

STOCKHOLM STUDIES IN LATE ROMAN AND EARLY
BYZANTINE SOLIDUS COINAGE

Occasional papers 3

The Accession of Leo
Perpetuus in February 457
A Newly Reported Addition to
the Åby Solidus Hoard
from Sandby Parish, Öland

Svante Fischer

Stockholm Numismatic Institute



Stockholm
University

Stockholm Studies in Late Roman and Early Byzantine Solidus Coinage

General Editor: Jens Christian Moesgaard

Assistant Editor: Svante Fischer

Peer-reviewed

Occasional papers

1. Svante Fischer, *The Late Roman and Early Byzantine Solidi of Småland*, 2023
2. Svante Fischer & Adrian Popescu, *The Lewis Collection of Late Roman Solidi in the Fitzwilliam Museum*, 2025
3. Svante Fischer, *The Accession of Leo Perpetuus in February 457. A Newly Reported Addition to the Åby Solidus Hoard from Sandby Parish, Öland*, 2026

Published by Stockholm Numismatic Institute
Stockholm University
SE-106 91 Stockholm
Sweden

Layout by Angelica Landgren

© The author and Stockholm Numismatic Institute, 2026

ISBN 978-91-527-8449-5

ISSN 2004-8238

THE ACCESSION OF LEO
PERPETUUS IN FEBRUARY 457
A Newly Reported Addition to the Åby
Solidus Hoard from Sandby Parish, Öland

Svante Fischer

Stockholm 2026

Stockholm Numismatic Institute



Stockholm
University

CONTENTS

Introduction.....	9
Description	10
Background – The Solidi of Öland	10
The Åby Hoard.....	12
The Constantinopolitan Solidus Mint from Theodosius II to Leo I.....	15
Systematic Catalogues as Comparative Material	19
Hoard Publications as Comparative Material.....	22
Recut Late Roman Legends.....	23
Reading the Obverse Legend.....	24
Interpreting the Obverse Legend	25
The Recycled Reverse from Åby	28
The Obverse Die-link to the Sandegård Hoard on Bornholm.....	28
The Sandegård Reverse Die-link to Mästerby on Gotland.....	30
The Björnhovda Mule, RIC X 602.....	31
The Accession of the Perpetuus in February 457.....	33
Conclusion.....	38
List of Illustrations	41
Tables.....	41
References.....	42
Abbreviations.....	42
Bibliography.....	43

ABSTRACT

The Accession of Leo Perpetuus in February 457. A Newly Reported Addition to the Åby Solidus Hoard from Sandby Parish, Öland.

This paper contains a detailed description and an analysis of a previously unrecorded solidus, reported to the Kalmar County Administrative Board in April 2025. It was found at the site of the Åby hoard in Sandby Parish on eastern Öland (Fagerlie 1967, Hoard 99). It is argued that this new solidus find appears to belong to one of the first recorded solidus dies issued for emperor Leo I (457–474), and that the solidus was struck in February 457. The new coin find has an obverse die-link to one of four solidi discovered in a hoard by Sandegård, Åker Parish, Sønder herred, Bornholm (NM C 341, Breitenstein 1944:69–70, fig 78, Horsnæs 2009, no. 9b). The Sandegård solidus, in turn, has a reverse die-link to a single find from Mästerby in Bander Parish, Gotland (Fagerlie 1967:202, hoard 164a, no. 427, SHM 11173). In this paper it is demonstrated that an obverse die was originally cut by a first die-cutter to produce a solidus in the early reign of Marcian (450–457), Leo's predecessor. When Leo I was proclaimed emperor by the warlord Aspar (c. 401–471), this obverse die was recut by a second die-cutter because of the need to rapidly produce and distribute new coinage to legitimize a new senior Augustus, now styled with the title Perpetuus on the obverse of all new solidi from the CONOB mint. It is further argued that the reverse must also be struck from a recycled die, possibly from the late reign of Theodosius II (408–450). In so far, the new solidus find is very important, adding to the complexity of the Åby hoard. Note here that the Sandegård specimen has a different reverse die that bypasses Öland but connects to a Gotlandic context. The new solidus find allows us to reconstruct the dynamics surrounding the accession of emperor Leo I, but also the distribution of solidi from Constantinople via Italy to Öland, Gotland and Bornholm. These results have implications for solidus research in that the archaeological contexts of the Åby, Mästerby and Sandegård hoards provide far more important numismatic data than do decontextualized coins in collections.

Keywords

Late Roman Empire, solidus, Leo I, Marcian, Theodosius II, Aspar, Constantinople, Italy, mercenaries, Öland, Åby hoard, Sandby Parish, Sandby borg, Kalmar County Administrative Board, Bornholm, Sandegård, Åker Parish, Sønder herred, Gotland, Mästerby, Bander Parish.

Introduction

This paper is a study of a new fifth century solidus find from Åby, Sandby Parish, Öland, Sweden.¹ On April 11, 2025, I received an email from Karl Oskar Erlandsson, antiquarian at the Kalmar County Administrative Board. Erlandsson explained that a lady had just visited his office and handed in a solidus that had been found by her father in the 1940's when he went to search the known find place for the Åby hoard. The solidus was promptly registered at the Kalmar County Administrative Board by Erlandsson as Dnr 431-3469-25. In July 2014, I excavated a Ravenna solidus for Valentinian III in nearby Sandby borg in the same parish (Alfsdotter, Dufay & Victor 2018, fig 6.) in the presence of Erlandsson. He thus asked me for an immediate initial assessment of the new solidus find, which turned out to be a solidus struck for Leo I in Constantinople, see fig 1a-b.

Erlandsson requested a longer written report once I had the opportunity to discuss the solidus find with fellow numismatists abroad. The new solidus find was first presented by the author to a scholarly audience at the Royal Numismatic



Fig 1a-b. The new solidus find.

¹ This publication was made possible through the support of the Gunnar Ekström Foundation for Numismatic Research and the Sven Svensson Numismatic Foundation. The author wishes to thank Karl Oskar Erlandsson of the Kalmar County Board, Kalmar County Museum, Borgholms Museum, the Royal Numismatic Society, Grazia M. Facchinetti and Ermanno A. Arslan. Many thanks are also due to Frands Herschend, Fernando López Sánchez, and Jens Christian Moesgaard who all read early drafts of this paper and provided valuable commentary. Finally, thanks to Harald Nilsson, former director of the Royal Coin Cabinet (KMK) and the Uppsala University Coin Cabinet (UUM), and a native of Kalmar County, who provided valuable information on solidus finds from Öland

Society (RNS) in London in May 2025 in a lecture titled “The Constantinopolitan Solidus Coinage of Leo I (457–474)”. The conclusions from the initial assessment sent to Erlandsson in April were met with general agreement at the RNS lecture in London in May. An early draft of this paper was subsequently submitted as a report to the Kalmar County Administrative Board in September 2025. Three months later, a final manuscript was submitted for publication in the Occasional Papers Series.

Description

Dnr 431-3469-25.

Leo I, Solidus, Constantinople mint. Issued in February 457. Fig 1a-b.

Obverse: D N LEO PE – RPET AVG

Emperor diademed, helmeted, and cuirassed three-quarter facing bust, holding spear over shoulder and shield decorated with horseman.

Reverse: VICTORI – A AVGGG E. In exergue: CONOB

Victory, winged, draped, standing left, supporting long jeweled cross, star in right field.

Diameter: 22 mm. Die-axis: 6 o’ clock. Weight: 4.45 g

Condition: Fair. The obverse legend has been recut.

References: Breitenstein (1944), Klindt-Jensen (1957), Fagerlie (1967), Hoard 99 Åby), Östergren (1981), Hauck (1985).

Obverse die-link to one specimen in the Sandegård hoard on Bornholm (Fagerlie 1967, hoard no. 218, no. 428), see fig 10a-d, 11b. The latter solidus shares a reverse die-link to a single find from Mästerby, Gotland (Fagerlie 1967, hoard no. 164a, no. 427), see fig 11c.

Background – The Solidi of Öland

There are some 400 solidi, Late Roman gold coins, reported from Öland, see fig 2. This reported sum is an approximate figure. The relative uncertainty has to do with how one defines reported as opposed to recorded or preserved find coins. In addition, there is a crucial question if a find coin retains a link to a preserved context as opposed to being decontextualized. Note that the term “decontextualization” is here defined as the process in which find coins cease to be archaeological finds, losing important scientific data while being transformed into less meaningful collector’s items with no clear background (Fischer 2020:22–24; 2022:7; Fischer & Popescu 2025:13). A case in point: it is uncertain how many of the once reported solidi from Öland may be identical with decontextualized specimens in various Swedish coin cabinets and collections, although there is

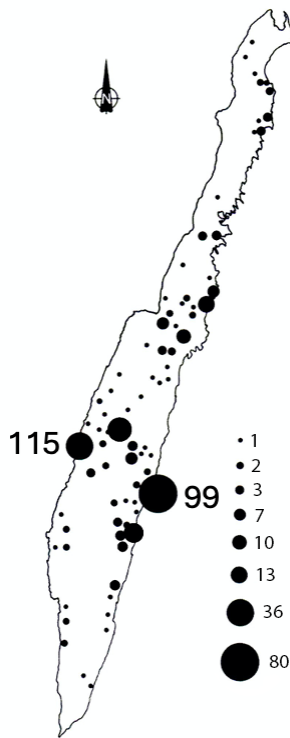


Fig 2. *Solidus finds from Öland. 115 and 99 are the Björnhovda and Åby hoards on the opposite shores of Öland.*

every reason to suspect an Ölandic provenance in many cases (Fischer 2020:22-24, tab 4). Most of the recorded solidi from Öland can be assigned to proper archaeological contexts though. By contrast, the adjacent Swedish mainland of Småland (Fischer 2023a) has very few Migration Period gold finds. The solidi are usually distributed along the shoreline of Kalmar Sound, while unminted gold and gold bracteates are found further inland, see fig 3.

The earliest preserved solidus find from Öland is a Trier issue for Constantine I (306–337), first published by Westermarck (1980). The latest preserved solidus find is an Ostrogothic pseudo-imperial issue in the name of Justinian I (527–565), Fagerlie (1967:79, no. 744, pl. xviii), Fischer (2022b). The vast majority of recorded and/or preserved solidus finds from Öland date to the mid- to late fifth century. The presence of fifth century solidus hoards in Sweden was identified by scholars already in

the early eighteenth century (Rudbeck 1702). With an impressive perspicacity, Rudbeck regarded a hoard of solidi struck for Theodosius II discovered in 1690 near Kalmar Castle in Småland as evidence of Roman tributes to Gothic

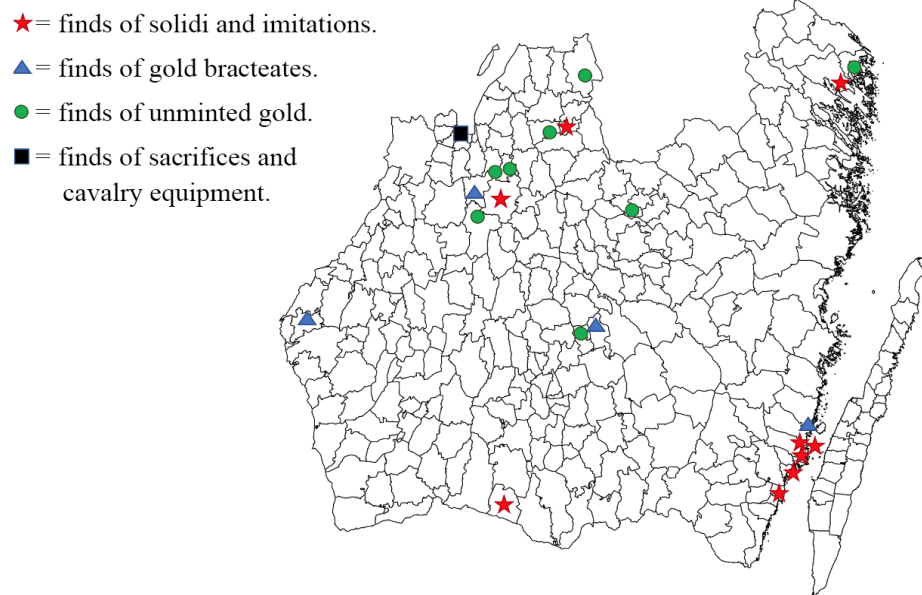


Fig 3. *Migration Periods gold finds from Småland.*

political affinities. Rudbeck did so with a proper reference to the chronicle of Jordanes (Fischer 2023a).

Many of the *solidi* found in Sweden are testimony to a close but brief contact between southern Scandinavia and the West Roman Empire in the second half of the fifth century. This contact was correctly identified by Scandinavian scholars already in the late nineteenth century (notably Montelius 1869, 1872; Hildebrand 1882, Salin 1892, Hauberg 1894). This crucial connection was also later recognized by Italian numismatists in the mid- to late twentieth century (Panvini Rosati 1953, Ungaro 1985, Arslan 1987). This was due to the availability of French and English language publications such as those by Hildebrand (1891), Janse (1922) and Fagerlie (1967) detailing the quantity and significance of the Scandinavian *solidus* material. Recent finds in Sweden and Italy have accentuated the importance of the late fifth century connection (Arslan 2015, Fischer 2019a, 2023b; Facchinetti 2022).

The Åby Hoard

The largest *solidus* hoard on Öland was discovered piecemeal near the village of Åby in Sandby Parish, Öland, in the 1940's. The *solidus* hoard had been deposited in a ceramic jar that eventually disintegrated, causing the hoard to disperse within a small area of plow soil. Currently, 80 *solidi* are kept in the Swedish History Museum (SHM), with the inventory number SHM 23664. The *solidi* in the Åby hoard range from an early Ravenna RIC X 1286 issue for Arcadius (395–408) struck c. 402–408, to a RIC X 2417 Milan issue for Romulus Augustus (475–476), struck in 476. As many as 22 *solidi* are Constantinopolitan RIC X 605 issues for Leo I (457–474) from the period 462–466, while one RIC X 630 dates to the ensuing period 468–473. The final Constantinopolitan *solidus* in the Åby hoard is a RIC X 803 issue for Leo II (473–474) and Zeno (474–476, 476–491), struck in 473–474.

The 80 previously recorded *solidi* from the Åby hoard are presented in greater detail in table 1 below, with the addition of the most recently published reference to each *solidus*. Table 1 demonstrates clearly that the Åby hoard has two main sources. Although it contains an important element of Gallic pseudo-imperial issues, possibly acquired during or shortly after Majorian's military campaigns around Arles in 458–461, the majority must have been assembled in northern Italy in the mid- to late 470's, as is the case with most other *solidus* hoards on Öland, notably the Björnhovda hoard (Fagerlie 1967, hoard no. 115; Fischer 2017), further discussed below.

The closest typological parallels to the Åby hoard outside of Öland are the Como hoard in Lombardy (Facchinetti 2022), the San Mamiliano hoard

Table 1. The *Āby* board

Ruler	Region	Mint	Mint mark	Officina	RIC X	Chronology	Fagerlie cat. no.	Reference
Arcadius	Italy	Ravenna	COMOB	RV	1286	402–408	193	Fischer 2020, 26.
Honorius	Italy	Ravenna	COMOB	RV	1287	402–408	7	Fagerlie 1967
Honorius	Italy	Ravenna	COMOB	RV	1287	402–408	19	Fagerlie 1967
Honorius	Italy	Ravenna	COMOB	RV	1326	414–423	20	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	–	219	421–422	202	Fagerlie 1967
Valentinian III	Gaul	Imitation Type 4a	COMOB	RV	3711	425–	77	Fischer 2021
Valentinian III	Gaul	Imitation Type 4a	COMOB	RV	3711	425–	84	Fischer 2021
Valentinian III	Gaul	Imitation Type 4a	COMOB	RV	3711	425–	90	Fischer 2021
Theodosius II	East	Constantinople	TES.OB	–	361	425–425	285	Fagerlie 1967
Theodosius II	East	Constantinople	TESOB	–	361	425–426	286	Fagerlie 1967
Theodosius II	East	Constantinople	TESOB	–	361	425–427	287	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	Alpha	242	425–426	216	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	Beta	242	425–427	217	Fagerlie 1967
Valentinian III	Italy	Ravenna	COMOB	RV	2018	425–445	56	Fagerlie 1967
Valentinian III	Italy	Ravenna	COMOB	RV	2018	425–446	58	Fagerlie 1967
Valentinian III	Italy	Ravenna	COMOB	RV	2018	425–447	59	Fagerlie 1967
Valentinian III	Italy	Ravenna	COMOB	RV	2018	425–448	60	Fagerlie 1967
Galla Placidia	Italy	Ravenna	COMOB	RV	2021	425–426	335	Fischer 2020
Theodosius II	Barbaricum	Imitation Type 2.1	–	–	–	431–	277	Fischer 2021
Theodosius II	East	Constantinople	CONOB	–	257	431–434	220	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	Alpha	257	431–434	222	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	Gamma	257	431–434	233	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	Delta	257	431–434	237	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	Delta	257	431–434	240	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	Zeta	257	431–434	253	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	Iota	257	431–434	263	Fagerlie 1967
Valentinian III	Italy	Rome	COMOB	RM	2015	440–455	40	Fagerlie 1967
Valentinian III	Italy	Rome	COMOB	RM	2015	440–456	46	Fagerlie 1967
Valentinian III	Italy	Rome	COMOB	RM	2015	440–457	49	Fagerlie 1967
Valentinian III	Italy	Rome	COMOB	RM	2015	440–458	50	Fagerlie 1967
Theodosius II	Barbaricum	Imitation Type 2.2	–	–	–	441–	346	Fischer 2021
Theodosius II	Barbaricum	Imitation Type 2.2	–	–	–	441–	347	Fischer 2021
Theodosius II	East	Constantinople	CONOB	–	285	441–447	272	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	–	285	441–447	276	Fagerlie 1967
Theodosius II	East	Constantinople	CONOB	–	285	441–447	278	Fagerlie 1967
Theodosius II	East	Constantinople	COMOB	–	292	441–447	299	Fagerlie 1967
Theodosius II	East	Constantinople	COMOB	–	292	441–447	308	Fischer 2020
Theodosius II	East	Constantinople	COMOB	–	292	441–447	319	Fischer 2020
Marcian	East	Constantinople	CONOB	Alpha	510	450–457	355	Fagerlie 1967
Marcian	East	Constantinople	CONOB	Delta	510	450–457	360	Fagerlie 1967
Marcian	East	Thessalonica	TESOB	–	523	450–457	375	Fischer 2020
Marcian	East	Thessalonica	TESOB	–	523	450–457	376	Fischer 2020
Majorian	Gaul	Imitation Type 4a	COMOB	RV	3743	458–	113	Fischer 2020
Majorian	Gaul	Imitation Type 4a	COMOB	RA	3743	458–	114	Fischer 2020
Majorian	Italy	Ravenna	COMOB	RV	3734	458–461	109	Fischer 2020
Majorian	Gaul	Arles	COMOB	AR	2634	458–459	100	Fischer 2020
Libius Severus	Italy	Milan	COMOB	MD	2723	461–465	115	Fagerlie 1967
Libius Severus	Italy	Rome	COMOB	RM (recut from RV)	2704	462–462	132	Facchinetti 2022
Leo I	East	Constantinople	CONOB	Alpha	605	462–466	378	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Alpha	605	462–466	379	Facchinetti 2022
Leo I	East	Constantinople	CONOB	Alpha	605	462–466	380	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Alpha	605	462–466	384	Fagerlie 1967

cont. Table 1. The Åby hoard

Ruler	Region	Mint	Mint mark	Officina	RIC X	Chronology	Fagerlie cat. no.	Reference
Leo I	East	Constantinople	CONOB	Beta	605	462–466	389	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Beta	605	462–466	407	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Beta	605	462–466	408	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Beta	605	462–466	409	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Delta	605	462–466	410	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Gamma	605	462–466	416	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Gamma	605	462–466	419	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Heta	605	462–466	420	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Delta	605	462–466	429	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Epsilon	605	462–466	435	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Epsilon	605	462–466	441	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Epsilon	605	462–466	442	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Epsilon	605	462–466	443	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Epsilon	605	462–466	444	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Gamma	605	462–466	450	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Sigma	605	462–466	467	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Sigma	605	462–466	470	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Sigma	605	462–466	471	Fagerlie 1967
Leo I	East	Constantinople	CONOB	Sigma	605	462–466	497	Fagerlie 1967
Leo I	East	Constantinople	CONOB	–	605	462–466	504	Fagerlie 1967
Anthemius	Italy	Rome	COMOB	RM	2808	467–468	157	Fischer 2014:120, tab 4.
Anthemius	Italy	Milan	COMOB	MD	2866	467–468	169	Fischer 2014:120, tab 4.
Anthemius	Italy	Ravenna	COMOB	RV	2899	467–468	154	Fischer 2014:120, tab 4.
Leo I	East	Constantinople	CONOB	Theta	630	468–473	475	Fagerlie 1967
Leo II & Zeno	East	Constantinople	CONOB	–	803	473–474	543	Fagerlie 1967
Romulus Augustus	Italy	Milan?	.COMOB.	–	3417	476–476	187	Fagerlie 1967

in Tuscany (Arslan 2015), the Zeccone hoard in Lombardy (Brambilla 1870, Vismara 1998), and the Vedrin hoard in Belgium (Lallemand 1965). To this cluster one may add the small, dispersed hoard of Monasterolo di Brembio, also in Lombardy (Chiaravalle 1994). The latter hoard is important as it is the only recorded case in Italy of a solidus assembly that, just like Åby, combines Gallic pseudo-imperial issues from the early 460's with later issues from Italy and Constantinople.

There have been many rumors circulating about the Åby hoard for a long time. Most of these relate how various locals who supposedly returned to scavenge the find place, and then kept an unknown quantity of solidi for themselves. It is also a known fact that locals in the vicinity have kept solidi from other find places without handing them in – in one case from the neighboring Stenåsa Parish it was still possible for the KMK director Harald Nilsson to document the find with proper weights and measurements, photographs and a plaster cast (Fischer 2019b:344, fig 8).

The Constantinopolitan Solidus Mint from Theodosius II to Leo I

There are two ways to research the background for a new coin find of this magnitude. One path that may soon end up in an impasse is to look for die-links right away. Yet if one fails to find die-links, this has merely proven to be a premature or even futile exercise, and one is back on square one. The methodical path is to seek to grasp the larger picture before one begins to search for die-links. Therefore, in order to situate the new solidus find from Åby in a larger context combining written sources, systematic coin catalogues and archaeological find publications, one has to understand the relative frequency of different solidus types in circulation in the fifth century. It is reasonable to begin with a glance at the largest production site – the imperial mint of Constantinople. There, the solidus production under the 42-year reign of Theodosius II was enormous. It may be regarded as an artistic apex of Late Roman iconographic mass-production in a precious media, gold of the highest imperial dignity.

The imperial iconography was held in deep respect under Theodosius II, see fig 4a. As a result, the die-carvers were skilled and maintained high standards in the workshops over many decades. There is relatively little typological variation over time from the very first solidi issued by his father Arcadius honoring young Theodosius II as the third ranking and most junior Augustus in 402 to his death in 450. Constantinopolitan solidi were not produced in a regulated annual output during the fifth century, but in spurts as dictated by immediate needs. The production of solidi had to do with politics, not least because of the large Hunnic tributes that arrived in Panonnia, which motivated a very large output of solidi commemorating the seventeenth consulate of Theodosius II, as evident in the Szikanacs hoard from Hungary (1439 solidi, tpq 443, Birò-Sey 1976).



Fig 4a-c. Stylistic continuity. Obverse iconography from the late reign of Theodosius II and the early reign of Marcian (Fagerlie hoard 99 Åby, cat. No. 299 and 355) compared to the new solidus find.

Besides the Hunnic tributes, one must emphasize the very substantial subsidies shipped to Italy during several military campaigns (Fischer & López Sánchez 2016). The East Roman war effort in Italy was led by the warlord



Fig 5. The Missorium of Aspar. Museo Nazionale, Florence.

Aspar (c. 401–471) who served as West Roman consul in 434 (Zaccagnino et al 2012), see fig 5 – a depiction of his consular missorium. Aspar rotated back to Constantinople, climbing to the top ranks there. Subsidies to Italy continued under Aspar’s successor there, the West Roman general Aetius (c. 390–454). The strong element of East Roman gold reaching the Roman West, only to end up in barbarian hands, is amply demonstrated by the composition of the Bína hoard from Slovakia (108 solidi, tpq 445, Kolníková 1968). The Bína hoard is located on the barbarian foothills just north of Pannonia and the Danubian limes. The assembly is an eclectic mix of East Roman subsidies in the shape of 44 solidi from Constantinople and Thessalonica, together with 62 West Roman issues from Italy (and two barbarous imitations), as detailed by Grierson & Mays (1992:279–280, tab. 43).

While there are many recorded die-identical chains of solidi for Theodosius II in both the Bína and the Szikancz hoards, there must have been an immense production of dies in the imperial mint under his reign. Many of the recorded solidus dies are still known only from single specimens. We must accept that we do not know what happened to all the dies, except that some were recycled much later, resulting in quite unexpected mules. The typochronology and the

distribution pattern of the vast solidus issues for Theodosius II are generally well understood, with a few exceptional exceptions – in particular the use of both CONOB and COMOB as mintmarks. A summary of the lengthy but inconclusive scholarly discussion on this matter is provided by Fischer (2020:29). We know where large, recorded hoards with solidi for Theodosius II have been found. We can also explain what types for Theodosius II appear in which solidus hoards and why this is the case. The distribution pattern is not contradictory, as earlier solidus hoards generally have more of the early types than do the later solidus hoards (Kolníková 1968, Birò-Sey 1976, Gorini 1979, Fischer & López Sánchez 2016, Ivanišević 2021). Above all, there is a clear albeit slow stylistic development of the obverse imperial portrait and legend for Theodosius II.

There is something of a linear progression of iconographic style and legend under Theodosius II from one major issue to the next. This progressive development can be traced in several places on the obverse, especially the crest of the helmet, the striated ribbons of the cuirass and the curvature of the flying ribbons at the back of the helmet. Moreover, the structure of the obverse legend changes, with middle letters of Theodosius being placed differently in the two largest issues, the VOT XXX from 431–434 and IMP XXXXII of 441–447. This relative clarity is a helpful comparison when it comes to the solidus issues for Marcian, which are far less well understood in terms of typochronology and distribution, note the discussion in Fischer (2020a:37–38). A similar problem hampers our understanding of the solidus issues under the early reign of Leo I 457–462, until the shift from the earlier solidus type RIC X 605, see fig 6a, to the later type RIC X 630, see fig 6b, in the period 466–468.

Under Marcian, the picture is much less clear than during the reign of Theodosius II. Written sources indicate that Marcian refused to pay Hunnic tributes and that he supposedly left behind a very rich treasury after he died in 457 (Fortescue 1910). But these claims seem to have no direct bearing on our understanding of the solidus production in Constantinople 450–457. A case in point, it is uncertain if solidi for Marcian with an officina mark on the reverse precede those without officina marks or vice versa (Fischer 2020:37). Die-linked solidi for Marcian are far less common than those for Theodosius II, despite the total known quantity for Marcian being more infrequent than those for Theodosius II.



Fig 6a. Early obverse type RIC X 605. Åby hoard, Fagerlie no. 470. SHM.



Fig 6b. Late obverse type RIC X 630. Åby hoard, Fagerlie no. 475. SHM.

There could be several explanations for this, including a possible policy of melting down solidi returning to the treasury in the form of taxes.

From a political perspective, the distribution of solidi to the West Roman client-state under Marcian must have been quite complicated. Marcian was not recognized as co-emperor by the western senior Augustus Valentinian III (425–455) until 452 and, conversely, Marcian may well never have formally acknowledged the western usurpers Petronius Maximus (455), Avitus (455–456) and Majorian (457–461) as legitimate co-emperors even if they may have received military aid or subsidies. This means that there probably was a hiatus in the supply chain of solidi from Constantinople to Italy in 455–457 or at least only sporadic shipments.

Financial prudence was called for in any case. There would have been no reason for Marcian to send money to Valentinian III before he officially recognized Marcian's authority in the East. Similarly, the subsequent three usurpers Petronius Maximus, Avitus and Majorian were all relatively short-lived rulers. There was no urgent need for the Great Palace to give them legitimacy as it was blatantly obvious that the real ruler behind them was the West Roman *magister militum* and *patricius* Flavius Ricimer (c. 419–472). A barbarian prince raised at various royal courts in southern Gaul, Ricimer had become Aspar's counterpart in Italy after Valentinian's murder of Aetius in 454 (MacGeorge 2002). Ricimer served as West Roman consul in 459, two years after the first solidi for Leo I were struck. In a rare, engraved image from precisely this period, Ricimer is depicted wearing full consular regalia on his seal ring (Delbrueck 1929, Spier 2007, Villela-Petit 2021), see fig 7. The Latin inscription on Ricimer's seal ring sends a very personal message: RICIMER VINCAS ("Ricimer shall be victorious"). There could be no case of mistaken identity – a barbarian warlord of the same quality as Aspar had come to stand between the Great Palace and its urge to exercise political control over Italy.



Fig 7. The consular seal ring of Ricimer, c. 459. Bibliothèque Nationale de France, Paris.

At least Avitus and Majorian (or rather Ricimer) may have chosen to strike their solidi in the name of Marcian, possibly to compensate for the dearth of new Constantinopolitan issues. RIC X 2301 was issued in Ravenna and RIC X 2304 in Milan, cities that came under the control of Ricimer by 456. Whenever the East Roman supply dried up, Ricimer was no stranger to using unorthodox methods to produce his own solidi. As demonstrated by several hundred coins belonging to different issues in the Como hoard, Ricimer ordered goldsmiths

into the service of the various Italian mints under his control where they had to improvise various methods such as using local gold sand together with scrap gold and recycled solidi, while also cutting the flans with iron scissors (Cucina & Facchinetti 2025). It follows that the distribution pattern of Constantinopolitan solidi for Marcian, that can be reconstructed from various well-recorded hoards in Italy and Scandinavia, is very uneven. Again, an important piece of evidence is offered by the Como hoard, which contains a small cluster of die-identical and die-linked solidi of type RIC X 510 that must have arrived together in Italy in the late 450's or early 460's (Facchinetti 2022:151–152, tab. 28-29). Similarly, the very unusual RIC X 523 die-linked specimens of Thessalonican issues for Marcian connecting Åby (Fagerlie 1967, no. 375–376) and San Mamiliano (Arslan 2015, cat. no. 91) are probably from a similar payment, see table 1.

Systematic Catalogues as Comparative Material

During the initial assessment of the new solidus find in April 2025, it became apparent that the obverse presented a familiar, yet surprising iconography combined with an unusual disposition of an otherwise perfectly standardized legend. Similarly, the reverse while being perfectly normal for a solidus of the early- to mid-fifth century, was also very unusual as it would not appear together with the obverse for Leo I. This did not add up right away. Where to look for something similar? There are two main ways to identify or categorize a solidus –you either compare it to a picture or description in a systematic catalogue or you try to find something similar in published finds.

There are four main systematic catalogues for fifth century solidi struck in Constantinople and Thessalonica (Hahn 1989, Grierson & Mays 1992, Kent 1994, Depeyrot 1996). It should be noted that there is no proper historiographical study of how these catalogues came about, although this would be very helpful to guide future generations of numismatists. The first thing one may note is that they all appeared within a relatively brief seven-year period 1989–1996. To any careful reader it soon becomes obvious that there must have been a race at the time to be the first in print and/or to invent a systematic order that would somehow stifle the use of rival catalogues. In addition, there is a very large and richly illustrated French language catalogue of Western solidi covering the period 455–489 by the autodidact collector Guy Lacam (1983). This is a peculiar work full of rare specimens coupled with imaginative interpretations.

One of the primary distinctions that can be found in all four catalogues is the strict separation between consular and non-consular solidi. This is important, because many fifth century consular solidi were issued quite early in the

reigns of various emperors, as a sign of institutionalized legitimacy and continuity. But consular solidi were rarely the very first issues, they only came into being once the dust had settled because they were usually connected to various political rituals which involved ceremonial dress and processions. This means that consular solidi can be used for comparative chronology of other coins, identifying specific traits that either develop or disappear in subsequent issues during a given imperial reign.

Consular solidi typically portray the bearded emperor standing facing left wearing a *chlamys* or a *trabea triumphalis*, a ceremonial checkered robe. The consular solidi were only issued for specific occasions and are far rarer than regular non-consular solidi that depict the so-called “emperor diademed, helmeted, and cuirassed three-quarter facing bust, holding spear over shoulder and shield decorated with horseman”. A case in point, there is only one recorded find of a consular solidus RIC X 623 for Leo I in Scandinavia (SHM 426), a looped specimen from Gothem Parish, Gotland, Sweden (Fischer 2019b:343–344, fig 7). The latter is die-linked to several RIC X 622 specimens in the Como hoard (Facchinetti 2022:155, tab. 33, fig. 16).

The first of the four catalogues to appear in print was that of the Austrian scholar Wolfgang Hahn (1989). Published in German, it did not include many comparisons with West Roman solidi, and some quite important Constantinopolitan solidus types are missing. Hahn (1989:9) explicitly motivated the publication in that he did not wish to compete with the forthcoming RIC X study below, but that he found that there were too many numismatic deficiencies in the fundamentally important study of Hendy (1985), a seminal work on the monetary economy of the Byzantine world. Hahn presents only one single non-consular solidus from Constantinople for Leo I, a typical RIC X 605 (Hahn 1989, Taf. 11, no. 2a).

The second catalogue was the DOC 1, by the Irish-born scholar Philip Grierson assisted by Melinda Mays (1992). This is a catalogue covering the years 392–491 of the Dumbarton Oaks Collection in Washington, DC. The collection was one of many that had been curated by Grierson for several years although a DOC 2 catalogue of later Byzantine coins from the period 491–602 had already been published (Bellinger 1966). Many of the West Roman specimens included in the DOC 1 catalogue previously belonged to the Italian numismatist Baron Oscar Ulrich-Bansa (1949), since Grierson had assembled substantial parts of the DOC 1 collection through various acquisitions prior to the publication. In total, the DOC 1 plates depict no less than 14 different non-consular solidi from Constantinople for Leo I, and five more for Leo I & Leo Caesar (whom Grierson identifies as Aspar’s third son Patricius, a junior Caesar in 470–471), and Leo I & Leo II Augustus.

Despite lining up such an impressive array of very different die-types in the DOC 1 catalogue, Grierson never managed to create a linear typochronology for the solidus coinage of Leo I. The argumentation on the chronology of solidi issued in 457–475 in the DOC 1 catalogue is sometimes easily contradicted by means of empirical evidence, especially when compared to the RIC X (see below). Similarly, Grierson's unwillingness to study the Scandinavian material in detail means that solidus finds from Scandinavia published after 1983 are not included in Grierson & Mays (1992). Grierson merely remarked that the Scandinavian material had already been fully studied by Kyhlberg (1986). Finally, a curious matter is that Grierson donated no less than five Constantinopolitan solidi for Leo I to the Fitzwilliam Museum in 1968 (Fischer & Popescu 2025:21, tab. 2; 29). There seems to be no provenance, rather the donation of solidi reinforces the impression that Grierson had begun a study of the solidi of Leo I but then rid himself of an incomplete and abandoned research problem many decades before Kent published a solution to it.

The third catalogue was the RIC X, that is, the tenth volume of the Roman Imperial Coinage published by the British scholar John P. C. Kent (1994), covering the period 395–491. Kent's magnum opus was part of a long tradition, and he prepared the publication for many decades. The structure of the RIC X was mainly based on the collections of the British Museum (BM) but also included coins from many other collections, not least the KMK in Stockholm. Unsurprisingly, this is by far the most complete catalogue among the four. By comparison, Kent was frugal with photographic presentation – the RIC X depicts only four different non-consular solidi from Constantinople for Leo I, three RIC X 605 and one RIC X 630.

Kent was the first scholar to provide a linear and coherent typochronology for the solidi issued under Leo I up to the reign of Zeno. Alas, Kent (1994) often used Scandinavian find coins as plate coins but did not bother to inform the reader of the Scandinavian hoards at all. In so far, the RIC X is highly problematic in that Scandinavian find coins are a plenty all over the catalogue but rarely identified as such. Still, much of Kent's overall typochronology appears justified given the Scandinavian hoard material, not least regarding Öland. There is a clear division between the Leo I types in the Ölandic hoards – RIC X 630 is rare in the hoards with many early western solidi and vice versa – RIC X 630 is more frequent in hoards with later western solidi.

Fourth, there was Georges Depeyrot's catalogue published in French (Depeyrot 1996). Its outline remains very ambitious as the catalogue seeks to enumerate all Late Roman gold coinage from Constantine I to Zeno in the period 306–491 – the output from every active solidus mint across the Late Roman world. The material is mainly based on Depeyrot's own extensive research in various museum

collections in Europe and the United States. The vast and generalizing scope of this catalogue makes it an imprecise dating tool for scholarly numismatists and archaeologist specializing in specific time periods or die-linked issues, while enabling collectors and auction houses an easy way of categorizing decontextualized solidi without too much nit-picking. A case in point, Depeyrot (1996, Pl 26, no. 93/1) only depicts one non-consular solidus from Constantinople for Leo I, a RIC X 630.

From a study of these four catalogues (and that of Lacam 1983), it could be deduced that the new solidus find from Åby does not look like most solidi issued for Leo I or Marcian (450–457) – the obverse portrait and the letters of the legend rather look like those of a very late issue for Theodosius II (408–450), typically the IMP XXXXII COS XVII. This was a commemorative consular issue struck c. 441–447 during the Hunnic tributes, note the early study by Kent (1992), further discussed by Fischer (2020:28–29). In particular, the first part of the obverse legend D N LEO PE carefully avoids the crest of the helmet, while most RIC X 605 and RIC X 630 issues for Leo I have the final E inside the feathers of the crest, see figs 1a, 6a-b. The new solidus find was thus struck by a recut older die.

Hoard Publications as Comparative Material

Unsurprisingly, it turned out that the best parallels to the new solidus find are from Scandinavia, one each from Gotland and Bornholm. This is not mere coincidence. As a rule with very few exceptions, only recorded finds from South Scandinavia and Italy seem to match up in terms of strict typological distribution. When the Italian numismatists Lucrezia Ungaro (1985) and Ermanno A. Arslan (1987) used Fagerlie's 1967 Scandinavian catalogue as their primary reference in their respective publication of the hoards of Casa delle Vestali (397 solidi, tpq 472) and Braone (9 solidi, tpq 491), they were ahead of their time without knowing it. The San Mamiliano and Como hoards were both still waiting to be discovered in 2004 and 2018.

Unfortunately, the arrival of the four systematic catalogues 1989–1996 in English, French and German had a devastating effect for the comparative research tracking the Roman payments to various barbarian political entities or military units. The decontextualized catalogues meant that the very successful comparative Scandinavian-Italian approach of focusing on find coins momentarily disappeared in Italian numismatics after 1989, being replaced mainly by the RIC X and to a lesser extent the DOC 1. Therefore, the new and extremely important catalogues of Arslan (2015) and Facchinetti (2022) are not matched with Fagerlie (1967) yet.

Recut Late Roman Legends

One can explain the strange appearance of the obverse legend on the new solidus find by identifying a first and a second die-cutter, the latter having recut the original legend produced by the former. The fact that recut dies were used to strike Late Roman imperial gold coinage was identified by numismatists already in the early twentieth century, notably when Baldwin Brett (1933) could demonstrate that a coin (BM 1889,0710.12) was die-identical to a coin with a different legend, see RIC VII Ticinum 34.

Recut dies are by no means infrequent in the mid- to late fifth century solidus corpus. But there is a marked contrast between Constantinople and Italy when it comes to recut solidus dies. While there are West Roman mules from the three mints in Italy, Milan, Ravenna and Rome, they rarely used much older reverse dies anew, more common was the tendency to recut the reverse from RV (Ravenna) into RM (Rome) or vice versa. This had to do with the fact that the imperial mint seems to have followed the path of the West Roman emperor, while the East Roman emperor in Constantinople was expected to stay put in the Great Palace, right next to the imperial mint. Often, the West Roman imperial administration chose to move only the obverse die from one mint to another mint where a local die-cutter would produce a new reverse die that differed from the first one. But there is an interesting development during the reign of Leo I, when the reign of his co-emperor Anthemius 467–472 in Italy becomes rather different from the preceding or ensuing periods altogether. Especially the output from the Rome mint which was under the control of Anthemius rather than the warlord Ricimer must be seen in the light of the reorganization of the Constantinople mint after 466, which meant that the Rome mint basically worked as a satellite mint under Constantinople.

In the Roman West, the reverse mintmarks on the solidi for Valentinian III (425–455), Libius Severus (461–465), Anthemius (467–472), and Romulus Augustus (475–476) were changed as the dies were transferred back and forth between Ravenna and Rome. In the case of Anthemius, reverse Rome dies were very frequently recut with additions of serified stars and colons, possibly as a method to keep track of different batches of the RIC X 2831–2835 issues from the period 468–472. The phenomenon of recutting solidus dies is far less frequent in the Roman East, however. This regularity says a lot about the relative political stability in Constantinople compared to the turbulent political scene of late fifth century Italy – one can thus only expect anomalies from the Constantinople mint at the onset of new reigns as brief intermittent episodes.

The new solidus is not the first recorded case of a solidus for Leo I produced from a recut die, but it is probably the earliest. Kent (1994:279, 285) identified that a consular issue RIC X 603 die for Leo I had been recut from a RIC X 503

die produced for Marcian (Kent 1994: Sale 121.401). Kent dated the recut die to early 458, that is, the first year of the first consulate of Leo I. Two other cases of recut Constantinopolitan solidus dies that are connected to political urgency were also identified already in 1994 by Kent in the RIC X. Both are decontextualized coins.

The first is a RIC X 803 solidus issued for Leo II and Zeno (473–474), formerly of the P. D. Whitting Collection, now kept in the Barber Institute at the University of Birmingham (BIRBI-LR0624), see Hahn (1989: Taf. 11, no. 1c) and the note in RIC X, Kent (1994:297). The die used to strike this specimen first had an obverse legend for Leo I that was then recut into a new one for his grandson Leo II and son-in-law Zeno, presumably right after Zeno could impose himself as the real ruler sometime after the death of Leo I on January 18, 474. For obvious reasons, the acronym PERPET was shortened into a laconic PP to fit the limited space already filled up by the new legend D N LEO ET ZENO. While the acronym was soon transformed into PERP for Zeno, the shorter PP was later reemployed in obverse legends for Zeno's successor Anastasius I (491–518), who had a rather long first name. The second recut die, also identified by Kent (1994:299), is a RIC X 902 for Zeno (Kent 1994: Sale 121.402). This obverse die was recut from a RIC X 639. This latter solidus is somewhat surprising, given that the reverse die is a VOT XX for Leo I, but it would seem reasonable that it was the iconographic motif of the standing emperor that mattered the most.

Reading the Obverse Legend

A key feature of the new solidus find is the unusual disposition of the obverse legend. It is complete but the distribution of the letters looks very different from the regular issues for Leo I. Below follows an explanation as to how the original legend that once spelled out D N MARCIA – NVS P F AVG was transformed into a much shorter new legend that came to be standardized: D N LEO PE – RPET AVG. The first letter D is original, placed near the thumb by the first die-cutter. The second letter N is garbled, as the second die-cutter has been forced to deal with the following M in the first legend, that had to be transformed. This area is marked by several uneven protrusions, showing that the recut die was not properly polished or shaved down. The third letter L has been placed on top of the second main staff of the original M and the triangular-shaped A. The fourth letter E has been placed on top of the R. The fifth letter O has been placed on top of the original triangular-shaped C, a clear indication that this is indeed a recut die for Marcian. The sixth letter P has been placed on top of the original I, where the lower serif is still visible at the bottom. After the seventh letter E, there is a void where the surface has been evened out by the second die-cutter. The small

triangular A near the crest of the helmet has thus disappeared, although one may discern the left foot of the A inside the seventh letter E. The eight letter R has been placed on top of the original N. The ninth letter P has been placed on top of the original V. The E and the T have been spaced at a slightly longer distance. The last letters AVG, just like the first letter D, are all original.

Interpreting the Obverse Legend

The comparative study of the new solidus together with the written accounts of the coronation of Leo I further discussed below, allows for an understanding of how one should interpret the obverse legend. The conclusions would seem to cast doubt on the claim by Hahn (1989) that the new obverse legend for Leo I was chosen simply because a hypothetical legend D N LEO P F AVG would have been too short: "Wegen der Kürze des Kaisernamens ist beim Regierungsantritt Leos I. die Titulatur von bisherigen P(ius Felix) zum Perp(etuus) geändert worden und bleibt so bei den nachfolgenden Ostkaisern." (Hahn 1989:40). Taken seriously, this line of argumentation is quite difficult to accept for several reasons, but one should also note that none of the other three catalogues offer any explanation for the sudden appearance of the new obverse legend at all.

First, men of consequence in Late Roman society normally had several names and titles, Aspar being a case in point, see fig 5. If these men for some reason had only one or several strange barbarian names before entering the political limelight, they would typically adopt new ones. A very common adopted name was the Latin first name Flavius, notably used by Aspar and Ricimer, the two main warlords of the mid-fifth century. Many of the fifth century Roman emperors would sometimes include several of their names either in full or as acronyms. Valentinian III (425–455) used both PL and PLA for his first name Placidus while Majorian (457–461) used both IVL and IVLIVS for his first name Julius. If the people surrounding the new emperor Leo I had wanted to retain the acronyms P F AVG with only five letters, the die-cutters of the imperial mint could have added the acronym FL or FLA as in Flavius as an initial first name and possibly also VAL as in Valerius as a second name after the first set of acronyms D N (Dominus Noster). But this was evidently not the important matter here.

Second, one must emphasize that the earliest recorded fifth century coin legends using an acronym for the Latin title Perpetuus are not from Constantinople. Instead, the first cases are West Roman solidus issues for the Gallo-Roman usurper Avitus (RIC X 2401–03) and tremisses in the name of the senior Augustus Marcian (RIC X 2305) but retaining the old title as well: PER P F AVG. These were struck in Arles and Milan in the very short period from 9 July 455 to 17 October 456, before the deposed Avitus mysteriously died in early 457 while

in captivity under his successor Majorian.

Third, the recent discovery in 2018 of no less than 14 solidi for Avitus (Facchinetti 2022:153, tab 31, fig 14) out of a total 1,000 in the Como hoard (tpq 472) shows that there was a new titular approach in the Roman West by 456, that is, well before the death of Marcian. This odd timing is probably not a mere coincidence or serendipity. There is reason to believe that Aspar may have wanted his new emperor Leo I to claim a future monopoly on this innovative title while also keeping any future West Roman emperor or usurper at a comfortable distance. Aspar's attitude was probably not lost on Ricimer who during the reign of his puppet Libius Severus (461–465) issued several series of solidi in Milan, Ravenna and Rome with the new title fully spelled out: D N LEO PERPETVVS (Bruni 2022). This pragmatic approach can be demonstrated by the well-preserved RIC X 2518 specimen from Sandby in Högby Parish, Öland (Fagerlie 1967, hoard 70a, no. 535), see fig. 8a-b.

Note also that an acronym PERP on West Roman coin legends for West Roman emperors from the three imperial mints Milan, Ravenna and Rome in Italy would not appear until the reign of Leo's direct appointee Anthemius in 467–472, and only after the titles P F AVG had been used first. Once Anthemius was killed in Rome by Ricimer's rebellious troops, the acronym PERP disappeared again under Olybrius (472–473) and Glycerius (473–474) until the reign of Julius Nepos in 474–475, who used the acronym PERP for issues in the name of the senior Augustus, Zeno, while only using P F AVG for himself.

Finally, Hahn's claim that the title Perpetuus would continuously remain in use in all future imperial coin legends issued in Constantinople is incorrect. In the case of the Isaurian military leader Tarasikodissa, that is, emperor Zeno (474–476, 476–491), he chose the succinct Greek name Zeno. This may have been because Tarasikodissa sought to appear connected to the unfortunate Flavius Zeno, an Isaurian general executed under Marcian in the 450's. But already in c. 473–477, Zeno was somehow involved with issuing solidi with the obverse legend D N ZENO ET LEO NOV CAES (RIC X 906, Hahn 1989, Pl. 12 no. 6a-b). This was a lengthy and very different political message that managed to reach far into the Roman West by means of subsidies. The type has been known in numismatic literature since the late seventeenth century. Indeed, there are



Fig 8a-b. The West Roman Leo PERPETVVS, RIC X 2518. Sandby i Högby hoard 70, Fagerlie no 535. SHM.

recorded find coins in the Reggio-Emilia hoard (60 solidi, tpq 476, Degani 1959, Grierson & Mays 1992:288–289), the Childeric hoard of c. 120 solidi buried 481/482 (Chifletius 1655, Fischer & Lind 2015) and the Gernetto hoard (273 solidi, tpq 491, De Rosmini 1820, Prohászka 2009, Demo 2025:276–277, fn 26).

The precise chronology and the exact meaning of this unusual legend are still unclear. Ulrich-Bansa (1942:10) argued that the type dated to late 473 and that the meaning was that Leo I still ruled as Augustus while his grandson Leo II and his son-in-law Zeno were both newly appointed Caesars. Kent (1959) first argued that this meant that both Zeno and Leo were new Caesars, leaving the role of the Augustus unspecified. It is interesting to note that the BM 1956, 1207.1 specimen of RIC X 906 was acquired by the British Museum in 1956 from the personal collection of Grierson, see fig 9a-b. In his first study of the coin type, Kent (1959) does not bother to mention this specific coin in the BM although he most certainly must have been quite aware of both its existence and provenance already at this point. It does appear forty-five years later in Kent's 1994 RIC X catalogue together with three further specimens from Brussels, New York and an auction sale but still without any mention of Grierson at all. By contrast, Marchant (1851), Croke (1983), and later Kent (1994:116) argued that the issue dated to late 476 or early 477 and that the meaning was that Zeno had accepted Leo Caesar, son of Basiliscus' nephew, the *magister militum* *Armatas*, as a junior colleague. Zeno then got rid of both *Armatas* and the latter's son Leo Caesar and went back to being *Perpetuus* alone. This view is accepted also by Hahn (1989:50–51) but without any acknowledgment that the RIC X 906 solidus type sports a legend that invalidates his other claims above.

In sum, the comparison with other solidus legends allows one to comfortably assume that the title *Perpetuus* was first used on solidi struck in Gaul and Italy in 455–456 and that the title was by no means mandatory on Constantinopolitan solidus coinage until after 473–477. One must therefore interpret the first appearance of the obverse legend in Constantinople in early 457 as a significant innovation. It follows that it was probably related to the various new rituals surrounding the accession of Leo I, see below.



Fig 9a-b. BM 1956, 1207.1. RIC X 906.

The Recycled Reverse from Åby

The reverse is what makes this new solidus find a so-called “mule”, an odd mixture of what are normally separate dies. It is from officina Epsilon, and the Greek officina letter is small, proportional and beautifully executed. The sublime carving of the symmetric, rounded serified letters in the reverse legend has nothing in common with the rather sloppy craftsmanship from the late reign of Marcian and most of the reign of Leo I that resulted in triangular-shaped letters and a cuneiform-like E. On the contrary, the overall impression is that this is a fine piece of art from an earlier period. The most likely explanation is that the reverse was struck from a recycled die dating to the reign of Theodosius II or the very early reign of Marcian, see fig 4a-c. It differs considerably to the Sandegård reverse from officina Delta which is die-linked to Fagerlie hoard 164a.

The Obverse Die-link to the Sandegård Hoard on Bornholm

The new coin find has an obverse die-link to one of the four solidi discovered in a hoard by Sandegård, Åker Parish, Sønder herred, Bornholm (NM C 341, Breitenstein 1944:69–70, fig 78), (Fagerlie 1967:211, hoard no. 218, coin no. 428). The hoard (NM C 336–344, Horsnæs 2009, no. 9a) included an imitation for Theodosius II and three solidi for Leo I, one of which is now lost. The other preserved Leo I is a RIC X 619 from Thessalonica, c 462–466. The find also includes one of two parts of a very large gold bracteate IK 324a-b and a half dozen pieces of hack gold. The Åby hoard is thus die-linked by solidi two the very small cluster of only 17 hoards that combine solidi and gold bracteates.

The Sandegård hoard is briefly presented in Breitenstein (1944:fig 77–79), but with only three of the four solidi depicted, see fig 10a-c. A picture of the two gold bracteate fragments and the hack gold is presented in Klindt-Jensen (1957), see fig 10d. A summary is provided by Hauck (1985: 160–161, IK 324, Taf. 105–106) including two reconstructed drawings of the gold bracteate fragments. Breitenstein (1944:69–70) cites Amtman Vedel’s report, that the Sandegård hoard was discovered 50 cm below the topsoil by two Swedish farmhands in 1869 in an area where the soil was littered with burnt bones and pottery. The fact that there is a cut-up gold bracteate, while two Leo I coins are the final coins in the assembly, of which one dates to the very early reign of Leo I, one may propose a deposition around c. 475–480. In addition, there are the likely remains of a later hoard from c. 480–500 from an area of 15x15 in Sandegård that has since the late 1980’s yielded four solidi ranging from Constantinopolitan issues for Leo I via Libius Severus from a mint in Gaul to Zeno from both Rome and Constantinople (Horsnæs 2009 no. 9b). This shows that the Italian connection to Sandegård went further on than that of Åby. The second cluster of solidi



Fig 10a- c. The Sandegård Hoard.

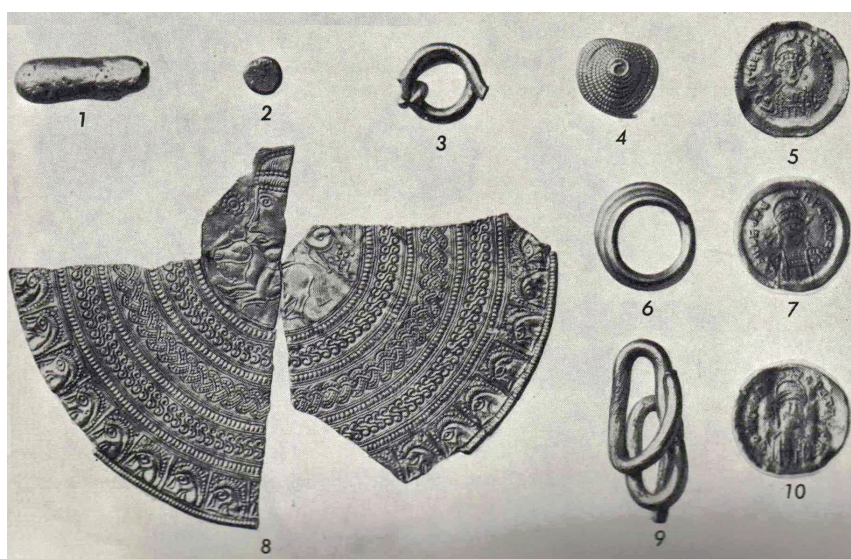


Fig 10d. The Sandegård Hoard.

discovered in Sandegård probably arrived on Bornholm sometime after the Åby hoard had been deposited after 476.

The obverse die-link between the magnate farm Sandegård on Bornholm and Åby is very interesting in that it shows how little we know of the relationship between the large solidus hoard owners and the producers and consumers of the gold bracteates, although there are such examples of mixed hoards in Denmark with die-links to Öland, notably the Rynkeby gård hoard from Funen (Fagerlie 1967, hoard 193, NM C 10038 F.P. 72). It should be noted that since the metal detector was introduced in 1990, over 100 find coins have been registered from Sandegård, including another four solidi. By contrast, there are very few finds surrounding Sandegård, which must have been a very large settlement with few immediate neighbors.

The Sandegård Reverse Die-link to Mästerby on Gotland

The Sandegård specimen (Fagerlie no. 428) is pivotal to the chronology of Leo I in that it has separate obverse and reverse die-links, connecting Bornholm to both Öland and Gotland and two different emissions, see fig 11b. Fagerlie (1967) was the first to identify the reverse die-link of the coin 428 to coin 427 in the Gotlandic single find 164a Mästerby. Fagerlie was also the first to note that the reverse left legend has a faulty sequence VICTRI instead of VICTORI – there are only two solidi for Leo I of this type in Fagerlie’s corpus. Moreover, Fagerlie showed that the officina mark is Delta and not Alpha. I did not first recognize the die-linked obverse from the Fagerlie 1967 plate catalogues, I only discovered the obverse die-link by looking at the better image in Breitenstein (1944) which is otherwise a much inferior catalogue. Fagerlie pl. XIV has a very dusky set of four photos where the emphasis is on the reverse die-link, not the two obverse dies.

The Sandegård no. 428 reverse die coupled with the recycled obverse is a near perfect example of how one can through die-links between three recorded Scandinavian find coins demonstrate the rapid deterioration of artistic skills in



Fig 11a. Åby, the obverse die-link.



Fig 11b. Sandegård, the mule.



Fig 11c. Mästerby, the reverse die-link.

the Constantinople mint in the earliest reign of Leo I before things stabilized. What is interesting is that despite getting the main reverse legend VICTORI wrong, the inexperienced die-cutter achieved one thing – after first misspelling the very first word, he made sure to add the officina Delta at the end of the reverse legend, and thus his work can be traced amongst the thousands preserved solidi for Leo I.

The Mästerby specimen no. 427 is surprisingly intact – listed as in fine condition by Fagerlie. It sports a crudely cut obverse portrait, see fig 11c. The bubbly surface on both obverse and reverse and the crudely cut dies suggest that at this point, perhaps in 458–459, Leo I had run out of old recut dies and new, inferior dies like this one were being introduced. At Mästerby, the older find horizon 164a–d are four separate finds. These range from Theodosius II via Leo I to two solidi for Justin I (518–527), towards the end of the Gotlandic solidus import, long after Öland and Bornholm. Rescue detecting in Mästerby supervised by Majvor Östergren (1991) has yielded more coin finds since that conveniently fill the gaps: one each for Marcian, Leo I, Zeno from Constantinople, and an early Merovingian Period imitation of Anastasius I from Gaul. Given the little wear on the Mästerby specimen, one may assume a rapid arrival and final deposition of Gotland, perhaps already in the mid-460's.

The Björnhovda Mule, RIC X 602

One does not need to cross open water or even go very far from Åby for a further relevant comparison. In fact, the distance is less than 14 kilometers – a brisk three hour walk on foot through the *macchia* of the Alvar wasteland up to the steep slopes of the Mörbylånga Valley on the western side of Öland. There, the Björnhovda hoard from Torslunda Parish is the second largest recorded solidus hoard on the island with some 36 solidi from the period 395–476 (Fagerlie 1967, hoard no. 115). Now, this allows for a comparison – the Björnhovda hoard has a composition that is slightly earlier than the Åby hoard, although it is abundantly clear that it was assembled in northern Italy, too. This relationship is demonstrated by the die-link chart of Öland in Fischer (2017:316), see fig 12. The Björnhovda hoard also has several unusual die-links to the Como hoard, including the archetypical solidi for Leo I, RIC X 605.

Still, the most important individual solidus in the Björnhovda hoard for this discussion is the only known example of RIC X 602. This is yet another strange Constantinopolitan mule for Leo I, combining a new freshly cut obverse die with a much older reverse die for the thirtieth vota of Theodosius II. The latter type was struck in 431–434, see fig 8a-b. This highly unusual specimen was first described in detail by Fagerlie (1967, no. 532) and later included by Kent in the

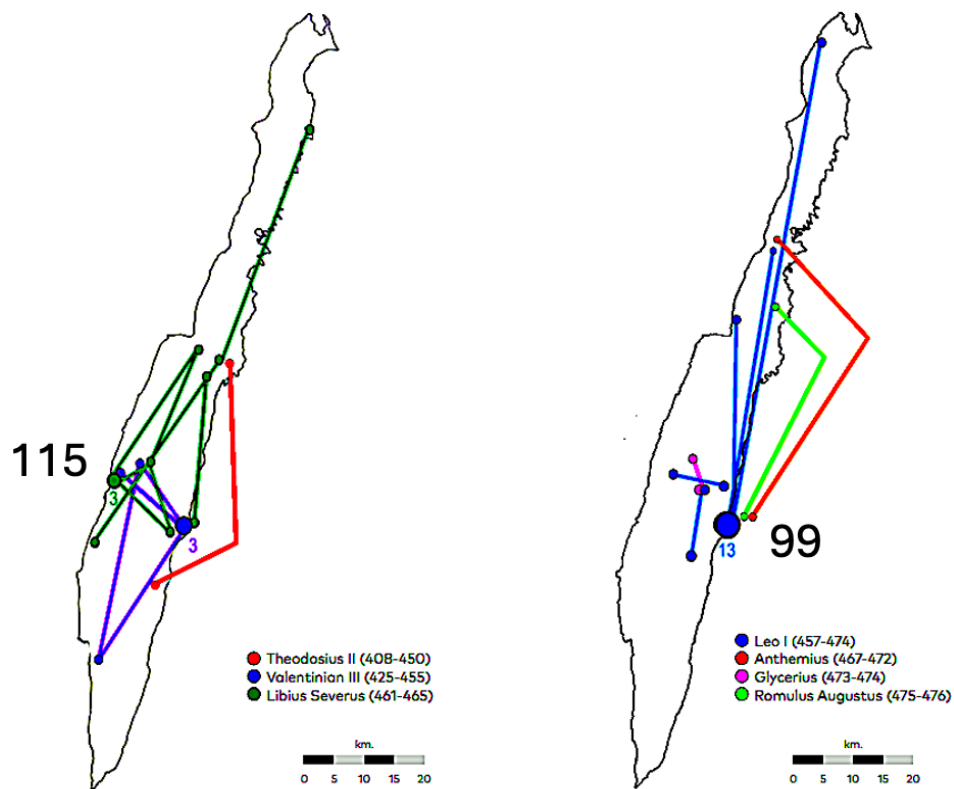


Fig 12. Die-linked solidi on Öland from the two periods 462-465 and 466-476. The first phase is dominated by the Björnhovda hoard 115, the Åby hoard 99 leads the second phase.

RIC X, but with no reference to the Björnhovda hoard itself. The Björnhovda mule can only be explained as a product similar to the new solidus find from Åby. They are both testimony to the urgency, if not desperation, to satisfy the immediate need to provide for rapid expenditure in a moment of full-blown political crisis. For many years, Aspar proved himself a master of brinkmanship on such occasions and the early Leo I mules from Scandinavia are testimony to Aspar's willingness to bend the rules when needed.



Fig 13a-b. Fagerlie hoard 115 Björnhovda, cat. no. 532. RIC X 602 plate coin.

The Accession of the Perpetuus in February 457

In order to understand why the new solidus find from Åby is so important, it is crucial to examine the political circumstances under which the solidus was once produced and how it came to circulate before being finally deposited in Åby. The new solidus may look very strange at first, but this appearance can be explained by means of written sources. The death of Marcian on January 27, 457 implied a huge power vacuum in Constantinople (Croke 1978). For a few days in late January to early February 457, the East Roman empire had no Augustus.

Aspar, *magister militum* and *patricius*, that is, the supreme military commander and highest-ranking government official, was forced to act. After assuring control of the key military units in and around Constantinople, he could concentrate on finding a suitable successor of Roman pedigree. Aspar himself was disqualified due to his barbarian descent, having an Alan father and a Gothic mother, as noted in the more recent contributions by Croke (2005a) and Bleeker (2022:20). The choice fell upon the *comes rei militaris* Leo, an officer from Thrace in his late fifties with no obvious ties to previous imperial rulers, see Stewart (2015:6–8). At the time, Leo was supposedly serving as commander of the *Mattiari* in *Selymbria*, a garrison town on the northern shore Lake Marmara, a few kilometers east of the future Anastasian Wall on the old road *Via Egnatia*.

For the last seven years, Aspar had wielded considerable influence over Marcian who had served as a *domesticus* under both Aspar and his father Ardabur when they lead Theodosius' campaigns in Africa in the 430's before Aspar installed Marcian as emperor. Leo's undistinguished family background allows for the assumption that Leo was, just like Marcian, yet another aging mid-level military bureaucrat that could be controlled by Aspar. This somewhat gerontocratic approach of picking the emperor out of the senior middle management staff were markedly different from that of installing dynastically legitimate but adolescent rulers – especially Theodosius II (408–450) and Valentinian III (425–455), note the pivotal study of McEvoy (2013) on the so-called “child emperors”, beginning with Gratian in 367.

The most obvious candidate to succeed the late Marcian up to now had been his son-in-law Procopius Anthemius, a middle-aged father of three sons and one daughter. He was arguably of imperial descent – his paternal forefather was the usurper Procopius (d. 366), a maternal cousin of Julian the Apostate (356–361). His maternal grandfather Anthemius had served as East Roman consul in 405 and his father had held Aspar's current position as *magister militum per orientem* in 422–425. Anthemius was deliberately skipped over by Aspar.

It is not known if Anthemius participated in the rituals surrounding Leo I's accession. One may assume that Anthemius was somehow assuaged or

threatened into subservience with promises of future compensation. Aspar and Leo I must have honored this agreement because Anthemius would later be given senior military commands on the Balkans in 460–464, before rising to the position as junior Augustus, ruling in Italy from 467 to 472 (Fischer 2014:108–109). Moreover, Anthemius’ son Marcian would serve as consul in 469 and 472. The latter even married Leo’s daughter Leontia in 471 after her first husband Patricius, third son of Aspar, was murdered – possibly at the orders of Anthemius himself.

Fortunately, the chain of events surrounding the accession of Leo I is well recorded in written sources, especially the *Book of Ceremonies* (*De ceremoniis*, I. 91, 410), a work compiled and edited by the Byzantine emperor Constantine VII (905–959). There is plenty of secondary scholarship to consult, early contributions of note are Brightman (1901), and Boak (1919:37–40). More recent contributions are those of Croke (2005a:150–159) and Bleeker (2022:117–118). It is hence possible to reconstruct the procession of Leo I from Campus Martius in Hebdomon to the Great Palace downtown Constantinople, see fig 14. The leading up to the procession began at Campus Martius in Hebdomon. In the mid fifth century, this was a major military base located on Lake Marmara four kilometers west of Constantinople and a day’s march from Selymbria to the west, where Leo I was originally stationed as an officer.

Using Campus Martius as a first staging point towards supreme executive power was probably a quite typical path up to the imperial throne in the Late Roman Empire ever since the proclamation of Valens (364–378) to junior Augustus there in 364. In fact, Campus Martius was also where Aspar had organized for Marcian to be proclaimed emperor in August 450 after the death of Theodosius II. The city center of Hebdomon also housed a large column for Theodosius II. This important monument, and the 1938 excavation of the area around the column is presented in Demangel (1945), including a very emendated and imaginative reconstruction of the major inscription on the plinth of the Theodosian column. A recent assessment of Hebdomon as a major Late Roman/Early Byzantine port is that of Simeonov (2021). Note also that Hebdomon could serve as a last refuge for emperors if needed – in 476, the usurper Basiliscus and his son Marcus were holed up in Campus Martius after having fled the angry mobs of Constantinople and the approaching armies of Zeno.

Leo I was first proclaimed Augustus by two *campiductores*, drillmasters of the troops (for a discussion of the role of these functionaries, see Domínguez Domínguez & Mánchon Gómez 2000). One of them, Bousaligus, took a soldier’s torque or necklace, placing it on the head of Leo as a crown. The second, Olympius, placed another one on Leo’s right arm. In both 450 and 457, it is reasonable to assume that Aspar made sure that the troops stationed there were



Fig 14. A reconstruction of the final part of Leo's *adventus* procession on 7 February 457. The circled three main stops are: The Forum of Constantinian, the Hagia Sophia, the Great Palace.

handsomely rewarded by the trusty campiductores with the available minted gold right away in the shape of a donativa. Then Leo I went to two of the local churches, Papilion, and the church of St John the Baptist, to pray. Soon thereafter, the new emperor embarked on a completely new path that no one had tried before.

After mounting a horse, Leo I made way from Hebdomon towards the Great Palace, a perfectly normal form of an imperial *adventus*. The procession would have gone through the Golden Gate at the southwestern end of the Theodosian Walls. The Golden Gate was first erected in the early 390's and rebuilt in 413 (Bardill 1999). It had served as a key gateway in imperial processions leading from Hebdomon for half a century already. Leo I then proceeded to turn right at the Sigma, continued down the Mese and turned right again at the Forum of the Ox. At some point on the route up to here, the new emperor dismounted his horse and climbed up on a chariot with a senior patricius (that is, Aspar) at his side. Then the procession crossed the Forum of Theodosius. The chariot finally stopped at the Forum of Constantine. Right there, the innovation began in the shape of an unprecedented public walk, different from the indoor rites of the predecessors.

Leo I dismounted the chariot to stand in the open square where a senator (possibly Aspar again) offered him a crown. Leo I subsequently went to the Senate on the northern side of the Forum of Constantine and asked for an acclamation, which he promptly received (*De ceremoniis*, I. 91, 410). Leo was then robed to great acclaim. The next step was to cement the connection to the church inside the city of Constantinople. Wearing the new robe, Leo I thus proceeded on foot to the church of Hagia Sophia and deposited the crown on the altar. He was subsequently coronated there by Anatolius, the patriarch of Constantinople before entering the Great Palace wearing the crown. Interestingly, Anatolius died already 3 July 458, which implied that Aspar and the new emperor were spared of any future troubles with Anatolius, as had often been the case during the reign of Marcian. Note here that previous coronations had not involved these public walks or church blessings. Moreover, the highly unusual and lengthy procession was never repeated. Following the death of Zeno and the accession of Anastasius I in 491, coronations were held in the *kathisma* of the hippodrome (*De ceremoniis* I, 92, 417).

It is obvious that the earliest coinage of Leo I differs greatly from that of his predecessor Marcian, meaning that the regular staff in the imperial mint were not at work when the first dies for Leo I were cut. It follows that there must have been some sort of rupture or hiatus in the imperial mint in the Great Palace. It would then not have been possible for Aspar and Leo I to relay a message from Campus Martius ahead of the coronation procession to strike more coinage for the new emperor. Rather, the much-anticipated arrival of the new emperor at the Great Palace may instead have marked the moment when the immediate orders from the emperor to the minister of finance were dispatched within the palace wall. The new accession path of the senior Augustus, coupled with the idea of asking several different political institutions for their outright consent had to be made manifest for perpetuity. In his function as *comes sacrarum largitionum*, the minister was to activate the various *officinae* of the *Sacra Moneta*, the imperial mint. More cash was needed – and fast. But for some reason, the new ruler was unable to run the imperial mint the way it worked before. This really begs the question as to what happened to the old die-cutters after Marcian died.

Once the stock of *solidi* struck for Theodosius II and Marcian kept in the military base in Hebdomon had been spent on buying loyalty on the path to Hagia Sophia, a new obverse legend was rapidly chosen inside the Great Palace. The new emperor Leo I needed to make manifest a new form of legitimacy that had come into vogue. Leo I was now styled as *Perpetuus*, that is, eternal. Soon, the *solidus* production had to be increased even further to resolve arrear payments and *donativae*. The relatively minor *solidus* mint in Thessalonica would shortly thereafter produce *solidi* for the new ruler from fresh dies, some of

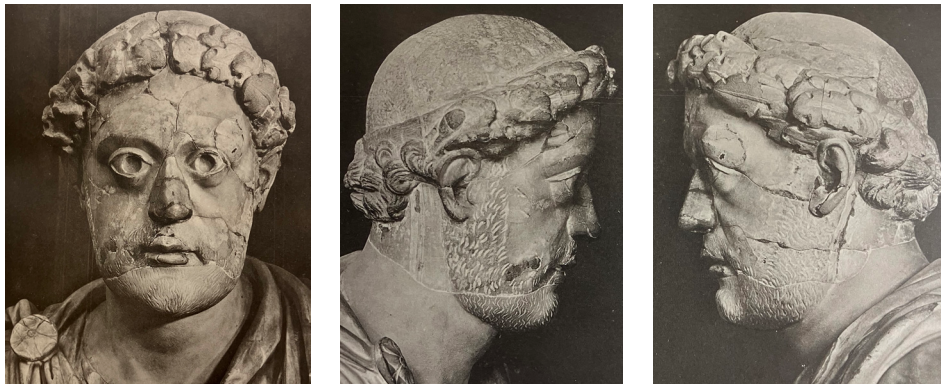


Fig 15a-c. Late 5th century alabaster bust, attributed to Leo I, Louvre Museum.

which also went to Italy and then to Scandinavia.

Within weeks, news reached Italy of the coronation of emperor Leo I. Majorian soon swore allegiance to Leo I and proclaimed himself West Roman co-consul in 458. The subsidies from Constantinople to Italy resumed, and thus the new solidus issue was shipped from the treasury in the Great Palace to Italy, where it reached the hands of Scandinavian mercenaries serving Ricimer. The recycled dies in the Constantinople mint could be discarded after a last resort in early 458 when older consular dies for Marcian were recut and employed one last time. Thus began the reign of Leo I and



Fig 16. Late 5th century marble bust, attributed to Leo I or Anastasius, discovered in Tusculum. Glyptoteket, Copenhagen.

within a few years came the production of RIC X 605 solidi from the new dies that are so characteristic of the Åby and San Mamiliano hoards. Two late fifth century busts, one in the Louvre in Paris (Delbrueck 1929) and the other one in Glyptoteket, Copenhagen (Johansen 1995), are said to portray Leo I, see fig 15a-c and 16. Even if they prove to be genuine and accurate, the busts do not offer any further insight into this enigmatic personality who ruled for as many as 17 years until 474.

A key element to secure such a long reign must have been the establishment of the Excubitores, Leo's new palace guard formed in c. 460 (Croke 2005b). They were loyal to Leo alone and presumably recruited from Isauria rather than being Aspar's cronies. As for the once omnipotent Aspar, he was accurately portrayed with name and titles already in 434, see fig 5 – a very important piece of evidence of a barbarian warlord wanting to prepare his offspring for the highest position in Roman civilization. It appears likely, however, that Aspar's hold on executive power had already begun to dissipate in the mid-460's when Anthemius and Zeno the Isaurian came to dominate the entourage surrounding Leo I (Stewart 2015:10). The aging emperor Leo I finally decided to get rid of

Aspar and his family in 471 when the question of succession could no longer be avoided. It cannot be excluded that either Anthemius' family or Zeno's Isaurian faction were behind this final strike to prevent Aspar's youngest son Patricius from reaching the imperial throne, as there were new arranged marriages within the imperial family shortly after.

Conclusion

The new solidus find from Åby is an extremely important addition to our limited knowledge of the political economy of the Late Roman world – from the highly remarkable accession of Leo I in Constantinople in February 457 to the late 470's, when the last unit of Ölandic mercenaries rotated back home from service in Italy. Produced in a hurry during a major political crisis in Constantinople, passed on to Italy, dispersed and deposited in Scandinavia. And what more? This is a quite beautiful example of how well-preserved evidence from the periphery of the Baltic may enhance our understanding of events at the center of the Mediterranean.

The new solidus has an obverse die-link to a specimen found in a small gold bracteate hoard on Bornholm that coincidentally has a reverse die-link to a single find from Gotland, allowing us to track connections inside otherwise elusive Romano-barbarian political networks. This shows that earlier typological numismatic research based on museum collections coupled with the deliberate cherry-picking of recorded find coins from Sweden can no longer be regarded as the main viable approach. As demonstrated by this paper, one must consistently prioritize the comparative study of recorded find coins before getting bogged down by the constraints of systematic catalogues of decontextualized coins in collections. The aim must be to connect the archaeological context of find coins to historical events, note the methodological discussion in Fischer & Wood (2020). Recorded solidus finds such as Åby, Mästerby and Sandegård, even if partially incomplete, are far more important clusters of scientific data than single museum curiosities or private collections, despite the latter providing important comparisons (Fischer & Popescu 2025:30).

Much of our current scholarly limitations regarding the historical period in which Late Roman and Early Byzantine solidi played a central role to the development of society are related to the fact that research on this fascinating period is unnecessarily compartmentalized into sometimes competing fiefs. Over time, we have fenced each other off and this is not always helpful. There is the study of the written history of Late Antiquity in various languages, separate or even rival branches of Late Roman and Early Byzantine numismatics – mainly confined to coin collections in museum departments, but also the division between

official and academic archaeology, notably in both Italy and Scandinavia. The new solidus find from Åby emphasizes the urgent need for continuous cooperation between numismatic archaeologists in Scandinavia and Italy. This is the case, as the die-linked solidus hoards in the two regions cannot be explained without each other. Scandinavians and Italians share the same past material culture and thus scholars in both regions must study it together now to save the record for the future.

List of Illustrations

- Fig 1a-b. The new solidus find. Åby hoard 99. Photographs by Martina Cederquist. Courtesy of Kalmar County Administrative Board.
- Fig 2. Solidus finds from Öland. Updated by Fischer (2017) after Herschend (1980). Hoard 115 Björnhovda is on the western shore, while the larger Åby hoard 99 is on the eastern shore.
- Fig 3. Migration Period gold finds from Småland (After Fischer 2023a).
- Fig 4a-c. Stylistic continuity. Obverse iconography from the late reign of Theodosius II and the early reign of Marcian (Fagerlie hoard 99 Åby, cat. No. 299 and 355) compared to the new solidus find. Figs 4a-b photographs by Gabriel Hildebrand, courtesy of SHM. Fig 4c photograph by Martina Cederquist, courtesy of Kalmar County Administrative Board.
- Fig 5. The Missorium of Aspar. Photograph by Failko. Courtesy of Wikimedia Commons.
- Fig 6a. Early obverse type RIC X 605. Fagerlie hoard 99 Åby, cat. No. 409. Photographs by Gabriel Hildebrand, courtesy of SHM.
- Fig 6b. Late obverse type RIC X 630 Fagerlie hoard 99 Åby, cat. No. 475. Photographs by Gabriel Hildebrand, courtesy of SHM.
- Fig 7. The consular seal ring of Ricimer, c. 459. Material: Engraved amethyst. After Delbrueck (1929).
- Fig 8a-b. The West Roman Leo PERPETVVS, RIC X 2518. Fagerlie hoard 70a Sandby i Högb, no. 535. Photographs by Gabriel Hildebrand, courtesy of SHM.
- Fig 9a-b. BM 1956, 1207.1. RIC X 906. Courtesy of the Trustees of the British Museum.
- Fig 10a-d. The Sandegård hoard 216. Fig 4a-c after Breitenstein (1944), fig 10d after Klindt-Jensen (1957).
- Fig 11a-c. The Die-linked coins: Åby hoard 99, Sandegård hoard 216, and Mästerby hoard 164. Fig 11a photograph by Martina Cederquist, courtesy of Kalmar County Administrative Board. Fig 11b after Fagerlie (1967). Fig 11c photograph by Gabriel Hildebrand, courtesy of SHM.
- Fig 12. Die-linked solidi on Öland from the two periods 462-465 and 466-476. After Fischer (2017).
- Fig 13a-b. Fagerlie hoard 115 Björnhovda, cat. no. 532. RIC X 602 plate coin. Photographs by Gabriel Hildebrand, courtesy of SHM.
- Fig 14. A reconstruction of the final part of Leo's adventus procession on 7 February 457. The circled three main stops are: The Forum of Constantine, the Hagia Sophia, the Great Palace. Adapted map from Wikimedia Commons.
- Fig 15a-c. Late 5th century alabaster bust, attributed to Leo I, Louvre Museum. After Delbrueck (1929).
- Fig 16. Late 5th century marble bust, attributed to Leo I or Anastasius, discovered in Tusculum. Glyptoteket Museum, Copenhagen. Older photograph.

Tables

Table 1. The Åby hoard.

REFERENCES

Abbreviations

<i>BIRBI</i>	<i>Birmingham University, Barter Institute.</i>
<i>BM</i>	<i>British Museum, London.</i>
<i>Dnr</i>	<i>Diarienummer (Archival record number).</i>
<i>DOC 1</i>	<i>Dumbarton Oaks Collection. Grierson, P. & Mays, M. 1992. Catalogue of Late Roman Coins in the Dumbarton Oaks Collection and in the Whittemore Collection, Washington: Harvard University Press.</i>
<i>KLM</i>	<i>Kalmar Läns Museum (Kalmar County Museum, Kalmar).</i>
<i>KMK</i>	<i>Kungliga Myntkabinettet (Royal Coin Cabinet, Stockholm).</i>
<i>KVHAA</i>	<i>Kungliga Vitterhets Historie och Antikvitets Akademien (The Royal Swedish Academy of Letters, History and Antiquities, Stockholm).</i>
<i>NM</i>	<i>Nationalmuseet (National Museum of Denmark, Copenhagen).</i>
<i>RAÄ</i>	<i>Riksantikvarieämbetet (National Heritage Board, Stockholm).</i>
<i>RIC VII</i>	<i>Roman Imperial Coinage vol. 7. Constantine and Licinius A.D. 313-337. Bruun, P. M. 1966. London: Spink.</i>
<i>RIC X</i>	<i>Roman Imperial Coinage vol. 10. Kent, J.P.C. 1994. The Roman Imperial Coinage, vol. 10. The divided Empire and the fall of the Western parts A.D. 395-491. London: Spink.</i>
<i>RNS</i>	<i>Royal Numismatic Society, London.</i>
<i>SHM</i>	<i>Statens historiska museum (Swedish History Museum, Stockholm).</i>

Bibliography

- Alfsdotter, C., Papmehl-Dufay, L. & H. Victor. 2018. A moment frozen in time: Evidence of a late fifth-century massacre at Sandby borg. *Antiquity* 92. Pp 421–436.
- Arslan, E.A. 1987. *Il ripostiglio di Braone*, in *La Valcamonica Romana—ricerche e studi*, eds. A. Bettini & F. Rossi, Brescia. Pp 202–209.
- Arslan, E.A. 2015. Alla fine dell'imperio romano d'Occidente. In: Arslan, E. A. & Turchetti, M. A. 2015. *Il ripostiglio di San Mamiliano a Sovana (Gr.) 498 solidi da Onorio a Romolo Augusto*, Spoleto: Centro italiano di studi sull'alto medioevo di Spoleto. Pp 61–123.
- Baldwin Brett, A. 1933. The Aurei and solidi of the Arras hoard. *Numismatic Chronicle* 13, No. 52. Pp 268–348.
- Bardill, J. 1999. The Golden Gate in Constantinople: A Triumphal Arch of Theodosius I. *American Journal of Archaeology*, vol. 103, no. 4. Pp 671–696.
- Bellinger, A. R. 1966. *Catalogue of Byzantine Coins in the Dumbarton and in Whittemore Collection. Vol. 1, Anastasius I to Maurice 491–602*. Washington, DC: Dumbarton Oaks.
- Birò-Sey, K. 1976. A Szikanci V. századi solidus lelet. *Numizmatikai Közlöny* 74–75. Pp 7–19.
- Bleeker, R.A. 2022. *Aspar and the Struggle for the Eastern Roman Empire, AD 421–71*. London: Bloomsbury.
- Boak, A. E. R. 1919. Imperial Coronation Ceremonies of the Fifth and Sixth Centuries. *Harvard Studies in Classical Philology*. 30. Pp 37–47.
- Brambilla, C. 1870. *Altre annotazioni numismatiche*. Pavia.
- Brightman, F. E. 1901. Byzantine Imperial Coronations. *The Journal of Theological Studies* 2. Pp 359–392.
- Bruni, S. 2022. The Gold Coinage of Leo I at Rome between the Death of Severus and the Accession of Anthemius. Die-Study, Chronology, Context and Circulation. *Ancient Numismatics* 3. Pp 9–37.
- Chiaravalle, M. 1994. *Il ripostiglio di Monasterolo Brembio (Milano), 1929* (RMIDoc), Milan.
- Chifletius I. I. 1655. *Anastasis Childerichi I. Francorum regis, sive thesaurus sepulchralis Tornaci Nerviorum, efossus, and commentario illustratus*. Antwerp.
- Croke, B. 1978. The date and circumstances of Marcian's decease, A.D. 457. *Byzantion. Revue Internationale des Études Byzantines* 48. Pp 5–9.
- Croke, B. 1983. Basiliscus, the Boy-Emperor. *Greek, Roman, and Byzantine Studies*. Pp 81–91.
- Croke, B. 2005a. Dynasty and Ethnicity: Emperor Leo I and the Eclipse of Aspar, *Chiron* 35. Pp 147–203.

- Croke, B. 2005b. Leo I and the palace guard. *Byzantion. Revue Internationale des Études Byzantines* 75. Pp 117–151.
- Cucina, C. & Facchinetti, G. M. 2025. The “Treasure of Como” and the Production of Solidi during the Late Roman Empire. *Metalla* Nr. 28.2, 2024. Pp 135–160.
- Degani, M. 1959. *Il tesoro romano-barbarico di Reggio Emilia*. Florence: Edizione Sansoni.
- Delbrueck, R. 1929. *Die Consulardiptychen und verwandte Denkmäler. Studien zur spätantiken Kunstgeschichte* 2, Berlin and Leipzig: De Gruyter.
- Demangel, R. 1945. *Contribution à la topographie d’Hebdomon*. Recherches françaises en Turquie. Fascicule 3. Paris: E. Bocard.
- Demo, Z. 2025. The solidi of Julius Nepos minted in Dalmatia. *Cercetări Arheologice* 32.1. Pp 271–284.
- Depeyrot, G. 1996. *Les Monnaies d’Or de Constantin II à Zenon (337-491)*. Wetteren: Moneta.
- De Rosmini, C. 1820. *Dell’Istoria di Milano*. I–IV. Milan.
- Domínguez Domínguez, J. F. & Manchón Gómez, R. 2000. Recherches sur les mots *campidoctor* et *campiductor* : de l’Antiquité au Moyen Âge tardif. *Archivum Latinitatis Medii Aevi* 58. Pp 5–44.
- Fabech, Ch. & Näsman, U. 2017. *The Sösdala horsemen – and the equestrian elite of fifth century Europe*. Århus: Jutland Archaeological Society.
- Facchinetti, G. M. 2022. *Il Tesoro di Como, Via Diaz 2018*. Notizario del portale numismatico dello stato 16. Rome.
- Fagerlie, J. M. 1967. *Late Roman and Byzantine Solidi found in Sweden and Denmark*. American Numismatic Society Monographs 157, New York.
- Fischer, S. 2014. The solidus hoard of Casa delle Vestali in context. *Opuscula, Annual of the Swedish Institutes at Athens and Rome* 7. Pp 107–127.
- Fischer, S. 2017. The Material Culture of the fifth Century Returning Veterans. In: Ch. Fabech & U. Näsman, (eds). *The Sösdala horsemen – and the equestrian elite of fifth century Europe*, Århus: Jutland Archaeological Society. Pp 313–327.
- Fischer, S. 2019a. From Italy to Scandinavia – the Numismatic Record of the Fall of the Western Empire. In: E.A. Arslan & A. Carile (eds.) *Migrazioni nell’alto medioevo. Atti dell’ LXVI Settimana di studi*, eds. Spoleto: Centro italiano di studi sull’alto medioevo di Spoleto. Pp 805–836.
- Fischer, S. 2019b. Images of Roman and Byzantine Imperial Dress – Inspiration for the Scandinavian Gold Foil Figures? In: A. Pesch & M. Helmbrecht (eds). *Gold foil figures in focus. A Scandinavian find group and related objects and images from ancient and medieval Europe. Schriften des Museums für Archäologie Schloss Gottorf. Ergänzungsreihe Band 14*. Pp 243–261.

- Fischer, S. 2020. The Late Roman and Early Byzantine Solidi of the Stiernstedt Ancient Coin Collection. *Journal of Archaeology & Ancient History* 28. Pp 1–64.
- Fischer, S. 2021. Barbarous imitations in Scandinavian solidus hoards. *Nordisk Numismatisk Årsskrift*. New Series 2. Pp 9–42.
- Fischer, S. 2022a. The Late Roman and Early Byzantine Solidi of Scania & the Lund University History Museum. *Journal of Archaeology & Ancient History* 28. Pp 1–56.
- Fischer, S. 2022b. En östromersk solidus från Store Backe – kejsar Justinianus I och katastrofen år 536. In: M. Henriksson, H. Menander & S. Ström, (eds). *Arkeologi och kulturhistoria i Blekinge*. Karlskrona: Blekinge Museum. Pp 55–56.
- Fischer, S. 2023a. *The Late Roman and Early Byzantine Solidi of Småland*. Stockholm Studies in Late Roman and Early Byzantine Solidus Coinage. Occasional Papers 1.
- Fischer, S. 2023b. The 1971 Aquileia solidus hoard and its relation to Scandinavia. In: B. Callagher & G. Carraro (eds). *Fundmünzen & Co. 30 years of Ancient Coin Finds (VI c. BCE – VIII c. CE). Trieste, April 22nd-23rd, 2022*. Trieste: EUT, Edizioni Università Trieste. Pp 171–179.
- Fischer, S. 2024. The Recurring Problem of Roman Veterans in Migration Period Scandinavia. F. López Sánchez, M. Bueno & D. Martinez Chico, eds. *Coins, Riches and Lands. Paying for military manpower in Antiquity and Early Medieval times*. Oxbow Press, Oxford.
- Fischer, S. & Lind, L. 2015. The Coins in the Grave of King Childeric. *Journal of Archaeology and Ancient History* 14. Pp 1–64.
- Fischer, S., López Sánchez, F. & H. Victor 2011. The 5th Century Hoard of Theodosian solidi from Stora Brunneby, Öland, Sweden. A Result from the LEO Project. *Fornvännen, Journal of Swedish Antiquarian Research* 106. Pp 189–204.
- Fischer, S. & F. López Sánchez, 2016. Subsidies for the Roman West? The Flow of Constantinopolitan Solidi to the Western Empire and Barbaricum. *Opuscula, Annual of the Swedish Institutes at Athens and Rome* 9. Pp 249–269.
- Fischer, S. & Wood, I. N. 2020. Vidracco, Braone and San Lorenzo – Recruitment or dilectio? *Opuscula, Annual of the Swedish Institutes at Athens and Rome* 13. Pp 164–185.
- Fischer, S. & Popescu, A. 2025. *The Lewis Collection of Late Roman Solidi in the Fitzwilliam Museum*. Stockholm Studies in Late Roman and Early Byzantine Solidus Coinage. Occasional Papers 2.
- Fortescue, A. 1910. Marcian. In: *Catholic Encyclopedia*. New York: Robert Appleton Company.

- Gorini, G. 1979. Tre ripostigli monetali dalla regio X. *Archeologia Venetia II*, 1979. Pp 139–144.
- Grierson, P. & Mays, M. 1992. *Catalogue of Late Roman Coins in the Dumbarton Oaks Collection and in the Whittemore Collection*, Washington: Harvard University Press.
- Hahn, W. 1989. *Moneta Imperii Romani-Byzantini. Die Ostprägung des Römischen Reiches im 5. Jahrhundert*. Vienna: Institut für Numismatik und Geldgeschichte der Universität Wien.
- Hauberg, P. 1894. Skandinaviens fund af romersk guld- og sølvmynt før aar 550. *Aarbøger for nordisk oldkyndighed og historie*. Pp 325–376.
- Hendy, M. W. 1985. *Studies in the Byzantine Monetary Economy c.300–1450*. Cambridge: Cambridge University Press.
- Herschend, F. 1980. *Två studier i öländska guldfynd. I. Det myntade guld. II. Det omyntade guld*. Tor 18, Uppsala.
- Hildebrand, H. 1882. *Från äldre tider*. Stockholm: PA Norstedt och söner.
- Hildebrand, H. 1891. Sous d'or Ostrogoths frappés en Pannonie et trouvés en Suède. *Congrès international de numismatique, organise et réuni à Bruxelles, Procès verbaux et mémoires*, Bruxelles 1891. Pp 421–427.
- Horsnæs, H. W. 2009. Late Roman and Byzantine coins found in Denmark. In: M. Wołoszyn, ed. *Byzantine coins in Central Europe between the 5th and 10th century. Proceedings from the Conference Organised by Polish Academy of Arts and Sciences and Institute of Archeology University of Rzeszów under the Patronage of Union Académique Internationale (Programme no. 57 Moravia Magna)*, Krakow, 23–26 IV 2007, Cracow. Pp 1–40.
- Ivanišević, V. 2021. The circulation of Roman solidi in the 5th century in Moesia Prima and the Barbaricum. In: Z. Rácz and G. Szenthe (eds), *Attila's Europe? Structural Transformation and Strategies of Success in the European Hun Period*, Budapest: Dürer Nyomda Ltd. Pp 519–535.
- Janse, O. 1922. *Le travail de l'or en Suède à l'époque mérovingienne. Etudes précédées d'un mémoire sur les solidi romains et byzantins trouvés en Suède*. Orléans: Paul Pigelet et fils.
- Johansen, F. 1995. *Catalogue of the Roman Portraits III; Ny Carlsberg Glyptotek*. Copenhagen: Glyptotek.
- Kent, J.P.C. 1959. Zeno and Leo, the Most Noble Caesars. *Numismatic Chronicle* 19. Pp 93–98.
- Kent, J.P.C., 1992. IMP XXXXII COS XVII PP. When was it struck and what does it tell us? In: H. Nilsson, (ed.). *Florilegium Numismaticum. Studia in honorem U. Westermark edita*. Stockholm: Swedish Numismatic Society.
- Kent, J.P.C. 1994. *The Roman Imperial Coinage, vol. X. The divided Empire and the fall of the Western parts A.D. 395–491*. London: Spink.

- Klindt-Jensen, O. 1957. *Bornholm i folkevandringstiden og forudsætningerne for tidlig jernalder*. Copenhagen: Nationalmuseet.
- Kolníková, E. 1968. Nález neskororímských solidov v Bini, okres Nové Zámky. *Numismatický Sborník* 10. Pp 5–50.
- Konstantinos Porphyrogennetos: *The book of ceremonies in 2 volumes*. Byzantina Australiensia. A. Moffatt & M. Tall, eds. Canberra: Australian Association for Byzantine Studies. 2012.
- Kyhlberg, O. 1986. Late Roman and Byzantine Solidi, An Archaeological analysis of coins and hoards. In: B. Hovén (ed). *Excavations at Helgö X. Coins, Iron and Gold*, Stockholm: KVHAA. Pp 13–126.
- Lacam, G. 1983. *La fin de l'Empire romain et le monnayage or en Italie 455–493*. 1–2. Lucerne: Adolph Hess A. G.
- Lallemant, J. 1965. Vedrin: sous d'or de Magnus Maximus à Anastase. *Études numismatiques* 3. Pp 109–144.
- MacGeorge, P. 2002. *Late Roman Warlords*. Oxford Classical Monographs. Oxford: Oxford University Press.
- Marchant, N. D. 1851. *Lettres du baron Marchant sur la numismatique et l'histoire*. Paris: Librairie de Leleux.
- McEvoy, M.A. 2013. *Child Emperor Rule in the Late Roman West, AD 367–455*. Oxford: Oxford University Press.
- Montelius, O. 1869. *Från jernalderna*. Stockholm: Ivar Hæggströms bokförlag.
- Montelius, O. 1872. Fynd av Romerska och byzantinska mynt i Sverige. *Kungl. Vitterhets-, historie- och antikvitetsakademiens Månadsblad*. Pp 55–63, 73–76, 81–84.
- Östergren, M. 1981. *Gotländska fynd av solidi och denarer. En undersökning av fyndplatserna*. Stockholm: RAGU.
- Panvini Rosati, F. 1953. Ripostiglio di aurei tardo-imperiali a Comiso. *Accademia dei lincei: Recondati morali, serie 8*. Pp 422–440.
- Prohászka, P. 2009. Der Solidusfund von Gernetto (1818) unter den numismatischen Denkmälern der ostgotischen Herrschaft in Italien. *Acta Archaeologica Carpathica* 44. Pp 204–217.
- Rudbeck, O. 1702. *Atlantica Atland Eller Manheim*. Uppsala: Hendricus Curio.
- Salin, B. 1892. Romerska och Bysantinska guldmynt funna i svensk jord. *Kungl. Vitterhets-, historie- och antikvitetsakademiens Månadsblad* 1892. Pp 114–130.
- Simeonov, G. 2021. The Harbour and Landing Stages of Hebdomon. In: Daim, F & Kislinger, E. (eds). *The Byzantine Harbours of Constantinople. Byzanz zwischen Orient und Okzident. 24. Veröffentlichungen des Leibniz-WissenschaftsCampus Mainz / Frankfurt. Interdisziplinäre Forschungen zu den*

- Häfen von der Römischen Kaiserzeit bis zum Mittelalter in Europa*. Mainz: Verlag des Römisch-Germanischen Zentralmuseums.
- Spier, J. 2007. *Late antique and early Christian gems*. (Spätantike-Frühes Christentum-Byzanz Kunst im Ersten Jahrtausend. Reihe B. Studien und Perspektiven, 20.) Wiesbaden: Reichert Verlag.
- Stewart, M. 2015. The First Byzantine Emperor? Leo I, Aspar and Challenges of Power and Romanitas in Fifth-century Byzantium. *Porphyra* n. 22, anno XI. Pp 4–17.
- Ulrich-Bansa, O. 1942. *Note sulle monete dell'imperatore Leone II, 473-474*. Perugia: Grafica.
- Ulrich-Bansa, O. 1949. *Moneta Mediolanensis (352–498)*. Venice: Carlo Ferrari.
- Ungaro, L. 1985. Il ripostiglio della Casa delle Vestali, Roma, 1899, *Bolletino di Numismatica*, III/I, gennaio-giugno. Pp 47–160.
- Villela-Petit, I. 2021. "Ricimer vincas". Symboles et inscriptions de quelques bagues des temps barbares. *Bulletin de la Société des Antiquaires de France*. Pp 355–389.
- Vismara, N. 1998. Il ripostiglio di Zeccone e le sue vicende successive il ritrovamento, *Museo in rivista. Notiziario dei Musei civici di Pavia*, 1.1998. Pp 78–85.
- Westermarck, U. 1980. Fynd av äldre romerska guldmynt i Kungl. Myntkabinettets samling. *Nordisk numismatisk unions medlemsblad* 5. Copenhagen. Pp 99–104.
- Zaccagnino, C., Bevan, G. & A. Gabov. 2012. The Missorium of Ardabur Aspar: new considerations on its archaeological and historical contexts. *Archeologia Classica* 63. Pp 419–454.