricus. <i>Possibly by 'Tol.' engraver, but more likely influenced by that style.</i>	Cf. MAN 2008/115/64 & ...65 (Gundemar-Emerita) > While slight variations occur in the bust and letter sizes and some forms (e.g., R), these occur even in coins of the same reign or on the two sides of the same coin, and the same thin, awkward S and left lean of letters occur throughout. Cf. MAN 2008/115/46 (Wittericus-Toletto) > Face* and similar hairline, but different type. +, epigraphy*, but letters are generally larger than at Toletto. The wide serifs esp. of no. 49 are common at Emerita.	Cf. nos. 64 & 65 > The same comments as obv. apply; M**, final S sometimes sideways during both reigns. Cf. no. 46 > Obvious similarities with execution of Toletto legends, but not exactly the same. Cf. no. 52 (Emerita) and no. 63 above (Gundemar-Toletto) > Face*; T**, P-I-V-S*.
Gundemar	Emerita	MAN 2008/115/64	Cf. nos. 52 & 53 above (Witteric) > Bust**; letters**, etched in between wedges, vary in size even on same inscription. R and S (thin, awkward)** Cf. MAN 2008/115/63 (Toletto) > Despite definite likeness in epigraphy, subtle differences in letter forms (e.g., G, R) and separate bust type suggest <i>not the work of the same hand but probable stylistic influence between Emerita and Toletto.</i>	Cf. no. 63 (Toletto) > Similar size of letters; E**, P-I-V*.
"	Emerita	MAN 2008/115/65	Same characteristics as no. 64, although cuirass is fully rounded, not with a straight or bent line at the top as in other coins from Emerita.	Cf. no. 63 (Toletto) > P-I-V-S (sideways S, as in no. 53 above, Witteric-Emerita).
Sisebut	Emerita	MAN 2008/115/143-55	<i>Possibly by 'Toletto' engraver. Cf. also 'Emer.' coins.</i> Cf. MAN 2008/115/134-37 above (Sisebut-Toletto) > Head similar but cuirass of different type. Letter forms* or **, esp. S-I-S, R. Compare nos. 143 and 137 > Letters **, esp. S-I-S, S-R-E. Cf. nos. 143 and 142 (Sisebut-Elvora) above	Cf. nos. 143 and 137 > Most letter forms*. Cf. 144 and 142 (Elvora) > Similar style, though perhaps not by the same hand. P is like a D at both mints.

Suinthila	Emerita			by 'Tol.' hand – possibly same engraver for both > Head*; +*; most letter forms*, esp. S (extends below other letters).	
"	"	MAN 1971/71/11			
"	"	MAN 1972/75/20		Cf. MAN 1971/71/11 > Bust **, esp. face; longer initial S; L-A, R-E	Bust **, esp. face & hair; E – tall, long horizontal line; wide M; A-P incl. slanted bottom wedges of A; P & R (loop not closed); P & S – taller, descends below line
"	"	MAN 100426		Same as above; cf. No. 11 above > R-E-x	Same as above
"	"	NAC 25, 761 = Pliego 2009, 393a.76 See many examples in <i>Pliego</i> , v. 2, 260-66		Same as above	
"	"	Pliego (14-12-2004) 251 = Pliego 2009, 393a.77		Same as above	
"	Egitania	CNV 325.1 = Pliego 2009, 391b.1 See many examples in <i>Pliego</i> , v. 2, 259f		Cf. NAC 25, 761 > Bust incl. face & uneven hair **; long initial S, L-A **, R-E-x **	Cf. NAC 25, 761 > + (off center); all other details**
"	Egitania	M. 233 (4/4) = Pliego 2009, 391c.4		Cf. Pliego (14-12-2004) 251 > same as above	Same as above
"	Egitania	ANS 2015.48.237 = HSA 16210		Cf. MAN 1971/71/11 > Bust **, all letter forms**	Same as on obverse

'BARCINONA ENGRAVER' ('Barc.')

King	Mint	Coin	Reasons for attribution of obverse	Additional comments about style of reverse
Reccared	Barcinona	M. 51(a) / ANS 2016.29.19 = HSA 10620 (pl. IV.3)	Prototype.	
"	Barcinona	M. 51(d) / ANS 2016.29.20 = HSA 16067 (pl. IV.4)		
"	Barcinona	M. 51(g) (pl. IV.5)	All aspects *; same wide E, narrow C, backwards S.	
"	Barcinona	M. 51(d) / ANS 2016.29.21 = HSA 16582 (pl. IV.6)	Probably by the same engraver > Cf. pl. IV.5: Bust and most letters **, S not backwards.	
"	Rodas	M. 63(a) (pl. IV.13)	All aspects **, esp. left lean of letters; see distinctive A (left stem at 90°, right stem at ca. 45°, wide thin wedge on top), R, backwards S.	
"	Tarracona	M. 72. I / see Heiss, no. 35 (pl. IV.20)	All aspects ** except cuirass and cross in center of reverse. The nose and eyes are formed in the same way.	
Witteric	Barcinona	M. 128(a) / ANS 2016.29.39 = HSA 16080 (pl. VII.5)	All aspects * or **.	See esp. letters B, A, R.

'NARBONA ENGRAVER' ('Narb.')

King	Mint	Coin	Reasons for attribution of obverse	Additional comments about style of reverse
Leovigild	Narbona	M. 11(a) / ANS 2016.29.2 = HSA 15989 (pl. II.2)	Bust* (face & hair**); most letters *, esp. L, E, D, R, S (thin, slightly larger than surrounding letters, slanting to right).	Same as obv.; see esp. P-I-V- <u>5</u> .
"	Narbona	M. 12 (pl. II.3)	Prototype.	
"	Rodas	M. 19(a) / ANS 2016.29.4 = HSA 16007 (pl. II.7)		
"	Rodas	GNC, pl. III.27		
Reccared	Narbona	M. 48(b) / ANS 2015.48.21 = HSA 16043 (pl. IV.I)		
"	Narbona	M. 49(a) / ANS 2015.48.22 = HSA 16044 (pl. IV.2)		

'CESARAGUSTA ENGRAVER' ('Ces.')

King	Mint	Coin	Reasons for attribution of obverse	Additional comments about style of reverse
Leovigild	Cesaraugusta	M. 16(e) (= pl. II.4)	All aspects **; cf. SB 2553 ** (Reccared-Cesaraugusta).	
Reccared	Cesaraugusta	M. 55(a) / ANS 2016.29.22 = HSA 16015 (= pl. IV.7) M. 55(c) / ANS 2016.29.23 = HSA 16016 (= pl. IV.8) M. 55(e) / ANS 2015.48.23 = HSA 16018 (= pl. IV.9) M. 55(h) / see Heiss, no. 6 (pl. IV.10) M. 56 / ANS 2015.48.25 = HSA 16069 (= pl. IV.11)	ANS 2016.29.22 is prototype . Note in this hand the peculiar engraving of the face, with a 'I' in the center: letters are mostly engraved by hand, with small wedge punches at the ends; R's diagonal stem goes all the way to the vertical stem; D's loop is often not closed, is often backwards; S is thin and tall. Pl. nos. 8-12: All aspects **, incl. abbreviation (:) and thin decorative rim.	
"	Cestavi	M. 57(b) / ANS 2016.29.24 = HSA 16017 (= pl. IV.12)		
"	Tirasona	MAN 1973/67/1. = Pliego 2009, 93(a)1 (p. 91)	Bust (face, hair slightly longer on left, dot at mouth); +. Cf. Kurt 2020, 338f, pl. III (39) (Witteric-Cesaraugusta) and s.n. (Witteric-Tarracona) > R (= slanted A with a ½ loop added), E (long horizontal bars, leans leftward, is larger than C), dots substituting letters.	
"	Cesaraugusta	M. 55(i) / ANS 57.542	Prototype	
"	Cesaraugusta	SB 42, no. 2553	All aspects **.	
"	Tarracona	M. 65(a) / ANS 2016.29.25 = HSA 16050 (= pl. IV.14) M. 66 / ANS 2015.48.26 = HSA 16046 (= pl. IV.15) M. 67(a) (pl. IV.16) M. 68(c) / ANS 2015.48.27 = HSA 16047 (pl. IV.17)	ANS 2016.29.25 is prototype . ANS 2015.48.26: Bust ** (esp. face); +* (lines are engraved between wedges but the wedge ends are very wide); all letters **, incl. size and spacing*; several dots in legend.	Overall style is very similar to that of obverse.

"		M. 70(6) / ANS 2016.29.27 = HSA 16056 (pl. IV.18) M. 70(c) / ANS 2016.29.28 = HSA 16048 (pl. IV.19)			
"	Tirasona	M. 74(d) / ANS 2016.29.29 = HSA 16072 (= pl. V.1)	Bust**; +**; all letters**, esp. T (slanted stem), R, D, S.	Bust**; all letters**, esp. T, R.	
Liuvia II	Tarracona	M. 118(a) / ANS 2016.29.38 = 16074 (=pl. VII.1)	Bust* (extremely similar to ANS 2015.48.26 [Reccared-Tarracona], as are letters D, A, R); +*; letter forms*, esp. R, E, A.	All aspects **, incl. style of +, dots in legend, and esp. letter T.	
"	Cesaraugusta	SB 42, no. 2563	All aspects and control marks*.		
Witteric	Cesaraugusta	SB 42, no. 2568	Bust **: letters *, L**.		
"	Cesaraugusta	SB 42, no. 2573	Uncertain: most aspects similar; E and R*.		
"	Cesaraugusta	M. 129(d) / ANS 2016.29.41 = HSA 16090 (pl. VII.7)	Bust**; +**; A, R,, S, E (with uneven stems) **: decorative rim (very close to edge)**.		
"	Cesaraugusta	M. 129(f)bis / ANS 57.555	Same as previous coin; even more similar to prototype.		
"	Cesaraugusta	Ensaïos, pl. II.39 (= Pliego 2009, 174c.3); in Kurt 2020, 338f, pl. III (39)			
"	Tarraco	SB 42, #2572 (= Pliego 2009, 179a.1); in Kurt 2020, 338f, pl. III (s.n.)			
"	Tirasona	M. 134 / ANS 2016.29.43 = HSA 16093 (pl. VII.9)	All aspects**, except this coin is slightly larger, as are the letters of its legend. Cf. also ANS 57.555 ** (Witteric-Cesaraugusta).		
Gundemar	Cesaraugusta	M.162(b) / ANS 2016.29.47 = HSA 16098 (= pl. VIII.5)	Later prototype. Cf. ANS 57.542 reverse (Reccared-Cesaraugusta) > Bust**; +**; letters E, R, A, V, O, C/G**.	All aspects **, esp. letters and inclusion of dots in legend.	
"	Cesaraugusta	MAN 2008/115/67			

"	Sagunto	GNC pl. V.57	Cf. other Gundemar coins here > most aspects*, esp. letters (and: in place of S). Most similar to ANS 2015.48.89 (Gundemar-Tarracona) > module, light decorative rim.	
"	Tarracona	M. 164(a) / ANS 2015.48.89 = HSA 16759 (= pl. VIII.6)	All aspects*. Cf. ANS 2016.29.47 (Gundemar-Cesaraugusta) > all aspects** (except M), but size of coin and letters is smaller.	
"	Tirasona	M. 165(a) / see Heiss, no. 4 (= pl. VIII.7)	All aspects*. Cf. ANS 2016.29.47 (Gundemar-Cesaraugusta) > all aspects**.	
Sisebut	Cesaraugusta	M. 174(a) / ANS 2015.48.93 = HSA 16102 (= pl. VIII.12)	All aspects*. Cf. ANS 2016.29.47 (Gundemar-Cesaraugusta) > esp. Bust, +, S, E, R **.	Cf. ANS 2016.29.47 > All aspects**, esp. letters (incl. size and spacing).
"	Cesaraugusta	M. 174(a) / ANS 2015.48.91 = HSA 16100		
"	Tarracona	M. 177(a) / ANS 2016.29.49 = HSA 16128 (= pl. VIII.14)	All aspects*. Cf. ANS 2015.48.91 (Sisebut-Cesaraugusta) > Bust**, +**;	All aspects*. Cf. ANS 2015.48.91 > All aspects**.
"	Tarracona	M. 177(e)2 / ANS 57.560	Same as above	Same as above
Suinthila	Calagorre	M. 212 / ANS 59.129.1	Cf. esp. ANS 2015.48.132 > Bust**;	Bust**;
"	Cesaraugusta	M. 213(e) / ANS 2015.48.132 = HSA 16149 (= pl. X.15)	All letters*, but larger on this coin.	+*; see letters C, E, A, O, I, V (all**) and same dots in legend.
"	Cesaraugusta	M. 213(e) / ANS 2015.48.132 = HSA 16149 (= pl. X.15)	All aspects*. Cf. ANS 2016.29.47 (Gundemar-Cesaraugusta) and ANS 2015.48.91 (Sisebut-Cesaraugusta) > Bust**;	Cf. esp. ANS 2016.29.47 and ANS 2015.48.91 > Bust*, all letters* (except larger on this coin).
"	Tarracona	M. 215(f) / ANS 2015.48.136 = HSA 16265 (= pl. XI.1)	S, R-E (-X on ANS 2015.48.91), T, N **.	Same as obv.
"	Tarracona	M. 215(f) / ANS 2015.48.136 = HSA 16265 (= pl. XI.1)	All aspects*. Cf. ANS 2015.48.89 (Gundemar-Tarracona) > Bust**;	
"	Tarracona	M. 215(f) / ANS 2015.48.136 = HSA 16265 (= pl. XI.1)	letters** (esp. R-E), but larger here and the die has deteriorated.	

"	Tarracona	SB 42, no. 2648	All aspects *. Cf. SB 42, no. 2654 (Suintila-Valentia) > Bust, esp. face *, + **, letters *.	
"	Valentia	SB 42, no. 2654	Bust, +, letters. See previous coin. However, Valentia coins have reversed S's.	
Sisenand	Tarracona	M. 256(d) / ANS 2016.29.63 = HSA 16441 (= pl. XVII.2)	Cf. esp. ANS 2015.48.136 (Suintila-Tarracona) > Style of bust *, but small differences begin to appear; + **; most letters similar, but S, N, R differ slightly.	Cf. ANS 2015.48.136 > Bust *, + **; letters *, with possible exception of R.

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