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ROMAN COINS IN ANDHRA IN THE EARLY HISTORICAL PERIOD

ABSTRACT: In the first centuries after Christ, the Indian subcontinent entered the orbit of the Roman state's trade interests. The subject of the exchange was a number of goods, including Roman coins. Their influx is documented by numerous finds as well as by ancient authors. One of the territories where we register quite a large number of Roman coin finds is the area of early historical Andhra. The specimens discovered here are found in various contexts, indicating their various applications. The hoards of silver and gold coins allow the observation of successive waves of the influx of Roman money, which is also confirmed by the finds of other categories – stray and settlement. The internal differentiation of the latter also allowed to define their mutual relations and tendencies in circulation. Observations of numismatic material and analysis of sources indicate that Roman coins could have had the function of a medium of exchange or payment in Andhra or, more broadly, India, but also played a bullion and prestigious role. The time of the influx of Roman money indicates that it was associated primarily with the period of the Satavahana Empire in Andhra. The essentially small number of registered Roman coins in relation to the territory and its role in trade indicates that the coins were only one, perhaps not a key element of Indo-Roman trade.

ABSTRAKT: W pierwszych wiekach po Chrystusie, subkontynent indyjski wszedł w orbitę handlowych zainteresowań państwa rzymskiego. Przedmiotem wymiany był szereg towarów, wśród których znalazły się rzymskie monety. Ich napływ dokumentują liczne znaleziska, a także przekazy autorów antycznych. Jednym z terytoriów, na którym rejestrujemy dość licznie znaleziska monet rzymskich, jest teren wczesnohistorycznej Andhry. Odkryte tu egzemplarze, znajdowane są w różnych kontekstach, co wskazuje na ich różnorodne zastosowanie. Skarby monet srebrnych i złotych pozwalają na obserwację kolejnych fal napływu rzymskiego pieniądza, co potwierdzają także znaleziska innych kategorii – luźne i osadnicze. Wewnętrzne zróżnicowanie tych ostatnich pozwoliło też na określenie ich wzajemnych relacji i tendencji w cyrkulacji. Obserwacje materiału numizmatycznego i analiza źródeł wskazuje, że rzymskie monety, mogły mieć w Andhrze, czy szerzej w Indiach, funkcję środka wymiany, czy płatności, ale także odgrywać rolę kruszcową i prestiżową. Czas napływu rzymskiego pieniądza wskazuje, że był on związany przede wszystkim z okresem władania w Andhrze

dynastii Satawahanów. Niewielka liczba zarejestrowanych monet rzymskich w relacji do terytorium i jego roli w handlu wskazuje, że monety były tylko jednym, zapewne nie kluczowym elementem handlu indo-rzymskiego.

KEYWORDS: Roman coins finds, early historic Andhra, India, Indo-Roman trade, Roman coins function

SŁOWA KLUCZOWE: znaleziska monet rzymskich, wczesnohistoryczna Andhra, Indie, handel indo-rzymski, funkcja monet rzymskich

Introduction and the Territorial Extent Covered

The present study is concerned with the issues of the long-range influence of the Roman Empire as exemplified by the inflow (and the subsequent circulation) of Roman coinage into the territories of present-day India. This recently observed academic trend in Poland, and its currently remarkable growth in the field of Polish research, should provide us with a better insight into the question of the Roman Empire's relations with foreign cultures, with a possible perspective on a broader (also not exclusively Eurocentric) view of this particular subject matter.

For the purpose of the present case study, we have considered the territory of the Indian state of Andhra Pradesh, understood primarily as a historical and geographical entity, not literally a territory in its modern administrative boundaries.² Although the coin finds from this region have been covered in a number of studies before, the authors have generally avoided delineating the geographical boundaries of the territory of the origin of the material under consideration. The following scholars have made very useful contributions to the discussion of the present topic: A. Cunningham,³ on the historical province of Andhra, M. Mitchiner,⁴ who has described the geographical and historical regions of southern India to a very basic extent, including a certain part of the territory we are concerned with, and V. V. Krishna Sastry,⁵ who has covered the physiographic characteristics and the natural features of Andhra Pradesh, setting out the state's administrative limits as of the early 1980s for the purposes of his study (i.e., including the state of Telangana. It

¹ This article has been written as part of the research project SONATINA 1, funded with the resources of the National Science Centre, Poland (grant 2017/24/C/HS3/00120), under the guidance of Dr Emilia Smagur (WAUW), whose assistance has been of great value during the entire writing process.

² In its present administrative form since 2014, following the establishment of the new state of Telangana, previously a part of the state of Andhra Pradesh.

³ Cunningham 1871, pp. 527–530.

⁴ Mitchiner 1998, pp. 33–36; see also the maps therein.

⁵ Krishna Sastry 1983, pp. 3–6; also the map therein.

is also noteworthy that despite some quite often detailed treatment of the subject of Roman coins found in the area, the conclusions drawn from the relevant research activity are more of a review character or they are focused on some selected aspects of the material.⁶ It is therefore necessary to take a more complex view, with an adequate consideration of the cultural diversity and fluctuations in the circulation of Roman coinage, which are observable on the basis of the research into various types of coin finds as well as their specific contexts and territorial distribution.

The boundaries of the coin find inventory have been marked out, as much as possible, on the basis of the natural topographical features, taking into consideration the physiographic characteristics of the area which would have an impact on the development of the communication possibilities in the relevant period. Such a demarcation of the territorial limits will also allow us to avoid any misunderstanding in cases of possible shifts in the administrative layout of the region. We have also taken into account the geopolitical situation of this territory in the early historical period, more specifically in the first three centuries CE. The territorial extent of coin finds is also a significant factor here. Practically, the area considered in the present study covers parts of the Indian states of Andhra Pradesh and Telangana as well as some minor sections of Maharashtra and Karnataka, with a total area of around 100,000 km². With all these assumptions taken into account, the boundaries of the territory in question have been determined as follows: in the north-east and the north, it runs along the Godavari up to its right-bank tributary Manjira (in the upper course of the Godavari); then, in the vicinity of the town Bidar, along the river Terna to the environs of the town Osmanabad; thence along the Boghavati to as far as the lower course of the Sina and farther on, where it flows into the Bhima (near the city of Solapur), a left-hand tributary of the Krishna, and then farther along that river to the estuary of the Tungabhadra, a right-bank tributary of the Krishna; finally, along the western slopes of the Eastern Ghats, where it runs along the rivers Gal Eru and Kundu to as far as the river Penna and its delta on the coast of the Bay of Bengal, which forms the eastern boundary of the whole area. Also included in the coin find inventory for this particular area is the town of Nellore, due to its direct location by the river which forms the southern boundary of the territory being considered.

CULTURAL DEVELOPMENT OF THE REGION

The chronological span of the present study is determined essentially by the issue dates of the Roman coins found within the territory of Andhra. The earliest of those pieces are coins of Augustus issued in the years 2–14 BCE, while the latest one is a solidus of Constantine I issued between the years 306 and 337. In practice,

⁶ Gupta 1965; Krishna Sastry 1992; Sree Padma 1993; Raja Reddy 2005; Suresh 2015.

⁷ Situated, in large part, on the right bank of the Penna.



Map 1. The location of Andhra in the early historical period (the boundaries as defined in the present article)

however, the inflow of the Roman coinage into this territory may have started during the 60s of the 1st century⁸ and lasted until the early decades of the 4th century. As a result, this period is of special interest for the purposes of our discussion, yet with an emphasis on a period up to the 220s as the most representative numismatic material is datable to this particular time.

During the period under consideration,⁹ the major part of the territory of Andhra was incorporated into the empire of the Satavahana dynasty, also identified with the Andhras who are mentioned in the *Puranas*. Their origin remains a matter of dispute and the scholarly views have been based on multiple inscriptions which refer to the name "Satavahana" as well as on a certain number of finds of their coinage. Some researchers have traced their origins to the western part of the Deccan, while other scholars refer to the name Andhra in the above-mentioned ancient text and identify them with the territory of the modern-day state of Andhra Pradesh, in

⁸ Perhaps a little bit earlier, beginning from the reign of Tiberius or his successors (see further on).

⁹ The limited space of the present text has allowed us to provide only the basic information on the cultural situation in the region. It must be noted that the scope of this topic is quite extensive and the extent of activity of the political entities (to be mentioned further on) proved to be very productive in each area of society and culture.



the environs of the mouths of the rivers Godavari and Krishna. 10 There is also no consensus on the possible time-frame for the existence of the Satavahana empire. According to one hypothesis, it existed from the 1st century BCE up to the late 2nd century CE, while some other scholars would date it back to a period from the 3rd century BCE to the early 3rd century CE, ¹¹ or even more broadly. ¹² The Satavahana polity (empire) expanded over time to the east and south, reaching its maximum extent in the 2nd century. At that time, it encompassed the western Deccan as well as the territories of the modern-day state of Andhra Pradesh and the northern part of Karnataka. The second half of the 3rd century brought the beginning of the decline and fragmentation of the empire into a number of smaller political units.¹³ Following the fall of the Satavahana state, a kingdom under the rule of the Ikshvaku dynasty was established in the eastern portion of the historical territory of Andhra. The state along the Krishna valley (in the Krishna-Guntur region) continued to exist for a century (ca. 225–315/25), attempting to emulate the political model of the Satavahana Empire. The authority of the Ikshvaku rulers was brought to a sudden end with the conquest by Pallavas.¹⁴

NUMISMATIC FINDS RECORDED TO DATE

Following a survey based on the relevant literature, the numismatic material collected for research comes from 32 sites, ¹⁵ with a total number of 2,115 Roman coins found and attested to date. Among these, 1,859 pieces are original coins and 128 are local imitations. The amount of gold coins recorded is 403, including 337 original pieces and 66 imitations, while silver ones encompass 1,584 pieces, including 1,522 original coins and 62 imitations. While silver coins are exclusively

¹⁰ Chattopadhyaya 1974, p. 17ff.; Ray 1996, p. 356; Nath Sen 1999, p. 172; Sinopoli 2001, pp. 166–168; Thapar 2002, pp. 225–226; Singh 2008, p. 381; Tomber 2008, pp. 130–131; Reddy 2011, pp. A250–251.

¹¹ See e.g., Chattopadhyaya 1974, p. 34ff.; Sinopoli 2001, pp. 167–169; Higham 2004, p. 299; Singh 2008, p. 381.

¹² E.g., R. Tomber (2008, p. 130) – from 200 BCE to ca. 250 CE.

¹³ Nath Sen 1999, p. 172ff.; Thapar 2002, pp. 226–227; Singh 2008, p. 381ff.; Tomber 2008, pp. 130–131; Avari 2011, pp. 149–150.

¹⁴ Thapar 2002, pp. 228, 327, 328; Reddy 2011, p. A252; Skinner 2012, pp. 1, 4, 15, 37, 41, with more on the Ikshvaku dynasty on pp. 37–45.

¹⁵ Some of them are situated within a single locality (see e.g. Nagarjunakonda and Phanigiri), while some of the other finds included on the list are not ascribed to any distinct place of discovery, even though they probably should be represented in this manner. Although found within the bounds of a single locality, their eventual attribution was dictated by the absence of proper documentation (e.g., the find(s) from Kondapur). However, it bears no impact on the general mapping of coin find distribution.

denarii, the group of gold pieces is made up of aurei, one solidus, and two pieces of unspecified denomination.

The entire numismatic material as taken for consideration here is composed of 11 hoards, including 9 with gold and 2 with silver coins. These contain 1,942 pieces, including 1,832 original coins and 110 imitations. Stray finds come from 8 sites and comprise 16 coins: 14 gold and 2 silver, while settlement-related pieces (29) have been attested for 13 sites, comprising 17 gold and 12 silver coins (see Tables 1–3 for details).

Table 1. Coins in hoards - metal (type) and denomination

AV/aurei		AR/denarii			
original	imitation	original	imitation		
319	53	1,513	57		
total: 372		total: 1,570			
aurei and denarii total: 1,942					

Table 2. Stray coin finds – metal (type) and denomination

total: 14 total: 2 aurei, solidi, denarii total: 16						
4-4-1-14						
11	2	1	2			
original	imitation	original	original			
aurei		solidi	denarii			
	AR					
7 (71)						

Table 3. Settlement coin finds – metal (type) and denomination

AV			AR			
aurei		AV indeterm.	denarii			
original	imitation	original	original	imitation		
4	11	2	7	5		
total: 17			total: 12			
gold coins and denarii total: 29						

For the territory within the boundaries defined here, P.J. Turner (1989) provides a list of 15 recorded finds¹⁶ of Roman coins and related imitations. With all the attested pieces and the numbers drawn from the written evidence taken into account. the total amount would be around 1,900 pieces, including 1,600 silver and around 250 gold coins.¹⁷ As for the time-frames of those discoveries, four finds can be traced back to a period from the 18th century to the year 1914, four finds had been recorded from 1914 to 1947, and seven from 1947 up until 1989. 18 In the present study, the number of coin finds have increased to 32, which means that there has been a growth in the numismatic evidence by more than 100%. All those finds comprise 140 pieces (139 gold coins + 1 denarius). ¹⁹ In spite of a very significant increase in the newly recorded finds, the amount of the coins they contained was relatively small. This is due to the absence of any subsequent large hoards, especially those of denarii. It is notable that 12 out of 17 finds, which enlarge our numismatic base in evidence, had been reported before the year 1989. It proves that there is a need for further surveys of written sources and verification of the records already known.

HOARDS OF SILVER COINS

Among the 11 hoards of Roman coins, there are 2 deposits of silver pieces. Altogether, 1,570 original Roman denarii and related imitations have been recorded there, which makes up 80.8% of all the coins contained in the hoards from Andhra. The time-span of the issues is 40–50 years, where the earliest pieces are represented by the coinage of Augustus (years 2–14 BCE), while the latest in the group are denarii of Nero (year 54 CE).²⁰ The chronological extent points to a cohesive pool composed of coins issued by the emperors of the Julio-Claudian dynasty. We should also take notice of the fact that the coins of Augustus and Tiberius make up an overwhelming majority here as they constitute the bulk of the coins assembled (97.4% of all the original denarii). Such a chronological composition attests to the

¹⁶ The question of a find from Yeleswaram in Nalgona Dt. (Turner 1989, p. 86), in the modern-day state of Telangana, remains uncertain. As the locality of this name can be found in the East Godavari Dt. (Andhra Pradesh), it has not been included in the presently discussed listing of coin finds.

¹⁷ Unfortunately, we have no precise figures. Considering the current state of the relevant studies and the repertoire of the data available, this assemblage should be somewhere in the range of 2,000 coins.

¹⁸ This division into periods is based on the history of the research in the field of this particular subject, publication dates of the pivotal studies, trends in historiography, and the socio-political transformations in India (Turner 1989, pp. 1-4; Singh 2008, pp. 7-9; Darley 2013, pp. 68-73).

¹⁹ This figure is based on the sources, accounts available as the number of pieces is definitely lower (84).

²⁰ Nastullapur, Akenpalle (Turner 1989, pp. 47, 70–71).

specific wave of the inflow of Roman silver coinage, the origin of which could be dated back to the reign of Nero, more precisely before the monetary reform of 64, as indicated by the latest coins of these particular hoards. The absence of coins struck after the year 54 points to the discontinuance of the inflow of Roman silver coinage into the territory of Andhra already in the late 50s or early 60s of the 1st century. However, regardless of the actual time of their arrival, the Andhra finds bring no records of coins issued by Nero's successors. The absence of coins issued after his reform of 64 should lead us to the conclusion that the trade relations with India demanded the use of coinage of good quality, before their weight became reduced.²¹

Such a chronological structure of silver coin hoards is well reflected in the hoard of Akenpalle, ²² but another one (found at Nasthullapur) represents a different composition.²³ As the latter collection contains coins of Augustus and Tiberius alone, it may represent an earlier time-frame of coin finds' inflow, datable back to the reign of Tiberius or one of his successors: Caligula or Claudius.²⁴ It is also possible that its composition is incomplete, without any coins from later periods. This inadequate representation of silver coin hoards in Andhra does not make it possible to attempt any secure identification of such an early wave of the inflow of Roman coins. As regards the arrival of early denarii into India, there is a hypothesis of their at least fragmentary inflow during the period of the Flavian dynasty.²⁵ Arguably, one of the key pieces of evidence is the emperor Vespasian's countermark stamped on a denarius of Augustus, type CL CAESARES, from the hoard found at Budinatham (Tamil Nadu).²⁶ It is not necessary to go into further details at this point, but let us observe that one instance of this type, though still significant, cannot be a sufficient argument in resolving the question of the inflow of early denarii into India, while the coin itself may have been added to the hoard later on, after the formation of its principal composition.²⁷ Likewise, the structure of the silver coin hoards from Andhra shows no confirmation of the hypothesis on the late arrival of the hoards with the Julio-Claudian denarii.²⁸ In fact, we would have expected that in spite of the possible selections taking place at the time, the monetary material brought

 $^{^{21}}$ Turner 1989, p. 43; Mac Dowall 1991, p. 146; 2008, pp. 333–334; Suresh 2004, p. 35; Meyer 2007, p. 60.

²² Gupta 1965, pp. 63–73; Turner 1989, p. 47.

²³ Gupta 1957, pp. 1–4; 1965, pp. 73–74; Turner 1989, pp. 70–71.

²⁴ Berghaus 1991, pp. 108–109, with reference to silver coinage, phase 1.

²⁵ MacDowall 1991, p. 152; 2008, p. 331; Johrden, Wolters 2008, p. 352.

 $^{^{26}}$ MacDowall 1991, p. 152; 2008, p. 331; Berghaus 1993a, p. 548; Johrden, Wolters 2008, p. 352.

²⁷ Suresh 2013, p. 31ff.; for a complete composition of the hoard and illustrations, see Sridhar, Suresh, Sundararajan 2011, p. 23ff.

²⁸ MacDowall 1991, p. 152; 1996, pp. 92–94.



from Rome should have been enriched with additions of later coins in at least insignificant quantities. After all, one could also theorize that the early denarii would have reached India in a later period, but rather on a random basis and as a result of selective imports of the previously well-known and accepted CL CAESARES and PONTIF MAXIM types from the Roman money market.²⁹

The coins found in the hoards of Roman denarii bear a number of secondary features such as incisions and punch-marks, which may be indicative of their fairly long periods of circulation before their eventual depositing.³⁰ Yet the fact of long periods of remaining in circulation should not rule out the possibility of treating those as part of the original compositions of the hoards considered here, the evidence of which is their short and cohesive chronological structure as well as the absence of later additions. It is fair to say therefore that they likely circulated as one and the same coin pool until the moment of their final depositing. Although it would be tempting to conclude that hoards of this type remained in circulation as cohesive assemblages of coins, such a statement would be quite risky if one considered the diverse nature of their secondary physical characteristics and the various states of preservation.³¹ The form in which these hoards had been deposited should point to the fact that the coins originally contained there would have been dispersed and reassembled. In consequence, as I have noted above, their circulation would have more of a closed-circuit character.³² Another important point is that gold and silver coins were not usually assembled or hoarded together in Andhra.³³ This particular circumstance points to the fact that they must have been in very different areas of circulation, with virtually no overlapping between them, or they would have been isolated prior to their eventual depositing. It is exactly this type of circulation which could possibly account for the presence of the coin with Vespasian's countermark in the otherwise largely homogeneous hoard of Budinatham.

The question of how long the denarii may have continued in circulation over the territory of Andhra could be explained better in the light of additions of local coinage or any accompanying artefacts, but such instances are quite rare and insufficiently documented. A case in point is the above-mentioned hoard of Nasthullapur,³⁴ with

²⁹ De Romanis 2012, p. 171.

³⁰ A major part of the coins from those two hoards is relatively well preserved.

³¹ Even though it is not completely out of the question, should we assume that coins found in hoards might have been subjected to various enigmatic or inexplicable practices.

³² Some banking activity of Buddhist centres remains a possibility, e.g., allowing the Roman coins to enter into a limited circulation only to recover them later on (Thapar 1978, p. 64; Morrison 1997, p. 95; Cobb 2018, p. 262).

³³ With only one known exception of a mixed hoard from a locality named Iyyal (Eyyal) in Kerala (Unnithan 1963, p. 22ff.; Turner 1989, p. 55).

³⁴ Gupta 1957, pp. 1–4; Turner 1989, pp. 70–71. The reported pieces also include some local coins from the hoard of Penuganchiprolu – a leaden coin of the Ikshvaku (second quarter of the 3rd – mid-4th century) and a bronze coin of the Qutub Shahi dynasty (1518–1687) (Subrahmanyan,



Roman denarii alongside eight silver punch-mark coins. As the identified circumstances allow us to believe, coins of this type remained in circulation from the early 4th century BCE³⁵ up to the early 2nd century CE or slightly later.³⁶ According to such a dating proposed for the whole hoard of Nasthullapur, it could be assumed that the Roman denarii of this hoard may have been in circulation for about 50 years,³⁷ which would confirm the hypothesis of their falling out of circulation long before the arrival of another pool of Roman coinage towards the end of the 2nd century.³⁸

LOCAL IMITATIONS OF ROMAN SILVER COINS AS FOUND IN HOARDS

The hoarded collections of silver coins have contained 57 recorded imitations of denarii, which makes up 3.6% of the total number of silver coins found in these particular hoards. These are imitations of denarii issues of Augustus and Tiberius, in the quantities of 25 and 32 pieces, respectively. Proportions in these two groups are equal in relation to the original coins. There are no records of local imitations with regard to the issues of Caligula, Claudius and Nero, which is a reflection of very low numbers of the latter coinage in the hoards known. The presence of imitations in the hoards of such a short chronological perspective points to the fact that they must have been produced during the circulation periods of the original coins and had a connection with that coin pool. Comparable amounts of imitations as regards the both issues recorded should prove that the demand for such products must have oscillated at lower levels.

HOARDS OF GOLD COINS

Eleven hoards of Roman coins, all found in the historical territory of Andhra, have been recorded to date, of which nine are treasures of gold coins (aurei and the related imitations), while the remaining two are hoarded collections of silver pieces (denarii and imitations). The hoards of gold coins have contained an overall number of 372 pieces, which is 19.1% of all the coins recorded as part of hoards, with their time-span estimated to be around 350 years. The oldest pieces among those recorded are represented by the aurei of Augustus, while the latest is an imitative coin of Constantine I. The chronological structures of gold coins found in

Rama Krishna Rao, Brahma Chary, 2008, p. 3). However, the circumstances of the find and the coins' dating would suggest random additions (Smagur, Romanowski 2020, p. 486).

³⁵ Cribb 2005a, p. 69; for more, see also pp. 58–72.

³⁶ Gupta 1957, p. 4; Krishnamurthy 2016, p. 266.

³⁷ Cobb 218, p. 262.

³⁸ Although the coins' states of preservation in the hoards of Andhra are relatively good, apart from some other secondary characteristics, e.g., countermarks and obverse incisions (Turner 1989, p. 16; Cobb 2018, p. 264).

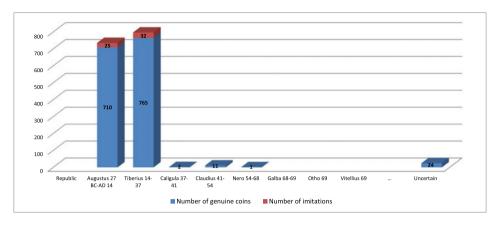


Fig. 1. Number of coins in silver hoards – genuine coins and imitations

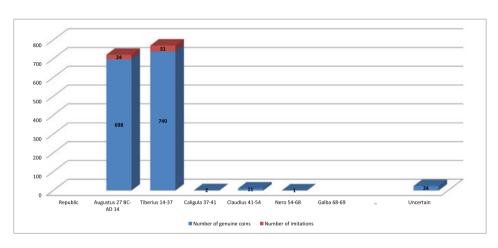


Fig. 2. Hoard of Akenpalle (silver coins)

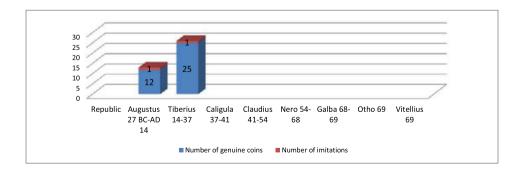


Fig. 3. Hoard of Nasthullapur (silver coins)

the hoards allow us to identify the three principal pools of money coming into circulation within the territory of Andhra. The first group is formed by coins of the Julio-Claudian dynasty and dated from the issues of Augustus to Nero (in particular up until the reform of 64).39 They account for 39.1% of all the original Roman gold coins contained in the hoards from the territory considered. It should be noted that the coins of Tiberius and his successors (except for Caligula) form an overwhelming majority here, which shows us the core of aurei imported from the Roman monetary market, with a clearly lower representation of coins in the name of Augustus. The structure of this first-mentioned pool of coinage suggests that this particular wave of Roman coinage must have left the Roman Empire near the end of Nero's reign. 40 Another recognizable tendency is the apparently continued lowscale representation of the Roman gold coin beginning from the Flavian dynasty (Vespasian's issues), practically up to the Severan dynasty. It is notable that in the course of this long period, however, there are no coins of the ephemeral emperors (Pertinax and Didius Julianus), but there is an increased amount of coins issued during the Nerva-Antonine period, especially those in the name of Antoninus Pius. 41 With all this fluctuation and the compositions of the individual hoards taken into consideration, we could put forward a plausible conjecture that the related "stream" of Roman coinage might have been imported from Rome during the reign of Commodus. As may be presumed, this monetary pool came to be formed in the Roman Empire following the year 107, when Trajan's reform made it obligatory to withdraw from the market all the denarii and aurei from before Nero's reform of 64.42 The above observation referring to a distinct stream of coinage could also ring true when applied to the time of the Severan dynasty. As in the previous case, observations of the contents of the particular hoards should lead us to distinguish a third wave of the inflow of Roman gold coins (leaving the Empire, as may be supposed, in the late 220s). Finally, it is possible that yet another "stream" of gold coins may have reached Andhra during the Constantinian era (in the early decades of the 4th century). Here, however, in view of a complete lack of original pieces,

³⁹ E.g. the following hoards: Nagavarapupadu – 3 pieces, Nandyal – 19 pieces (MacDowall, Howell 1993), Penuganchiprolu – 7 pieces (Subrahmanyan et al. 2008).

⁴⁰ The latest coin of this emperor, from the hoard of Penuganchiprolu, is datable to the years 64–68. In the publication, it is misidentified as *Claudius Drusus*, dated to the years 41–54 (Subrahmanyan et al. 2008, p. 8, no. 15106; Smagur, Romanowski 2020, p. 489).

⁴¹ Which could be the result of the state of research and the recording process as the author is familiar with the information on some finds of gold coins in the name of Pertinax from the territory of present-day India (Andhra being among the possible locations).

⁴² Unfortunately, it is impossible to determine it with certainty due to the secondary character of the hoards from Andhra. On a more conservative note, however, we could refer to the hoard of Nellore, with its assemblage of 2nd-century aurei, which in its identifiable part (8 coins) is datable to a period from Trajan to Antoninus Pius (Turner 1989, p. 71).

we shall rely on the line of argument expressed in the further part of the present article.⁴³

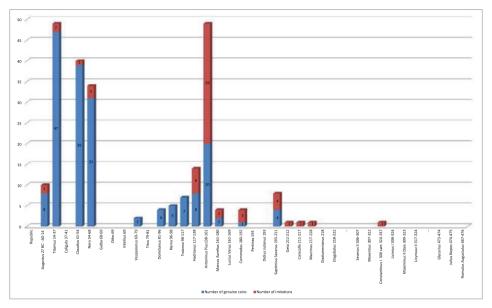


Fig. 4. Number of coins in gold hoards – genuine coins and imitations

Such a view of the inflow of Roman gold coinage is confirmed by the chronological structures of the individual hoards. These are of secondary character, all of them formed over a long period in the territory of Andhra.⁴⁴ There are also two other hoards, Nagavarappupadu and Nellore, which are of a different character – formed in uniform groups with short-period time-lines of coins, without any additions of pieces from the successive phases.⁴⁵ This would suggest the probable depositing of the hoards before the arrival or in isolation from the subsequent waves of inflow of Roman coins: late 2nd century for Nagavarappupadu and the early 3rd century for Nellore. A varied nature of the circulation of coins in the local market should account for the fact that such chronologically cohesive collections contained aurei in various states of preservation, very much worn-out pieces beside those in mint condition, as well as many coins with cuts or holes.

⁴³ Moreover, 139 original gold coins of unidentified issues have been recorded.

⁴⁴ Darmavaripalem, Gootiparti, Nandyal, Penuganchiprolu, Veeravasaramu, Vinukonda, Weepangundala.

⁴⁵ Nagavarappupadu, dating from the issues of Augustus to Nero, tpq [year] 62 (Krishna Sastry 1992, pp. 4–16) and Nellore, dating from Trajan to Antoninus Pius, tpq [year] 145 (see Turner 1989, p. 71, for further literature).

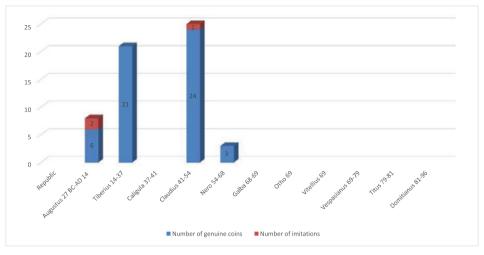


Fig. 5. Hoard of Nagavarappupadu (gold coins)

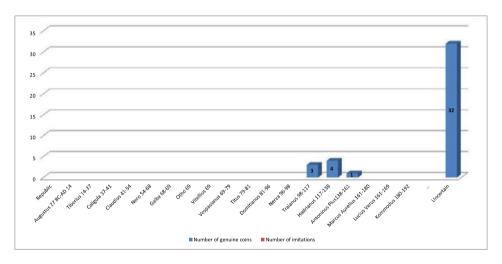


Fig. 6. Hoard of Nellore (gold coins)

LOCAL IMITATIONS OF ROMAN GOLD COINS IN HOARDS

A significant ingredient of the hoards in question is formed by local imitation coins, recorded in a considerable amount of 53 pieces, which make up 14.2% of all the coins found as part of this type of collection. Their chronological distributions⁴⁶ within the particular issues (issuing authority) cover a very wide range: 1-29 pieces. A particularly large number of this coin type can be found within the

⁴⁶ As regards the type being imitated.

issues of Antoninus Pius. Definitely not isolated from the adjoining issues, they all combine to form some broader chronological arrangements. As in the case of the original coins, these can be classified into three primary pools. The increasing number of imitations in relation to the original coins becomes even more evident over a long perspective, from the coins of Hadrian to Macrinus and the chronologically incompatible Constantine I. The number of imitations from that period differs from the figures observed for the issues of Augustus and Tiberius, but still not to any significant degree. It is fair to assume then that the demand for such coins must have increased during the 2nd century, but it continued to remain at a relatively low level. The inclusion of imitations into one and the same pool with the original pieces does not disturb the correlations within the latter between the specific numbers of coins in the relevant issues. The presence of imitations in all the three coin pools may indicate that the period of their production may have been concurrent with the times of inflow and circulation of each individual pool. The repetitive character of the chronological structures of imitations in the particular hoards can be discerned very well, in correspondence with the structures of the original coins, even if the latter are not found as part of a given collection. This situation is most conspicuous in the hoards from Penuganchiprolu and Veeravasaramu, but also in those from Darmavaripalem.⁴⁷ Another argument for the concurrent production periods⁴⁸ of the imitations and original coins can be found in the previously mentioned hoard of Nagavarappupadu, with the year 62 as its terminus post quem, where three imitations (Augustus – 2, Claudius – 1) can be found. These pieces have various incisions and are worn-out in a degree similar to the other coins from the same hoard.⁴⁹ Another clue in confirmation of the above hypothesis may be the fact that among the hybrid imitations known from the hoards discussed here, imitations composed of the types belonging to different coin pools are recorded only exceptionally.⁵⁰

⁴⁷ Subrahmanyan et al. 2008; Turner 1989, pp. 80–81; Krishna Sastry 1992, pp. 17–23. The latest verified data concerning the composition of the hoard from Penuganchiprolu as based on: Smagur, Romanowski 2020.

⁴⁸ Understood as chronologically linked with a given wave of inflow, but also during its circulation.

⁴⁹ Krishna Sastry 1992, pp. 4–16.

⁵⁰ Strictly speaking, we know of one credible specimen, found in the hoard of Veeravasaramu, this one is a hybrid piece based on a coin in the name of Antoninus Pius (Faustina I) and an aureus of Nero, e.g. RIC 1, 3, 8, 9ff. (Turner 1989, p. 80).

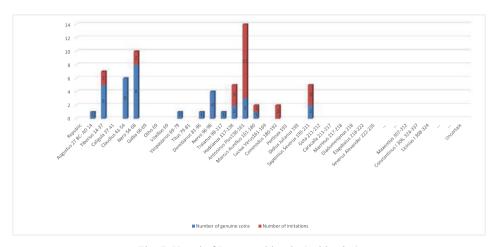


Fig. 7. Hoard of Penuganchiprolu (gold coins)

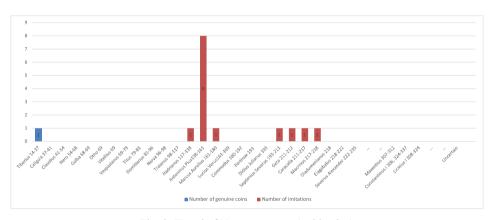


Fig. 8. Hoard of Veeravasaramu (gold coins)

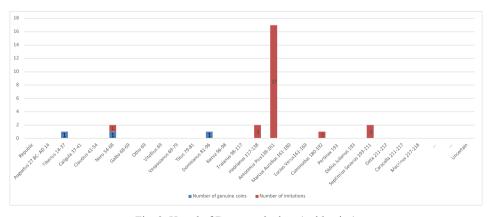


Fig. 9. Hoard of Darmavaripalem (gold coins)

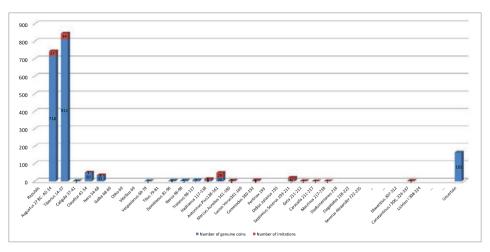
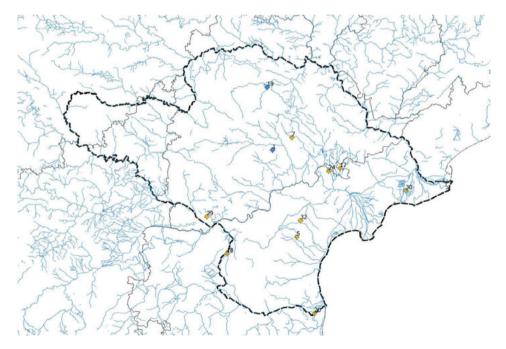


Fig. 10. Number of coins in hoards – genuine coins and imitations



Map 2. Hoards of Roman coins. Legend: dashed line - border of the territory, gold coins - yellow, silver coins - blue

STRAY FINDS

Another category of Roman coins found in Andhra, to be discussed in the present section of the text, are stray finds without any specific archaeological context (0.7% of all the finds). The total number of recorded pieces, found at 8 various locations, is 16.51 of which 14 (76.0%) are gold coins [of these, 12 are original pieces - 11 aurei and one solidus (85.7% of gold coins), while 2 of them are imitations of aurei (12.5% of gold coins)]. There are 2 silver coins in this category of finds: original Roman denarii, which make up 12.5% of stray coins found. The overall number of gold coins (both imitations and original pieces), mostly aurei, is far greater than that of silver coins. This stands in contrast to the situation known from the hoards, where silver pieces (denarii) are very clearly in a majority in the whole monetary volume considered here. This phenomenon makes it clear that gold coins were those most likely to become dispersed in one way or another, while silver ones would have a more enclosed area of circulation. The number of nine hoards with gold coins, in comparison with two with silver ones, is probably not without significance as well. Despite the fact that the hoards of denarii contain many more pieces than those with gold coins, the greater number of the latter makes it potentially more likely to have them spread over a wider area.

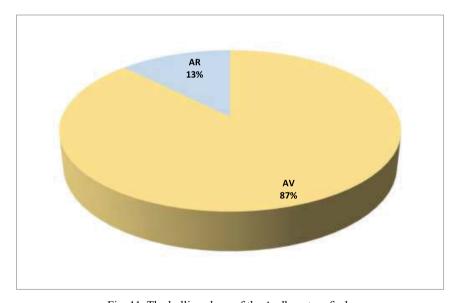


Fig. 11. The bullion share of the Andhra stray finds

⁵¹ In actual fact, the number of potential sites may be greater. The sources do not provide details on the circumstances of how all the known coins had been found, which would point to possible different locations of coins found within the limits of the same localities.

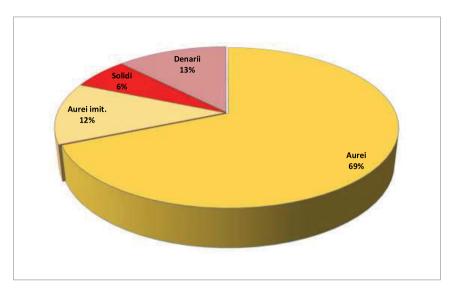


Fig. 12. The denomination share of coins in the Andhra stray finds

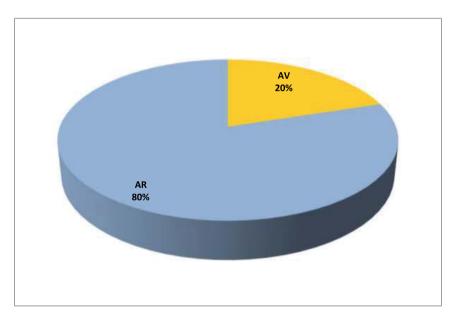


Fig. 13. The bullion share of the Andhra hoards

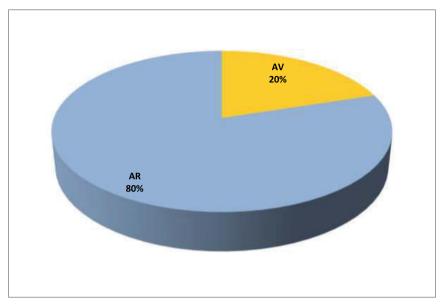


Fig. 14. The denomination share of coins in the Andhra hoards

A closer analysis of the chronological structure of stray finds could help us to explain all those questions a little better. A look on the time-line situation of the gold coins from this kind of category shows us the principal chronological characteristics to be seen in the structures of coins found in the hoards. Three coin pools can be distinguished clearly: first – marked by Nero's coin, 52 second - by several coins of the Antonines, and third - indicated by imitations of aurei in the name of Septimius Severus, which are a reflection of the arrival of a stream of his coins into Andhra. A single solidus of Constantine I may confirm the fact of the arrival of a fourth stream of Roman gold coinage in that period, especially as compared with imitations of this emperor's coin identified in the hoards. This picture may be incomplete because of a small number of recorded pieces, but even despite the lack of coins from a higher number of issuers, it should be said that gold coins recorded as stray finds are identical with those found as part of hoards. Then, regardless of the incidental nature of how they may have been deposited, e.g., as lost pieces or intentionally deposited at the places where they were to be found, they come from the redistribution of the hoards known from the territory of Andhra. The observations on the identity of the coins from stray finds with those found as part of hoards are also affirmed by the distinct data for

⁵² It is possible that the coins of Tiberius are an indication of a stream of coins [also turning up in the hoards of denarii] which may have left the Empire during this emperor's reign (Berghaus 1991, pp. 108–109, with reference to silver coins).

the particular metal-type groups. A fairly similar percentage of imitations of gold coins in stray finds (12.5%) and hoards (16.6%) is noteworthy, which may be an indicator of their common origin in the same coin pool. This observation does not apply to silver coins as there are no silver imitations among stray finds. In turn, this fact can be seen as a confirmation of the previously mentioned limited scope of their circulation.

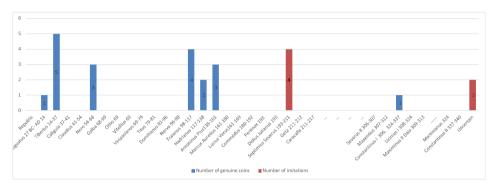


Fig 15. Total number of coins in single finds from Anhdra - genuine and imitations

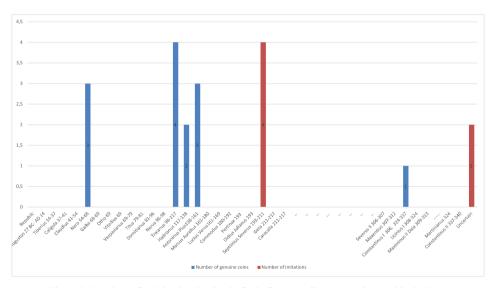


Fig. 16. Number of gold coins in single finds from Andhra - genuine and imitations

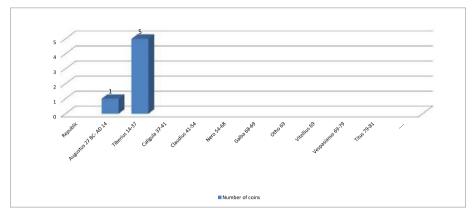


Fig. 17. Number of silver coins in single finds from Anhdra

SETTLEMENT FINDS

The last group are coin finds coming from settlements, i.e., broadly associated with archaeological sites of such a character, specifically dwellings, manufacturing centres, places of religious worship. The latter group does not include burial grounds and graves as these form a different, and very distinct, category of coin finds. It is also significant that such finds have not been recorded, to date, in the region. Overall, 13 sites have been attested for the whole territory under consideration, with 29 Roman coins or their imitations found there (1.3% of the total number of coins found). Among those, 17 pieces are gold and gilded coins⁵³ (58.6% of the settlement-bound coins). Six pieces are Roman originals: 4 aurei and 2 gold coins of uncertain denomination (35.2% of the gold coins from settlements). Another portion of 11 gold pieces are a group of imitation aurei⁵⁴ (64.7% of the settlement-bound gold coins). In this category of finds, silver coins are represented by 12 pieces (41.3% of all the coins from settlements). Among those, there are 7 originals: denarii (58.3% of silver coins from settlements) and 5 imitations of denarii (41.6% of silver coins from settlements). In this particular case, the proportions are slightly more similar to the coins attested as stray finds, which would show the possibly identical metal-type relation of the both categories (however not applicable to the hoards). With respect to the denomination structure, we should take note of a very interesting arrangement of imitations, which are here much better represented than those contained in the stray

⁵³ Including the bronze *aenima* that are most likely the vestige of a gold subaeratus (Nagarjunakonda VI).

⁵⁴ This supposition is drawn from the type of metal used for production, i.e., gold. However, it should be noted that the imitations in question were all produced with the use of various techniques, including such as plating and as bracteates, while the degree of "barbarization" is also quite considerable. There is an ample space for interpretation here.

finds category, but especially in the hoards (which concerns the gold coins in the first place, but also the silver ones). Another striking thing is the relatively high number of imitation denarii, represented less in the hoards and never recorded among the stray finds. Perhaps, as in the case of the stray finds, these imbalanced proportions should point to the production of imitations which had never been added to the hoards or, which is less likely, to their redistribution out of the hoards.

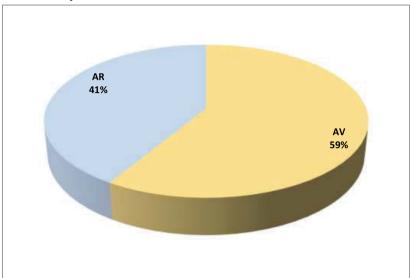


Fig. 18. The bullion share of the Andhra settlement finds

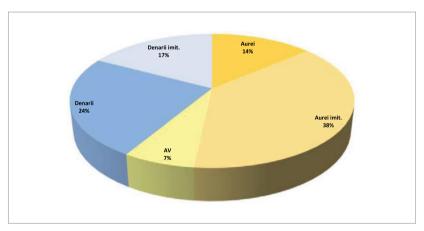


Fig. 19. The denomination share in the Andhra settlement finds

The time structure reflects two, out of the above-mentioned four, waves of the inflow of Roman coinage, as can be seen in the hoards and stray finds, i.e., Julio-Claudian and Nerva-Antonine. It should be presumed that the other two remain unrecog-

nizable due to a small amount of the numismatic material recorded, which could in turn signify a limited number of coins of later issues in settlement-bound circulation. However, a closer look on the chronological arrangement within the particular issues and metal-type groups allows us to venture into some new observations. Among the gold coinage, we have no records here of any original coins of Augustus and Tiberius, even though they are very well represented in the hoards. This situation is, incidentally, somewhat similar to the stray finds, with only three gold coins of Nero recorded as part of the first coin pool. Yet some imitation pieces in the name of Tiberius can be seen within this group, both gold and silver, but in a slightly higher number than in the hoards. The second pool is only very poorly represented here, with just two finds of gold coins, which are better represented in the stray finds group. Except for the first wave of inflow, there are no recorded examples of silver coins, which is coincident with the situation known from the other coin find categories.

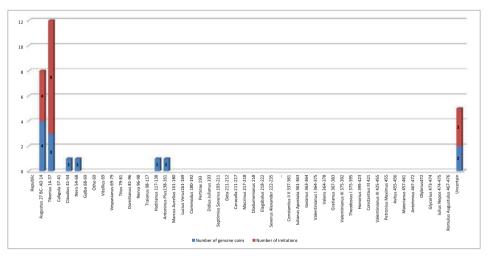


Fig. 20. Total number of coins in the settlement finds from Anhdra - genuine and imitations

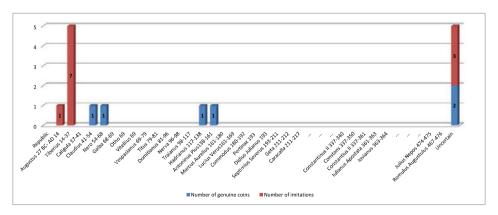


Fig. 21. Number of gold coins in Andhra settlement finds - genuine and imitations

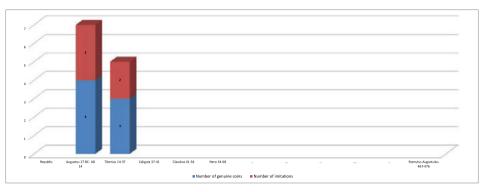
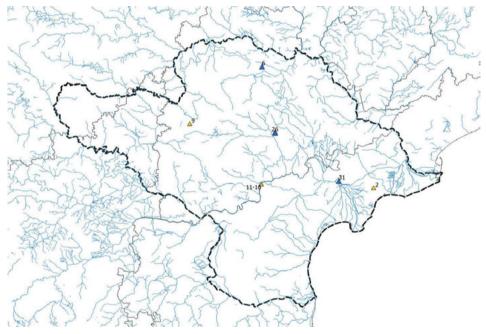


Fig. 22. Number of silver coins in Andhra settlement finds - genuine and imitations



Map 3. Settlement finds. Legend: dashed line - border of the territory, gold coins - yellow, silver coins - blue

CONTEXT OF COIN FINDS IN ANDHRA

The present study contains an analysis of three types of finds of Roman coins: hoards, stray finds, and finds related to settlements. No relevant coin finds have been recorded in connection with graves and burial grounds. As for the number of sites with coin finds recorded to date, this number is spread out quite evenly for each category, although settlement-bound finds are the leading group here, with 41% of the total number of sites. A definitely different relation is shown by the con-

tents of coins in the particular categories, where the overwhelming number of the coins recorded can be attributed to hoards (98%), with marginal shares in the finds of other types. This shows that Roman coins were hoarded in Andhra for the most part, while their redistribution or some other sort of dispersal would take place to a very limited extent. Unfortunately, the information on broader contexts of hoard depositions, safeguarding measures and some other details is scarce or extremely hard to find, which leaves us with limited possibilities for further analysis of this type of coin finds.⁵⁵

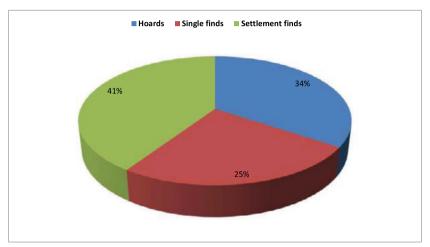


Fig. 23. The share of Roman coins in particular categories of finds

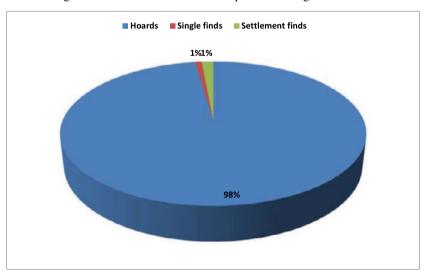


Fig. 24. The quantitative share of Roman coins in particular categories of finds

⁵⁵ Also concerning the other categories of Roman coins found in India (Turner 1989, p. 12).

These rudimentary pieces of information should turn our attention, however, to certain recurring solutions and the possible nature of the hoards from Andhra. In some cases, we can find some details on how the safeguarding of hoarded coins would have taken place, namely with the use of vessels, most probably – pottery (hoards of Nandyal, Nellore, and Akenpalle).⁵⁶ Such an interpretation is something that can be inferred here as the sources tend to mention some kind of pot, but not the ceramic material being used. Unfortunately, as for two of those hoards, we have no further details about the context, but we do know that the hoard of Nellore was most probably hidden away among the remnants of a Hindu temple, in the relics of a brick structure. We also know that the pot contained some medals alongside the Roman coins found there.⁵⁷ It is difficult to determine what this could mean, especially in the context of the first account, where there is no such information as well as no details on the possible character of the brick construction.⁵⁸ It is also possible that the "medals" referenced by P. L. Gupta are the result of an interpretation of a mention referring to some coins with holes, which would have reportedly been used as pieces of adornments.⁵⁹ As far as this second question is concerned, there is another published account which refers to a Hindu temple, but the basis for such an identification is not known.⁶⁰ Some broader context of the discovered hoards, likewise in connection with structures of brick or stone, is also to be mentioned when it comes to the coin finds of Dharamvaripalem and Vinukonda.⁶¹ Unfortunately, there is no certain information on the character of the building structure at Dharamvaripalem, while the hoard from Vinukonda was found, according to our sources, somewhere within an old fort. Vinukonda is situated at the foot of two hills, with a stronghold built on one of the hill-tops. This fort dates back to at least the 16th century, when it was seized by the ruler of the Vijayangar Empire, Krishna Deva (in 1515). The existing remnants of the fortress show the evidence of a powder magazine, a temple, and a few other buildings. As such details may suggest, it is probable that the hoard may have been associated with a Hindu temple there, which may have been in existence until the time when Vinukonda had fallen under the rule of the Golkonda Sultanate in 1579.62

⁵⁶ Nandyal (Turner 1989, p. 69); Nellore (Gupta 1965, p. 54, no. 1; Turner 1989, p. 71); Akenpalle (Gupta 1965, p. 63; Turner 1989, p. 47).

⁵⁷ Gupta 1965, p. 54, no. 1.

⁵⁸ Sydenham 1789, pp. 81–83. Let us note that in the light of this specific account of the coins found there, one could speak of at least 11 distinguishable pieces, not eight, as Turner would have it (Turner 1989, p. 71).

⁵⁹ To identify the author of this particular term, we would need to look through all the sources and accounts referring to this find.

⁶⁰ Prinsep 1832, p. 397.

⁶¹ Dharamvaripalem (Sastry 1992, p. 17; Suresh 2004, tab. 8, p. 80), Vinukonda (Thurston 1889, pp. 325–328; Turner 1989, p. 84).

⁶² Francis et al. 1988, p. 339.

Two hoards should bring our attention to the possibility of some other context of finding and composition. According to the accounts in our sources, the hoard of Nastthullapur was found by a boy playing in a stream, and it contained 39 Roman denarii as well as 8 punch-mark coins. 63 As we have no further details on the circumstances of this finding, we could only guess how the hoard might have (or have not) been secured. At least several possibilities could be ventured as to how such a manner of depositing should be explained. According to one, the coins previously deposited somewhere along the stream may have been taken away by the water, with the container destroyed without a trace left or no identification of such traces was possible. Another possibility is that the coins would have been deposited directly in the stream-bed as a result of some indefinite magical or cult-related(?) practices. It is also quite likely that this collection of coins is a purse hoard, which may have been lost in that stream by accident or as a result of some violent occurrence. With all these points assumed as possible, the first option appears to be the most sensible and convincing one. Supposedly, the arguments that could be given in favour of this hypothesis would be a limited perimeter of the coins found and their condition of preservation, with the both circumstances connected. As the coins are preserved in a relatively good condition, it may mean that they should not have been carried downstream too far. Otherwise, we would have expected a much worse condition, considering the probable impact of wear-and-tear damage in the long term. Moreover, it could be assumed that because of such circumstances, the hoard would have been deprived of its protective element (some kind of a solid container, presumably) after a relatively long period. Another hoard with some *punch-mark* coins as reported to date comes from Weepangundali.⁶⁴ If in the former instance, the monetary function of the coins hoarded (denarii and punch-mark coins)⁶⁵ could be assumed, the things look different in the latter case. As in the previous instances given, we have no precise information about the circumstances of how it was found. The nature of this hoard indicate its bullion character, which is also possible, the treasure owned by the jeweller, the presumable maker of the jewellery found as part of the hoard. A broad time-span of this assemblage is characteristic here as indicated by very much worn-out Mauryan punch-mark coins as well as imitations of late-Roman (Constantine I) and 7th-century Byzantine gold coins. Unfortunately, no dating of the other objects in the hoard is known, which makes any analysis of the material difficult. The presence of the jewellery in this set of objects does not resolve the question of its owner's profession, but it may be suggested by the partially preserved imitations of Byzantine coins.⁶⁶ Two pieces (preserved in, roughly, ¾ and ½) bear traces of intentional cutting, which may suggest the use of those as material in the production of jewellery. From this

⁶³ Gupta 1957, p. 1ff., Turner 1989, pp. 70-71.

⁶⁴ Gupta 1972, p. 1ff.; Turner 1989, p. 86.

⁶⁵ Gupta 1957, pp. 3–4. Though perhaps not to a full extent (author's footnote).

⁶⁶ Gupta 1972, pp. 4–5, pl. I. 2–3.



particular perspective, we could consider the nature of the hoards from Akenpalle and Dharamvaripalem, which included some pieces of jewellery or their fragments. In the former instance, it would be possible to interpret this hoard along similar lines as it contained some broken fragments of jewellery and cut stripes of silver,⁶⁷ while in the latter, there are no such arguments at all. The character of the set of valuable artefacts from Dharamvaripalem may have been different, e.g., as a wedding present especially if we consider the fact that it contained a set of objects that could be identified as parts of a woman's attire (two gold earrings in the shape of Makara, among other things).⁶⁸ In the context of this group of hoards with jewellery, we could also mention the hoard from Nagavarapupadu, where coins were accompanied with some beads in globe- and leaf-shaped forms, and a half of a gold coin.⁶⁹

Although only 12% of the coins have been found and recorded in settlement-related contexts, the number and the diverse nature of the sites are important elements of the observation, pointing to some aspects of the circulation of Roman coins in Andhra other than thesaurization. Perhaps the most suggestive observation within this category of finds is the presence of Roman coins in Buddhist contexts, both strictly sepulchral and those connected with sacred places. The former ones are definitely less represented in the records for the territory of Andhra, but we should be aware of the fact that it could be a consequence of insufficiently accurate documentation of research activity or the number and quality of relevant publications.

First of all, we should mention a very interesting find from the temple complex of Nagarjunakonda (IV), Dt. Guntur. The gold reliquary inside the Stupa no. 6 contained a silver box (much corroded and deformed), small fragments of bone, several pearl and coral beads, adornments in the form of gold-leaf flowers, and two gold bracteates, with two holes each, in imitation of coins of Tiberius and Augustus. The earlier authors considered the images on those bracteates as representing the local members of the Ikshvaku dynasty: princess Chamtisiri, a donatress of many religious building projects at Nagarjunakonda, and some other representative of the royal family (according to I. K. Sarma, a portrait of the king Siri Mathariputra Virapurushadatta). The Roman influence in the style of the images was noticed

⁶⁷ Turner 1989, p. 47. The hoard may have been treated as a repository of precious metal material, with the silver utilized as "per weight".

⁶⁸ Sastry 1992, p. 17; Suresh 2004, tab. 8, p. 80.

⁶⁹ Sastry 1992, p. 4.

⁷⁰ Coins of this type have not been included in the statistics cited above and are treated here a little differently than the other pieces due to their very specific form. The three reported pieces do not affect the statistics in any significant way, yet they should not be omitted from the research of the numismatic material.

⁷¹ Sarma 1992, pp. 39–40; 1994, p. 69; Longhurst 1999, pp. 21–22.

⁷² Longhurst 1999, pp. 21–22; Sarma 1994, pp. 69–70.

⁷³ Sarma 1992, p. 41; 1994, p. 70.

as well, which also finds confirmation in the recent interpretation of these coins. It points to the observation that the prototypes of the imagery for the bracteates in question were portraits of the emperors Augustus and Tiberius, while this type of depictions has parallels in the ceramic and metal artefacts known from Sisupalgarh and some other places.⁷⁴ The method of production, in particular their stylistic features and the technique used, demonstrates that the both imitations may have been made at the same workshop. The holes in exactly the same places in the upper part of the coins suggest that the latter would have been previously in the same position as part of a necklace. As regards the functions of this sort of coin imitations in the context considered here, we could agree with the interpretation proposed by I. K. Sarma, who points to the ritual reasons for depositing the objects inside the reliquary as part of the consecration of this stupa.⁷⁵ Another example of a Rome-related numismatic find from a sacred compound, but outside the actual places of worship, is an imitation aureus of Tiberius reported as found in a monastery at the site known as Nagarjunakonda II. 76 No further details on this find are known, but it would be an interesting example indeed, especially with some other finds of this type from beyond Andhra taken into account.⁷⁷ Another several finds. classified as random, come from within the temple complex of Nagarjunakonda I, where during the erection of the museum, among various architectural elements, an aureus of Hadrian alongside, reportedly, 17 leaden coins of the Satavahana dynasty were found. 78 Let us also mention the following two locations: Alluru, Dt. Krishna – randomly found two incised aurei of Claudius;⁷⁹ Phanigiri, Dt. Suryapet, state of Telangana – one aureus of Nero found during excavation work, along with some other artefacts such as figurines of terracotta and stucco, seashell beads, and precious stones. 80 Besides, a denarius of Augustus was found at some unidentified place.81

⁷⁴ Smagur 2018, p. 68.

⁷⁵ Sarma 1992, p. 41. The author also shows some parallels to this kind of practices, e.g., in north-western India (Sarma 1994, p. 70).

⁷⁶ Sarma 1992, p. 37: 1994, p. 68. Initially, the coin was taken to be an original piece, although the author of the publication (Sarma 1992, p. 37) cites a misinterpreted legend. For a supposition that this is actually an imitation coin, see Gupta 1965, p. 75.

⁷⁷ In particular, Thotlakonda, Dt. Visakhpatnam, with Roman coins, among other things, found at viharas no. I, VI, IX, i.a. (Sastry, Subrahmanyam, Rama Krishna Rao 1992, p. 46; Indian Archaeology 1993, p. 5, no. 9; 1994, pp. 5, 7–8, no. 8).

⁷⁸ Ramachandran 1999, p. 30; Sarma 1992, p. 37; 1994, p. 68.

⁷⁹ Sarma 1992, p. 37; Suresh 2004, p. 165, no. 56a-b.

⁸⁰ As based on: The Times of India, Gold coin of Roman era retrieved, 18.03.2011, edition on line: https://timesofindia.indiatimes.com/city/hyderabad/Gold-coin-of-Roman-era-retrieved/articleshow/7731447.

⁸¹ Cf. the website: National Mission on Monuments and Antiquities. Government of India, access: 10.11.2020, http://nmma.nic.in/nmma/antiqDetail.do?refId=142510&object=103&fbclid=I-



A different zone in the broadly understood limits of the city can be observed in the case of the site Nagarjunakonda V. Two imitation aurei found within the citadel were struck in bronze, with a gilded surface. The residue of the gold coating can still be seen, and one of them has two holes in it.82 Both are preserved in a poor condition.83 Very interesting examples of settlement-related finds are also two coins from Nagariunakonda III (site no. 58). In a group of dwelling houses outside the citadel, a treasure of jewellery and other objects of value was found inside a protective probably ceramic pot.⁸⁴ Among the tortoise-shaped gold beads and earrings, there was also an aureus of Antoninus Pius minted for Faustina I, with a hole and a plugged bit of coin metal. 85 In some older publications, 86 this coin is interpreted as an element of a necklace found as part of a hoard, but it is quite likely that it had no connection with it, at least originally.⁸⁷ The same hoard also included a gold bracteate, an imitation of the obverse of a Roman coin.88 The urban quarter where this collection was found had stores and workshops, including jewellers' shops.⁸⁹ One of those was located at the site no. 58, near the structure where this set of artefacts was found.⁹⁰ It is therefore possible that the valuables collected in the treasure from this site may have belonged to a goldsmith or a merchant dealing in this type of commodity.

Another find of interest comes from Dhulikatta, Dt. Peddapali, state of Telangana – a Buddhist temple and palace compound. 91 An imitation of a denarius in the

wAR1Zt3gAv39VNJbb8CDf_WNRymqzvz-JAN05vCmNSuSKT2o4XAKCIghBRxE. The coin is in the collection of the Archaeological Museum in Andhra Pradesh, inv. no.: SM-apm-AP-142510.

⁸² Sarma 1992, p. 41 and 1994, p. 70. It is possible that the coin with holes is an imitation of a coin struck for one of the empresses (Faustina II, Lucilla, or Crispina). For this reason, the original issue could be dated back to the reign of Antoninus Pius, Marcus Aurelius, or Commodus (138–192).

⁸³ As based on the illustrations found on the website: *Museums of India. National Portal & Digital Repository*. Access: 23.11.2020, http://www.museumsofindia.gov.in/repository/record/nkm_hyd-gsc-coppercoin-reg-0065-5318; http://www.museumsofindia.gov.in/repository/record/nkm_hyd-gsc-coppercoin-reg-0076-5329.

⁸⁴ Sarma 1992, p. 39; 1994, p. 68; Sarkar, Misra 2006, pp. 21, 57; Smagur 2018, p. 67.

⁸⁵ The plugged piece of metal was usually placed behind the ruler's head on the obverse, with the intention of increasing the coin's weight to a desired value (Smagur 2020, p. 22ff.).

⁸⁶ Sarma 1992, p. 39; 1994, p. 68; Sarkar, Misra 2006, pp. 21, 57.

⁸⁷ As indicated by the absence of double holes, characteristic of the coins used as pendants in India, and also ears of a different type, while the aperture itself, by means of which the coin was fastened to a necklace, is the result of a damage and a displacement of the metal insert used for increasing the coin's weight (Smagur 2020, p. 24).

⁸⁸ Smagur 2018, p. 67.

⁸⁹ Sarkar, Misra 2006, p. 21.

⁹⁰ Sarkar, Misra 2006, pp. 21, 58. As the authors say, a set of jewellery products and utensils (forms, melting pots) was found there.

⁹¹ Indian Archaeology 1979 a, p. 3, no. 5; Indian Archaeology 1979 b, pp. 2-3, no. 4.

name of Augustus was found there within the bounds of the manufacturing area, among the structures of the phase VI (which was identified in the course of the excavation work). ⁹² In those layers, within the previously existing area of brick structures, a radical change in the architectural organization of the inhabited space was observed. The earlier palace and dwelling compound was transformed into a space of small structures, with a probable craft-based function. Apart from the imitation denarius just mentioned, the objects included many coins of the Satavahana dynasty (struck in lead and tin-and-lead alloys), various pieces of jewellery such as seashell bracelets, beads of precious and semi-precious stones, rings as well as knives, products made from terracotta, among other things. It is noteworthy that some casting forms for punch-mark coins were found there as well.

The last of the coin finds discussed here come from the urban centres and religious compounds, with some less specified contexts. One of such coins is a denarius of Tiberius from Vidyadurrapuram, Dt. Krishna, found underneath the stone tiles close to the floor-level. We do not know what kind of structure this description may refer to, but it is possible that the Buddhist temple (caitya-hall), once located there, could be an answer. As based on the information available, the coin was coated with a resin-like substance (?) and in a fairly good condition Se should also mention four imitations of Roman coins from the site of Kondapur, Medak Dt. Coins were found there during the archaeological explorations in the years 1940–1942 and 2009–2010. From the earlier research, there are records of two imitations of coins in the name of Tiberius: Nhere are records of two imitations of coins in the obverse, while the other is leaden, with two holes also in the upper part of the obverse, while the other is leaden, with two holes also in the upper part of the obverse. The gilded piece, preserved in a good condition, was in the denarius weight range (3.84 g). The imitations were found within a layer along with 1,824 coins of the Satavahana dynasty, punch-mark coins,

⁹² Indian Archaeology 1978, pp. 4–5, no. 6; Suresh 2004, p. 166, no. 64.

^{93 [...] &}quot;under the stone flags near the floor" (Turner 1989, p. 84).

⁹⁴ Coomaraswany 1927, p. 38.

⁹⁵ Gupta 1965, p. 55, no. 3; Turner 1989, p. 84. On this find, see also Wheeler, 1951, p. 45 (as based on Turner 1989); Suresh 2004, p. 170, no. 93.

⁹⁶ Gupta 1965, p. 78; Maheshwari 2012, p. 163.

⁹⁷ Maheshwari 2012, p. 162ff.

⁹⁸ There are different versions concerning this find, e.g., Yazdani 1941, p. 180 – the retrieved piece is a gold (original – author's note) coin of Augustus, with no mention of a broken ear; likewise, Dikshit 1952, p. iii. Wheeler 1951, p. 351 (as based on Turner 1989) – supposedly, a coin of Tiberius, with its non-precious core also noticed; furthermore, the coin is incised and does not seem to be a product of any Indian workshop. For more on this subject, see Turner 1989, p. 61.

⁹⁹ Gupta 1965, p. 78.

¹⁰⁰ Ibidem.

and a seal datable to the 1st century CE (as indicated by its style of inscription). 101 Among pieces included in the more recent research, there are two imitations of coins from the emperor Tiberius' reign, both struck in copper and gilded. 102 The both pieces have holes in the upper part of the obverse, but one of them is wornout to an extent that the two separate holes are not there anymore, while the other one is preserved in around 2/3 of its original size, with a visible hole outline. 103 It is worth noting that the first one has a visible vertical cut over the ruler's portrait on the obverse. 104 Those pieces, just like those discovered in the 1940s, were found in one layer with the numerous coins of the Satavahana dynasty. 105 In the both instances, the coins have been determined as the issues of the following monarchs: Śri Śatakarni (Gautamiputra), Śri Pulumâvi (Vâsisthiiputra), Satakarani, Śiva Śri Pulumâvi (III), Śri Yajña Śâtakarni, 106 as well as Goutamiputra Satakarani and Śri Satakarani. 107 As can be seen, those coins had been produced in the course of a period from, approximately, the 80s of the 1st century CE and the early 180s CE. Some punch-mark coins, which continued to be in circulation until the early decades of the 2nd century or a little later, were found there as well. 108 Assuming the possibility that the retrieved pieces would not have remained in circulation for very long from the moment of being minted, 109 the production time of those imitations of Roman coins could be specified as a period from about the mid-1st century up to the mid-2nd century CE.¹¹⁰ To this list of artefacts, we should also add a bulla of terracotta from the same archaeological layer, which was made in imitation of the emperor Tiberius' coin.¹¹¹ To complement a picture of the range of various "minting" techniques employed by the local artisans, let us take note of some finds of ceramic moulds utilized in the production of local coinage. 112 Such circumstances allow us to conjecture the existence of many possibilities in this regard: from local minting activity to the manufacturing of monetary products of foreign (imitative) and coin-like character. It should be observed that the site has been rich in discoveries of various sorts of hand-crafted products (earthenware and other ceramic

¹⁰¹ Yazdani 1941, pp. 180–181; Turner 1989, p. 61.

¹⁰²Maheshwari 2012, p. 166, Pl. 19.XVII.

¹⁰³ Maheshwari 2012, Pl. 19.XVII.

¹⁰⁴See note 78, Wheeler's comment (1951).

¹⁰⁵Maheshwari 2012, p. 166.

¹⁰⁶ Yazdani 1941, p. 180; Dikshit 1952, p. iii.

¹⁰⁷Maheshwari 2012, p. 166.

¹⁰⁸Gupta 1957, p. 4; Krishnamurthy, p. 266.

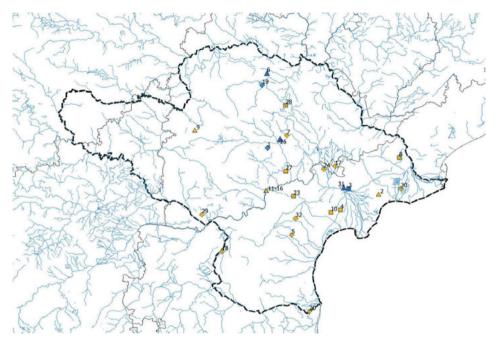
¹⁰⁹Some of the Satavahana coins (as found there) are in a relatively good state of preservation (e.g., Maheshwari 2012, Pl. 19.X, XII).

¹¹⁰Considering the poor condition in which the imitations are usually preserved.

¹¹¹ Maheshwari 2012, p. 166, Pl. 19. XVIII.

¹¹² Yazdani 1941, p. 180; Shastri 1993, p. 81ff.

objects, articles made with the use of kaolin, ivory, terracotta), beads of various types, all of them attesting to the existence of a prospering and highly specialized centre of crafts and other related production. The last one of this particular group of coinage is another specimen from Nagarjunakonda (VI): a bronze *aenima*, possibly coated with gold in its original form. The coin's surface is very much worn-out, but there is an outline of an indeterminate issuer's portrait on one side and the coin disc bears two holes in the upper part of the obverse. On the same side, there is also a clearly visible dent running from one aperture to the other. The exact location of this coin find remains unidentified. 114



Map 4. Finds of Roman coins – contexts. Legend: dashed line - border of the territory, gold coins - yellow, silver coins - blue. \Diamond - hoards, Δ - settlement finds, \square - single finds

THE FUNCTION OF ROMAN COINS AND THEIR IMITATIONS

A very significant and urgent question to be considered is the actual function of Roman coins and their imitations in the territory of India. One of the fundamental topics discussed to date is the possible role of Roman coins in the Indian subconti-

¹¹³ Yazdani 1941, p. 171ff.; Dikshit 1952, p. iVff.; Maheshwari 2012, pp. 166–167.

¹¹⁴ As based on the information from the website: *Museums of India. National Portal & Digital Repository*; access: http://www.museumsofindia.gov.in/repository/record/nkm_hyd-gsc-coppercoin-reg-0087-5340, 11.01.2021.



nent as an element of the monetary market. As this subject matter has been submitted to a number of extensive analyses, the scholarly views are very much divided here, from the opinion that the Roman money fulfilled the monetary function to the assertion of its limited role, as only a source of precious metal material. 115 As the observations of the above-mentioned academic discussions and especially the archaeological contexts as well as the numismatic material recorded in India make it clear, the Roman money served in a variety of roles, in particular as a source of precious metal and coins in circulation.

The treatment of this subject already begins with the question of the Indo-Roman commercial exchange and the role of coins as a medium of payment or exchange in the performance of this type of relations. 116 One of the recurring arguments in favour of Roman coins being utilized as precious metal for the purpose of trading activity is an account by Pausanias (mid-2nd century), concerning the character of the trade exchange between India and the West. 117 As D. W. Mac-Dowall argues, this account indicates that the commodity-based model of trade exchange was practised in Pausanias' time, while coins functioned as a source of precious metal, not as objects of currency. 118 Pausanias comments on the nature of a trade exchange in Sparta under Polydoros (741–665 BCE), i.e., in a period before a more widespread dissemination of coins in circulation. This pivotal item of information, from the perspective of the present text, has a slightly different wording in some renditions, e.g., by W. H. S. Jones and H. A. Omerod (1918), or J. G. Frazer (1898), 119 which could be taken to signify that the Indian merchants were not familiar with coins ("knowing nothing about coinage"). Such a statement would have been anachronistic in Pausanias' time as coins had been in use across the Indian subcontinent already in the early 4th century BCE. 120 It is quite likely then that the ancient Greek geographer made a sort of a mental short-cut here, mixing up the

¹¹⁵E.g., MacDowall 1991, p. 145ff.; 2004, pp. 41–44; Shastri 2004, pp. 48–49; Suresh 2004, p. 66ff.

¹¹⁶There is an extensive body of literature on this subject, e.g., MacDowall 1991, p. 145ff.; 2004, p. 39ff.; 2008, p. 331ff.; Turner 1989, p. 20ff.; Ray 1991, p. 138ff.; Meyer 2007, p. 59ff.; Tomber 2008, pp. 30–37; De Romanis 2012, p. 171; Coob 2018, pp. 241–245, 249ff.; Darley 2019, p. 68ff. et al. Ancient sources: Claudius Ptolemeus, *Geographia*, Book 7, ch. 1; Pliny the Elder, *Historia Naturalis*, VI, ch. 26, pp. 100–106; *Periplus Maris Erythraei*, ch. 39, 49, 56.

¹¹⁷Pausanias, Descriptio Graecae, Book 3.12.3–4.

¹¹⁸MacDowall 2004, pp. 40–42; 1991, p. 145; 2008, p. 331, where the author cites: Pausanias, Descriptio Graecae, Book 3.12.3–4. [...] The sailors on the ship that go to India say that the Indians give produce in exchange for a Greek cargo, but coins are meaningless to them, even though they have an enormous amount of gold and bronze. Johrden, Wolters 2008, p. 347.

¹¹⁹ Jones, Ormerod 1918, Paus. 3.12.4. [4] Those who sail to India say that the natives give other merchandise in exchange for Greek cargoes, **knowing nothing about coinage**, and that though they have plenty of gold and of bronze [...]. For a similar rendition, see J. G. Frazer 1898, p. 151.

¹²⁰Punch-mark coins (Cribb 2005a, pp. 58–72).



two very distinct realities, 8th/7th centuries BCE and his contemporary time, while making a reference to the former period.¹²¹ However, Pausanias' version relating to the barter exchange (at least in some part) with India cannot be ruled out completely or conclusively. In particular, as in view of the analysis presented before, this is exactly the time between the first and the second waves of inflow of the Roman money into Andhra (essentially, contemporaneous with the whole subcontinent).

As part of a basic review of the historical sources relating to the Indo-Roman trade relations in the context of the expended sums and the presence of coinage in this long-range commercial exchange, let us mention the *Historia Naturalis* by Pliny the Elder and the *Periplus Maris Erythraei* by an unknown author. ¹²² Both were written at about the same time, in the 1st century; the Historia Naturalis is a well-known encyclopaedic work, while the *Periplus* is a kind of a travel guide focused on the Red Sea and the Indian Ocean.¹²³ In the first-mentioned source the Roman author refers to the Indo-Roman trading balance (unprofitable to Rome), quoting the accounting sums in sesterces. 124 In addition, his text is rather moralizing in character and takes a critical view of the Romans' extravagant and decadent habits. 125 The latter source gives us more specific details, referring to the types of goods shipped to the ports of India, including Roman coins. 126

The above-mentioned sources do not state explicitly that the Roman coinage was adopted as a medium of payment in India, but none of them rules out such a possibility. As a matter of fact, it is certain that Roman coins were among the products exported to the Indian subcontinent as part of the Indo-Roman trade relations. 127 Could they have been treated and used, then, as nothing but a source of precious metal? From the technical and formal points of view, the coins shipped to India were a legitimate medium of exchange (legal tender), at least from Roman merchants' perspective, appropriate to the political entity empowered with a proper authority to guarantee their value. 128 Such a conjecture could be made, even if the merchants might have been aware of the possible reuse of Roman coinage as precious metals in India and the change of the coins' original function only after their acquisition by Indian tradesmen. We do not know how the Roman merchants'

¹²¹It may be the result of Pausanias' choice of his narrative method and selection of the material presented. See e.g. an extensive commentary to the English translation of the Descriptio Graecae (Frazer 1898, pp. xx, xxii-xxiii, xxviii, Ixxi-Ixxii, Ixxvii-Ixxviii; xc; in general, cf. xiii-xcvi).

¹²²See note 115.

¹²³MacDowall 2004, p. 40; Johrden, Wolters 2008, p. 351.

¹²⁴MacDowall 2004, p. 39; Johrden, Wolters 2008, p. 351; De Romanis 2012, p. 171.

¹²⁵ Johrden, Wolters 2008, p. 351.

¹²⁶MacDowall 1991, pp. 150–151; 2004, p. 39; 2008, p. 331; De Romanis 2012, p. 171.

¹²⁷MacDowall 2004, p. 39; 2008, p. 331; De Romanis 2012, p. 171.

¹²⁸Considering that all the necessary conditions are satisfied. MacDowall 1991, pp. 145–146; 2004, p. 41; Bursche 2008, p. 397.



business partners from the subcontinent set their prices with the money being involved in transactions: in nominal values (being acquainted with the Roman currency units) or according to the weights of precious metal (if the coins were perceived as such). 129 If only the precious metal had been wanted, it would have been cheaper to make payments in bars of metal, instead of shipping the more expensive coinage overseas. Therefore, if coins should have been received in the form of standardized pieces of precious metal, with the imperial stamp seen as a warranty of quality being respected, they may have functioned as a medium of payment. If we assume that the transactions at international level must have required the presence of high sums of money, it does not appear as necessary to have used the relatively low denominations such as, e.g., denarii (if the desired thing was only the precious metal they were made of). According to the information given in the ancient sources, 130 the goods exported to India included those metals which were, reportedly, unavailable in the subcontinent, e.g., copper, brass, tin, lead, and some others, 131 but the short supply was not resolved by means of importing bronze coins as they would begin arriving in India much later. 132 The question of the lack of natural deposits of these metals remains a matter of dispute, 133 even though such resources were available in the Indian subcontinent, as evidenced by the coinage issued by the Satavahanas¹³⁴ and the Sada Dynasty, ¹³⁵ struck with the use of such metals as copper and lead. Referring to the above-cited account by Pausanias, the inhabitants of India reportedly possessed large amounts of gold and bronze, 136 which would be in contradiction to the theory of their allegedly high demand for the import of such precious metals.¹³⁷

As the accounts found in the *Periplus* make it clear, it was possible to exchange Roman coins at a profitable margin relative to the local currency denominations in the ports of the Indian subcontinent.¹³⁸ This circumstance is also indicative of the demand for Roman coins in a character other than only a source of precious metal, because in that case they would have been worth only their equivalent as determined by the quality of the alloy. As can be observed, they were not used as

¹²⁹ Although there have been various attempts to interpret the source texts referring to this subject matter (Cobb 2018, pp. 241–245).

¹³⁰Schoff 1912, p. 42, par. 49; MacDowall 2004, p. 40 (following the *Periplus*).

¹³¹MacDowall 2004, p. 40 (following the *Historia Naturalis*).

¹³²MacDowall 2008, p. 335.

¹³³MacDowall 2004, p. 40.

¹³⁴Cribb 2005a, p. 16; Bhandare 1999, pp. 43–44.

¹³⁵Bhandare 2016, p. 41ff.

¹³⁶See note 117.

¹³⁷MacDowall 2008, p. 335.

¹³⁸For instance, *Barygaza* (present-day Bharuch in the state of Gujarat). Schoff 1912, p. 42, par. 49; MacDowall 1991, p. 150; 2004, pp. 40, 43–44; 2008, p. 331; De Romanis 2012, p. 171.



material for melting down, which would prove that Roman coins were evidently in high demand, regardless of the ways of their reuse at a later time. Such examples show that Roman coins may have served the function of a medium of exchange even at the early stage of their Indian "peregrination". There are also more arguments in support of the monetary nature of their circulation in the Indian subcontinent.

Besides the secondary characteristics frequently found on Roman coins, such as incisions on the surface of the obverses and countermarks, 140 we should also take note of the numerous examples of metal particles plugged into the coins in order to increase their weight. This question, much less known and only sporadically observed in literature, is a good example of the reuse of Roman coins as money.¹⁴¹ A sort of a gold rivet inserted in the previously made hole behind the ruler's portrait served as a plug-in element which increased the coin's weight to a desired value.¹⁴² Such a practice could be observed exclusively in the case of aurei and their imitations issued from Nero to Caracalla. 143 Quite evidently, the aurei of Nero dating from before the reform of 64 were the point of reference here, as indicated by the weights of the coins known (each with an increased weight in proportion to its original mass).¹⁴⁴ This is certainly another piece of evidence for the utilization of Roman coins as a medium of exchange in their monetary function. 145 Even though there was no longer any guarantee of value provided by the issuing authority, the practice and the conformity with the local custom (or perhaps with the law as well) made it possible to use such Roman coinage as a medium of exchange or payment. 146

Regardless of the Roman coins' role in serving the monetary function also overseas (although to a more limited extent),¹⁴⁷ they must have certainly been used as

¹³⁹De Romanis 2012, p. 171.

¹⁴⁰As the question of countermarks has already been discussed at length by many authors, we will not go into details here. Depending on interpretation, however, they may be considered as an argument for the monetary role of Roman coins in India. See, e.g., Turner 1989, pp. 30–36; Berghaus 1991, p. 112; Shastri 2004, pp. 46, 48–49, 51–52; Suresh 2004, pp. 40–58, 68.

¹⁴¹Smagur 2020, pp. 180–181.

¹⁴²According to Berghaus (2000), the making of a hole was to ensure that the coin was not plated, after which the aperture was stopped up with the intention of putting the coin back in circulation (Smagur 2020, p. 22, here also a different view; Smagur 2020, p. 30). It does seem to be a fairly arduous technique, especially in consideration of some simpler solutions such as making a cut in the coin's rim or, possibly, on its surface (author's note).

¹⁴³Smagur 2020, p. 181.

¹⁴⁴Smagur 2020, pp. 188–189.

¹⁴⁵Smagur 2020, pp. 189–191.

¹⁴⁶Cribb 2005b, p. 431; Smagur 2020, pp. 189–190.

¹⁴⁷For more information, see Suresh 2004, pp. 66–71, MacDowall 2008, p. 335. This method of saving up is still practised in India to this day (author's note; as based on oral evidence gathered from inhabitants of India).

a source of precious metals and for reasons of prestige. The best way to observe this phenomenon is to take a look on the jewellery made with the use of imported coins. This practice was a form of investing in the owners' wealth, also lending to their personal prestige. 148 Among the finds from the territory of India, including Andhra, 149 there are many records of Roman coins with two holes in them, which attest to their reuse as pendants. 150 Such a practice was quite common, widely recorded among the finds of Roman coins in various contexts. Readapted pieces included silver (denarii), gold (aurei), but also imitative coins. 151 In addition, a particular overtone may have arisen from the fact that the reused coins were foreign, especially as those of Roman origin would have been very likely associated with the emperor's authority and the power of the state. 152 Not without significance are also the images depicted on Roman coins and the fact that the holes are positioned in such a way that the emperor's portrait is given prominence.¹⁵³ It is also possible that some portion of those coins may have been acquired with the purpose of being used for adornments and becoming a material for jewellers. The archaeological contexts in Andhra would also point to this function of Roman coins as ornaments or a source of material to be used in jewellery.¹⁵⁴ Finally, it should be mentioned that Roman coins, their imitations, and decorations made from coins also served as objects specially prepared to be used for religious purposes. 155 For Andhra, we have records of such finds from several places of worship (Buddhist stupas), where deposits with coins were used as part of their consecration. 156 Yet Roman coins have also been found within the dwelling houses or utility structures situated inside the temple precincts, which can be seen as some evidence of the economic activity performed by inhabitants of the monasteries.¹⁵⁷

¹⁴⁸Smagur 2018, p. 64.

¹⁴⁹E.g., the coins from Gootiparti, Gopalapuram, Kondapur, Peddabankur and others.

¹⁵⁰Suresh 2004, pp. 68, 77–81; Darley 2013, pp. 258–267; Smagur 2020, pp. 179–204.

¹⁵¹Smagur 2018, p. 68.

¹⁵²Smagur 2018, pp. 70–71.

¹⁵³The tradition of portrait-type representations on coins was absorbed by inhabitants of the Indian subcontinent through the Greek coinage expanding from Central Asia (Smagur 2018, pp. 68-70).

¹⁵⁴The hoards known from Weepangundali, Nagarjunakonda III as well as the finds from Kondapur.

¹⁵⁵Suresh 2004, pp. 28, 68; MacDowall 2008, p. 335.

¹⁵⁷Which is no surprise, considering the role of the monasteries established in the proximity of important municipal centres and trade routes (MacDowall 2008, p. 335).

In conclusion, let us turn our attention to the question of the local imitations of Roman coinage.¹⁵⁸ For the territory of Andhra, such coins have been reported in relation to both denarii and gold coins. The investigation of the relevant finds, especially hoards, shows that the phenomenon had never been widespread¹⁵⁹ and the volume reached proportions determined by the requirements of local recipients. 160 Considering the relatively low number of finds, there are no plausible reasons to believe that this measure would have been undertaken to resupply the market in view of the gradually decreasing inflows of Roman coinage. 161 In actual fact, however, imitations were treated just as original coins, i.e., pieces of lighter denominations were given more weight, remade into jewellery, and presumably, they would also serve as a medium of exchange. 162 The attractiveness of Roman coinage was certainly a factor which would cause even their copies to be perceived as desirable, especially as those would be produced in a properly high standard of quality.¹⁶³ There remains a question whether imitations could be distinguished from the original pieces or would function, at least among a majority of users, as originals, since it was assumed they were not regarded as a forgery. 164 The technical and artistic levels of some of those imitative products tended to be very high, 165 but some with very carelessly drawn images and deformed legends would happen as well. 166 In all probability, the supply was determined by the quality of their precious metal material, in the first place, while the image was perceived as contributing to making the coin look more attractive. It is also impossible to overlook the presence of plated and gilded coins. 167 Some of those may have been counterfeit pieces, but there is no way to clarify this situation. As it seems, imitations as well as the original Roman coins were not present in a more general circulation. ¹⁶⁸ As a matter of fact, they may have been the money utilized for some special purposes, then gradually "filtering" into the rest of the Roman monetary mass in Andhra. There is also a possibility that they might have been produced for ritual purposes, more prestigious trade exchange,

¹⁵⁸For more details, see Turner 1989, pp. 37–41; Suresh 2004, pp. 58–66. See also Berghaus 1993b, pp. 305–310; 2004, pp. 53–54.

¹⁵⁹ Just as in other regions of India (Suresh 2004, p. 61).

¹⁶⁰Turner 1989, p. 40; Suresh 2004, p. 65.

¹⁶¹ Even in spite of the general growth in the number of imitations. According to Suresh, copies were produced at all the places where the original coins were missing (Suresh 2004, p. 62).

¹⁶²Suresh 2004, p. 65; Smagur 2018, p. 68; 2020, p. 180.

¹⁶³Turner 1989, pp. 39, 40; Suresh 2004, p. 65; MacDowall 2008, p. 335.

¹⁶⁴Turner 1989, p. 40.

¹⁶⁵Very rarely found or identified now. Turner 1989, p. 37.

¹⁶⁶Suresh 2004, p. 59.

¹⁶⁷E.g. the coins from Kondapur. Turner 1989, pp. 37, 61; Suresh 2004, p. 62.

¹⁶⁸Suresh 2004, pp. 69–70, 75.



or as a medium used in settling accounts between the individual temples.¹⁶⁹ The proportion, in percentage, of imitation coins in the territory of Andhra is definitely higher among the settlement-related and random finds than in hoards.¹⁷⁰ This should attest to the existence of some diverse areas of circulation, overlapping in a relatively small degree. Possibly, this situation may also signify that imitative pieces were manufactured to supply the retail markets, not to serve the needs of the wealthy owners of Roman coins, which would be subsequently deposited in hoards.

THE DISTRIBUTION OF COIN FINDS IN ANDHRA

Coin finds in all the categories discussed here are concentrated primarily in the drainage basin of the Krishna, in the river's lower course and its northern tributaries. The finds from the region of the Godavari river estuary are also an integral part of this conglomeration. In general, there is a noticeable region-wide tendency in the dissemination area gravitating towards the Bay of Bengal. A broader view of the Roman coin finds across this territory shows that the coastal conglomeration continues into the area situated to the north-east of the mouth of the Godavari, Administratively in the state of Andhra Pradesh now, it formed part of the early historical region of Kalinga between the 1st and 2nd centuries. The finds of gold coins are spread out quite evenly in the central part of Andhra, with several more detached sites to the south and east, tied with the river Penna, then a further course of the Krishna, and in the north, the river Musi, a left-hand tributary of the Krishna. Very few locations of silver coin finds are aligned from the south-east to the north-west, in the drainage basins of the both great rivers. As can be seen, those first Julio-Claudian silver coins found their way into some fairly remote inland regions. 171 Interestingly, the two hoards (nos. 1, 19)172 and the settlement-bound finds (nos. 6, 26), perhaps the "splinters" of the first-mentioned deposits, are the northernmost finds of denarii on record, while the Nasthullapur hoard and the coin find from Dhulikatta (nos. 1, 19) are, overall, the farthest localized finds of silver coins in Andhra. 173 It is there where the principal centres of the Satavahana dynasty of the period could be found, which would fit in with the south-eastern direction of their expansion in Andhra. So early Roman coins, retrieved as single finds close to the hoards of Dhulikatta and Phanigiri (nos. 6, 26 – here, with an aureus of Nero found as well), connected with the Buddhist stupas and along with some pieces from the period

¹⁶⁹The possible evidence of some sort of banking activity among the Buddhist monasteries (Thapar 1978, p. 64; Morrison 1997, p. 95; Cobb 2018, p. 262).

¹⁷⁰See above. The frequent presence of imitations in the finds retrieved from urban sites has already been noticed (Suresh 2004, p. 62).

¹⁷¹Cobb 2018, p. 254.

¹⁷²The numbers in brackets correspond to those shown on the maps.

¹⁷³This latter coin is an imitative denarius of Augustus. For more details on the finds from the Karimnagar region, where those sites are located, see Sastry 2004, pp. 59–67.

of the Satavahana dynasty (Dhulikatta), can only lend support to this view. It is also possible that the random finds of denarii from Vidyadurrapuram and Bezvada (nos. 31, 3) are a part of some larger unrecorded conglomeration. Still, this could also be seen as a trace of the redistribution of the early denarii into or from the other parts of the land. Likewise, a significant share of Roman denarii can be observed in the finds from the historical territory of Kalinga, all of them related to the Buddhist centres and the coincident coins of the Satavahana dynasty. The investigation of the denarii finds in the context of the Satavahana empire, most probably extending their control over the basins of the great rivers of Andhra (around the year 100), The investigation of the opportunity for further research on their possible time of arrival in this territory.

The absence of silver coins struck post-54 CE in the hoards demonstrates that their further inflow into Andhra was disrupted shortly after that date or, as noted above, coins issued by Nero's successors ceased to arrive. Assuming that the inflow of the Roman money should be linked to the presence of the Satavahana dynasty in the region, it would have been possible that they made their appearance in the territory, perhaps already during the 60s of the 1st century. However, in view of the fact that the territory in question was still under the rule of the Sada monarchs at the time, 177 one should consider perhaps at least a hypothetical connection between those finds and that dynasty. The secondary features of the Roman denarii (incisions, countermarks) may be indicative 178 of the fact that they should have arrived there much earlier, before their eventual depositing together with coins of the Satavahana dynasty, but also with the formerly used punch-marked coins. A different, but equally possible, option is the arrival of the same coins into Andhra at a later time, as a result of the redistribution of the Roman money from some other parts of the subcontinent, in particular from the south.

The hoards of gold coins are scattered mainly in the western part of the territory of Andhra, generally along the lines parallel to the coast, but with no direct relations with it. Due to the lack of any information about a larger context, only two of them can be linked with the sepulchral or municipal sites: Nellore (no. 20), perhaps related to a Hindu temple there, and Vinukonda (no. 32), where the hoard was retrieved from the relics of a local fortress. On the other hand, the settlement-bound

 $^{^{174}}$ E.g., Bavikonda, Lingarajupalem, Pavurallakonda, Thotlakonda, dt. Visakhapatnam, Salihundam, dt. Srikakulam.

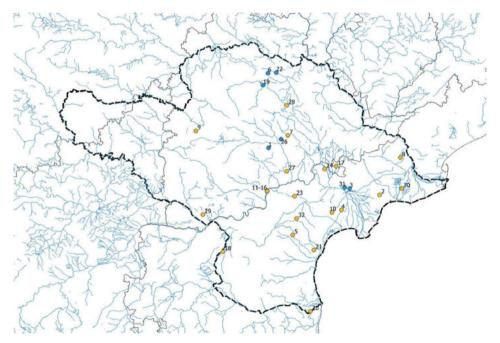
¹⁷⁵Bhandare 2016, p. 40.

¹⁷⁶This situation is basically similar to the finds of denarii recorded in the whole territory of India (Turner 1989, p. 43; Mac Dowall 1991, p. 146; 2008, p. 331; Johrden, Wolters 2008, pp. 342–343, graph 1, tab. 3.). The latter authors cite the presence of Vespasian's coins in hoards of denarii, but the publication by p. Turner (1989), which they refer to, does not provide such information (Salihundam, Wellalur – Turner 1989, pp. 81—84, 124).

¹⁷⁷Bhandare 2016, pp. 38–41.

¹⁷⁸The coins bear some relatively minor traces of their usage in circulation (as based on the photos in Gupta 1957; 1965; Turner 1989, pl. VIII, p. 142).

finds of gold coins, associated with the municipal and religious centres, are aligned along the latitudinal lines, east to west, scattered over a fairly wide area; in two instances, at a very long distance from the hoard sites of Nagarjunakonda (nos. 11–16) and Kondapur (no. 9). In turn, the random finds of Roman coins, concentrated primarily in the eastern part of Andhra, do not seem to have a close connection with the hoards, from which they might have been taken away as a result of redistribution. Their relation to the settlement-bound finds is similar (in general, also quite far apart). To be clear, this whole picture may be distorted as a consequence of the very inadequate current state of the research, which is certainly not without an effect on the correctness of archaeological contexts being determined. A small number of finds suggests low levels of the redistribution of Roman coins and their imitations, which runs parallel to a small amount of the coins recorded overall.¹⁷⁹



Map 5. Territorial extent of Roman coins in Andhra. Legend: dashed line - border of the territory, gold coins - yellow, silver coins - blue

¹⁷⁹Turner 1989, p. 43.

INFLOW AND CIRCULATION

According to the results of the present analysis, Roman coins had been arriving in the historical territory of Andhra¹⁸⁰ for circa 150 years, beginning from the 60s of the 1st century to the 220s. The three distinctly definable waves of inflow appeared with the following intervals: between first and second – ca. 130 years (Nero–Commodus), second and third – ca. 30 years (Commodus-Severan dynasty (Macrinus?)), third and fourth – most probably ca. 80–100 years.¹⁸¹

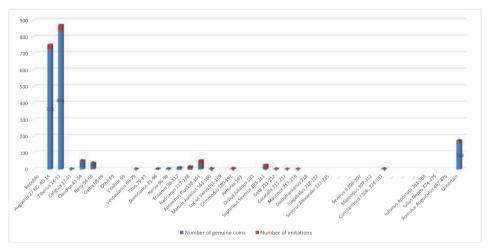


Fig. 25. Finds of Roman coins from early historic Andhra – all categories

The first stream of the Roman money consisted primarily of silver coinage (denarii), the amount of which, despite the very limited number of finds, constitutes the main volume of this particular coin pool. It is significant that the coins under consideration had been issued prior to Nero's monetary reform of 64, with denarii of Augustus and Tiberius being the main component. Such a timeline and composition of the whole coin pool point to certain preferences in the demand for the Roman money in Andhra, which is also evident in the Indian subcontinent as a whole. Among the factors that contributed to this situation was certainly the higher quality of coins minted in the Roman Empire before the innovative measures of Nero's reform. At the same time, what should be also taken into account here is the chronological range of the coin finds, the arrival of which appears to

¹⁸⁰As geographically defined by the author.

¹⁸¹Berghaus 1991, pp. 109–110, phases 2–4; Smagur, Romanowski 2020, p. 487.

¹⁸²Turner 1989, p. 25, 43; Mac Dowall 1991, p. 146; 2008, pp. 333–334; Suresh 2004, p. 35; Meyer 2007, p. 60.



be datable to the reign of Tiberius or his closest successors. ¹⁸³ Although the hoard from Natshullapur would suggest so, ¹⁸⁴ the small number of hoards consisting of denarii, as retrieved and recorded in Andhra to date, cannot provide any argument in confirmation of such an early inflow wave of Roman coinage.

This first stream of silver pieces arriving in Andhra appeared in "company" of aurei of the Julio-Claudian dynasty dating from the issues of Augustus to Nero, especially those from before the reform of 64. The principal portion of the coins collected in this pool is composed of the issues from the emperors Tiberius, Claudius, and Nero. 185 The chronological structure of this first inflow stage of gold coinage is suggestive of the fact that we deal with the inflow wave of the Roman money. chronologically concurrent with the silver one, which had left the Roman Empire towards the close of Nero's reign (the latest one being datable to the years 64–68). However, the hoarded collections of gold coins contain no pieces in the name of Caligula, which are sparsely represented in the hoards of denarii, but first of all, a disproportion in the number of the aurei of Augustus recorded there. In the hoards of gold coins, within the range of the timeline under consideration, the share of the latter issuer is at a definitely lower proportion (6.2%) than in the silver hoards (47.6%). 186 Denarii of Claudius and Nero are represented in a symbolic amount as well (0.8%), compared with a percentage of these two emperors' coins in the gold hoards (56.0%).¹⁸⁷ Among the hoards of gold coins, there have been no records (due to their long-term character) of collections with a terminus post quem defined by coins of Tiberius. For this reason, there is no way of confirming the stream of gold coins, as dating back to this emperor's reign, in the territory of Andhra, 188 which could possibly be done in the case of Roman denarii. As in the instance of silver coinage, the disruption in the inflow of coins after the issues of Nero should be attributed, most likely, to the then-prevailing preference in the Indo-Roman trade exchange for the pre-reform coinage – consequently, to the lack of profitability in receiving debased coins in India or, in general, the lack of interest in such a form of exchange. 189 Let us also notice that although gold coins make up only

¹⁸³Bergaus 1991, pp. 108–109, phase 1.

¹⁸⁴Assuming that its full content is known.

¹⁸⁵Likewise in the entire territory of India (Turner 1989, p. 24; Johrden, Wolters 2008, p. 344).

¹⁸⁶For the Roman perspective concerning this question, see De Romanis 2012, p. 176; Cobb 2018, p. 260.

¹⁸⁷As regards the original Roman coins.

¹⁸⁸ Such a stream has been proposed by p. Berghaus (1991, pp. 108–109); with reference to the hoards from Adam and Vellalur (1939); see also Berghaus 1993b, p. 305. But it should be noted that the first-mentioned hoard may be incomplete, considering the circumstances of the finding (Turner 1989, p. 46), while the content of the latter is also far from certain (Turner 1989, p. 84).

¹⁸⁹Turner 1989, pp. 24–25; Suresh 2004, p. 67; Mac Dowall 2008, p. 333. On the inflow of coins from before Nero's reform, see e.g. Turner 1989, 20ff; MacDowall 1991, pp. 151–152; 1996, pp. 92–94; De Romanis 2012, p. 161ff.



7.7% of the original coins contained in the hoards dating back to the period from Augustus to Nero, ¹⁹⁰ their nominal value exceeds around twice the value of denarii from the same pool, ¹⁹¹ which is quite significant to our estimation of the later levels of the inflow of Roman gold coinage into Andhra.

A second wave of Roman coins, which had taken place during the reign of Commodus, was represented solely by aurei. 192 The core of this pool was composed of coins issued by the Nerva-Antonine dynasty, with a particular indication of the issues in the name Antoninus Pius. The chronological structure of the coins from this pool suggests that they might have been accumulated in the Roman Empire following the year 107. A limited inflow of Roman coins also resulted in a general shift in the relation between the production of their imitations and the original coins staying in circulation. These two categories remain relatively proportionate within all the particular issues. This phenomenon could be explained by the fact that a greater distribution of some ruler's coins would lead to the manufacturing of the increased volumes of their imitations due to a better availability of model coins.

A third wave of the inflow of Roman coinage is a fairly small accumulation of pieces, and very sparsely represented in the finds known from Andhra. 193 It consists of the original aurei in the name of Septimius Severus and imitative coins of his successors, with the latest one being an imitative aureus of Macrinus. If we assume that the model specimen for the latter coin should have been in Andhra, it is fair to conjecture that this stream of coinage may have left the Roman Empire in the late 220s. A prologue to the appearance of this small stream of coinage could be seen in their earlier, definitely low, volume of inflow, most probably aggravated by the advancing economic crisis of the Roman Empire. As we may assume, the interest in the increasingly debased Roman coin must have already been running out in the Indian subcontinent for some time before. In this chronological group, we can observe the already complete dominance of imitations over the original coins, the latter still being produced in limited amounts (showing no apparent intentions to resupply the money market). After this period, we have no records of any original aurei as part of hoards. In the hoard collections from Gumada and Veepangundali, ¹⁹⁴ however, there are three imitations of solidi issued in the name of Constantine I and also one original coin of the same emperor (found at Chebrol). Considering our earlier observations, it is presumable that one more stream of gold coins arrived

¹⁹⁰125 pieces.

¹⁹¹1,489 denarii x 25. For details, see De Romanis 2012, p. 176.

¹⁹²For India as a whole: Turner 1989, p. 42; Berghaus 1991, pp. 109–110, phase 3; 1993b, p. 305; Smagur, Romanowski 2020, p. 487.

¹⁹³Berghaus 1991, p. 110, phase 4; Smagur, Romanowski 2020, p. 487.

¹⁹⁴Turner 1989, pp. 54, 86.



in Andhra, namely solidi from the 4th century (as evidenced by their imitations). 195 Yet in the last-mentioned case, the imitative pieces appeared in a certain set from a later period, along with some imitations of 6th-7th century Byzantine coins. 196

Conclusion

The findings presented in the above sections allow us to formulate several key observations concerning, in particular, the presence of Roman coins in Andhra, but also intended as a contribution to this subject matter in the broader context of the entire Indian subcontinent.

Roman coins had continued to be present in the early-historical territory of Andhra for as long as several centuries, beginning from the second half of the 1st century ¹⁹⁷ up to the 4th century CE, but also presumably over a longer perspective, perhaps already in the context of the Indo-Byzantine relations. 198 They were a tangible effect of the trade exchange, taking place as part of the extensive commercial relations between the Roman Empire and India. This perspective can give us an insight into some fluctuations in the volume of the inflow of Roman coinage into Andhradesa, consistent (in part) with the situation known from the other regions of India. What we can see is a picture of the periodical arrivals of the specific pools of coinage (rather than a linear and steady inflow of Roman money):

- 1. Probable stream of denarii during the reign of Tiberius or shortly afterwards (his closest successors).
- 2. Inflow of silver and gold coins of the Julio-Claudian dynasty, in the final years of Nero's reign (mainly coins from before the reform of 64).
- 3. Inflow of aurei of the Nerva-Antonine dynasty (with occasional additions of coins from the Flavian dynasty) during the reign of Commodus.
- 4. Inflow of aurei in the period of the Severan dynasty (most likely, in the late 220s).
- 5. Presumable stream of gold coins during the Constantinian dynasty.

Most of the coins recorded to date had been deposited as part of various hoards, attesting thus to the thesaurization aspect of the functionality of Roman coinage. The hoarded denarii, though in very sparse samples, show the possible original

¹⁹⁵Berghaus 1991, p. 111, phase 5.

¹⁹⁶And also together with 17 punch-marked coins (Turner 1989, p. 86).

¹⁹⁷Or perhaps a little earlier.

¹⁹⁸Darley 2013, p. 25ff.

nature of such treasured collections. ¹⁹⁹ This suggests their circulation within one and the same monetary pool and a fairly hermetic area of circulation, but possibly also some re-collecting prior to their final depositing. Most of the above-mentioned hoarded collections of gold coins are in turn of secondary character formed over a long period, with a clearly discernible distinct pools related to the inflow waves of Roman coinage. In some instances, none the less, such as the hoards from Nagavarappupadu and Nellore, the collections may be basically of original character, yet previously in circulation for a long time before their final depositing as indicated by their secondary features such as incisions, countermarks, holes, or a degree of the wear-and-tear of coins (including imitations), in general. These characteristics also tend to be varied within the individual hoards, which should point to very different periods of remaining in circulation and functions of Roman coins in Andhra and beyond. ²⁰⁰

The selection of coins with a high quality of precious metal was, with certainty, among the key elements which had an impact on the structures of the Roman coinage exported to India.²⁰¹ This is very much evident from the absence of coins issued after Nero's monetary reform, in the first wave of inflow, but also the later attachment to the weight standard known from the pre-reform period, a phenomenon manifesting itself in the practice of adding more precious metal weight to those gold coins which would arrive later on.²⁰²

The other types of finds (stray settlement) reflect the chronological layout that can be seen in the hoards. In general, this should indicate the provenance of coins from such contexts out of the hoard-based pools which had been dispersed to a little extent, while the structures of denomination and precious metal factors suggest a somewhat different morphology of this coin find type, which makes it possible to observe here some variety in the areas of circulation as regards gold and silver coins. On the other hand, the observation of the settlement-related finds, where a relatively large number of imitative coins can be seen, points to the circulation manner of the latter outside the hoards as well as to their sites of production, generally located at municipal or religious centres.²⁰³

The settlement-related finds are, in general, the body of various data on the archaeological contexts, which should in turn provide us with the essential informa-

¹⁹⁹Formed at the starting point, i.e., in the Roman Empire.

²⁰⁰Cf. Suresh 2004, p. 74, with a reference to a group of hoards, including Nagavarappupadu, where the good condition of the later pieces can be seen very clearly, which would suggest their removal from circulation after a relatively short time. Yet this fact does not have to tell us when they may have been deposited, finally, in a hoard with such characteristics.

²⁰¹Turner 1989, p. 43; Mac Dowall 1991, p. 146; 2008, pp. 333–334; Suresh 2004, p. 35; Meyer 2007, p. 60.

²⁰²Smagur 2020, pp. 188–189.

²⁰³The settlement-bound finds of Andhra belong to this category.

tion useful for determining the function of Roman coins in the Indian milieu. For Andhra, the archaeological records encompass almost all the contexts known from India, e.g., sacred hoards, finds connected with workshops, as well as jewellery hoards located in various urban quarters and other sites outside settlements. This situation is indicative of a fairly broad scope of usage of Roman coins, which was adapted for the local needs and based in the context of local culture.²⁰⁴ It is also significant that the Roman coins in Andhra may have been used, to some extent, as a medium of exchange or payment. This function may have been based on their symbolic characteristics and technical properties as determined by their Roman provenance, but with the acceptance of local authorities and the respect for local customs.²⁰⁵ The significance of the Roman money and the demand for it in the Indian subcontinent may be also confirmed by the production of imitative coins.²⁰⁶ This practice was not supposed to serve the market in response to the diminished inflow of Roman coins as imitations satisfied the economic, or prestige-related, needs of a different nature, which would continue at a more or less steady level.

The finds of Roman coins are concentrated mostly in the basin of the Krishna and at the mouth of the Godavari, i.e., in the central part of Andhra. The time of the inflow of the Roman money suggests that it was connected with the period of the rule of the Satavahana empire in Andhra (the state reached its peak during the 2nd century, but the expansion of the Satavahana dynasty into this territory had already started in the 1st century).²⁰⁷ It should be presumed that the discernible fluctuations in the inflow of Roman coins were also conditioned by the degree of monetization across the whole region and the economic policy of the Satavahana dynasty.

A more general observation is the problem of a basically low number of Roman coins, as recorded to date, in relation to the territory and its role in commerce, also the long-distance one.²⁰⁸ It appears that this is not just a result of the state of our research, but a certain reflection of the vividness of a cultural situation.²⁰⁹ This may also give support to the fact that coins were only an element in the Indo-Roman trade, and certainly not the crucial one in consideration of the figures quoted by Pliny the Elder.²¹⁰ Evidently, in the Indo-Roman trade relations, the other goods

²⁰⁴Suresh 2004, p. 77ff.; Smagur 2018, p. 70ff.

²⁰⁵Cribb 2005b, p. 431; Smagur 2020, pp. 189–190.

²⁰⁶Turner 1989, pp. 39, 40; Suresh 2004, p. 65; MacDowall 2008, p. 335.

 $^{^{207}}$ Nath Sen 1999, p. 172ff.; Thapar 2002, pp. 226–227; Singh 2008, p. 381ff.; Tomber 2008, pp. 130–131; Avari 2011, pp. 149–150.

²⁰⁸For Andhra – 1,859 original coins, while for the entire territory of India (sometimes, with reference to the southern part of the subcontinent) – approx. 5,000–6,000 denarii and ca. 1,000–1,500 aurei; e.g., Turner 1989, p. 23; Cobb 2018, p. 256.

²⁰⁹Even assuming that this was only some part of the coins actually imported.

²¹⁰Which amounted to 550,000 sesterces per annum, expended on various Indian goods (Bostock, Riley 1855, Plin. Nat. 6.26; Turner 1989, p. 23; MacDowall 2004, p. 40; De Romanis 2012, p. 171.



must have played a greater role in the commercial commodity exchange, especially in view of the decreasing quality of Roman coinage.²¹¹

Finally, it is also possible that the precious metal obtained as a result of the trade exchange with Rome may have been utilized in ways which are now very difficult to determine or infer from coin finds, e.g., due to the melting down of large amounts of coins. There is a possibility that Roman denarii might have served as material in the production of coinage by the Western Kshatrapas dynasty, but this is still a matter of controversy.²¹²

The form of the present text does not make it possible to take up any attempt of an exhaustive treatment of all the questions concerning the inflow and the further functions or utilization of Roman coins in the Indian subcontinent. There is no doubt that the possibilities of interpretation are hindered by the highly insufficient source base and the state of the studies on the numismatic finds in the territory of Andhra. It becomes necessary, therefore, to broaden the database in the scope required, also as a result of archaeological explorations, and also, as much as possible, to have an insightful critical analysis of the material known to date. It is also beyond all doubt that the research would be very much facilitated by a greater accessibility of the artefacts preserved in the museums of India and the more frequent co-operation with local coin collectors.

LIST OF COIN FINDS

(numbers of finds correspond to the designations used on the maps featured as part of the text)

- 1. Akenpalle, Nalgonda Dt., Telangana
- 2. Alluru, Krishna Dt., Andhra Pradesh
- 3. Bezwada (Vijayawada, Bezawada), Krishna Dt., Andhra Pradesh
- 4. Chebrolu, Guntur Dt., Andhra Pradesh
- 5. Dharmavaripalem, Prakasam Dt., Andhra Pradesh
- 6. Dhulikatta, Peddapali Dt., Telangana
- 7. Gootiparti, Nalgonda Dt., Telangana
- 8. Gopalapuram, West Godavari Dt., Andhra Pradesh
- 9. Kondapur, Sangarddy Dt., Telangana
- 10. Mallayapalem, Guntur Dt., Andhra Pradesh

²¹¹MacDowall 2008, p. 336.

²¹²Suresh 2004, p. 68. In order to determine this, it would be necessary to execute the metallographic testing on the composition of the local coins' alloys with an emphasis on the presence of trace elements as the examination of the quality of a given precious metal material itself cannot be decisive in determining its provenance. Such procedures had been performed, but unfortunately on a limited number of samples (Ganorkar, Pandit Rao, Gayathri 2004, pp. 79–84).

- 11. Nagarjunakonda I, Guntur Dt., Andhra Pradesh
- 12. Nagarjunakonda II, Guntur Dt., Andhra Pradesh
- 13. Nagarjunakonda III, Guntur Dt., Andhra Pradesh
- 14. Nagarjunakonda IV, Guntur Dt., Andhra Pradesh
- 15. Nagarjunakonda V, Guntur Dt., Andhra Pradesh
- 16. Nagarjunakonda VI, Guntur Dt., Andhra Pradesh
- 17. Nagavarapuppadu, Khamman Dt., Andhra Pradesh
- 18. Nandyal, Kurnool Dt., Andhra Pradesh
- 19. Nasthullapur, Karimnagar Dt. Telangana
- 20. Nellore, Nellore Dt., Andhra Pradesh
- 21. Ongole, Prakasam Dt., Andhra Pradesh
- 22. Peddabankur, Karimnagar Dt. Telangana
- 23. Peddakodamagundla, Guntur Dt., Andhra Pradesh
- 24. Penuganchiprolu, Krishna Dt., Andhra Pradesh
- 25. Phanigiri I, Nalgonda Dt., Telangana
- 26. Phanigiri II, Nalgonda Dt., Telangana
- 27. Sangavam, Nalgonda Dt., Telangana
- 28. Warangal Dt., Warangal Dt., Telangana
- 29. Weepangundala, Mahbubnagar Dt., Telangana
- 30. Veeravasaramu, West Godavari Dt., Andhra Pradesh
- 31. Vidyadurrapuram, Krishna Dt., Andhra Pradesh
- 32. Vinukonda, Guntur Dt., Andhra Pradesh

BIBLIOGRAPHY

Avari B.

2011 Starożytne Indie, Kraków.

Berghaus P.

- 1991 Roman coins from India and their imitations, [in:] Coinage, trade and economy, January 8th–11th, 199, 3rd International Colloquium, ed. A.K. Jha, Nashik, pp. 108–121.
- 1993a Bulletin de la société Française de Numismatique, 48, No. 5, pp. 547–549.
- 1993b Indian Imitations of Roman Coins, [in:] Proceedings of the XIth International Numismatic Congress: organized for the 150th anniversary of the Société Royale de Numismatique de Belgique. September 8th–13th 1991, 2, eds T. Hackens, G. Moucharte et al., Brussels, Louvain-la-Neuve, pp. 305–310.
- 2000 Gestopfte Löcher auf römischen Goldmünzen aus indischen Funden, [in:] XII. Internationaler numismatischer Kongress Berlin 1997. Akten Proceedings Actes, vol. I, eds B. Kluge and B. Weisser, Berlin, pp. 499–502.
- 2004 Evidence of Die-Links of Roman Coins and Their Indian Imitations Found in India, [in:] Foreign Coins Found in the Indian Subcontinent, 4th International Colloquium, 8th–10th January, 1995, eds D.M. MacDowall and A. Jha, Nashik, pp. 53–54.

Bhandare S.

- 1999 *Historical Analysis of the Satavahana Era: A Study of Coins*, PhD. Thesis, parts 1 and 2, University of Bombay, unpublished.
- 2016 Money and the Monuments: Coins of the Sada Dynasty of the Coastal Andhra Region, [in:] Amaravati: The Art of an Early Buddhist Monument in Context, eds A. Shimada, M. Willis, London, pp. 37–116.

Bostock M.D., Riley H.T.

1855 *The Natural History. Pliny the Elder* (with an English Translation by M.D. Bostock, H.T. Riley, London.

Bursche A.

2008 Functions of Roman coins in Barbaricum of Later Antiquity. An antropological essay, [in:] Roman Coins outside the Empire, Proceedings of the ESF/SCH Exploratory Workshop, Radziwilł Palace, Nieborów (Poland), 3–6 September 2005, Collection Moneta 82, eds A. Bursche, R. Ciołek and R. Wolters, Wetteren, pp. 395–416.

Chattopadhyaya S.

1974 Some Early Dynastie of South India, Delhi-Varanasi-Patna.

Coob M.A.

2018 Rome and the Indian Ocean Trade from Augustus to the Early Third Century CE, Mnemosyne, Supplements, History and Archaeology of Classical Antiquity, vol. 418, Leiden-Boston.

Coomaraswamy A.K.

1927 History of Indian and Indonesian Art, London.

Cribb J.

2005a The Indian Coinage Tradition. Origins Continuity & Change, Nashik.

2005b Money as Metaphor 1 – Money is Justice, The Numismatic Chronicle 168, pp. 417–438.

Cunnigham A.

1871 *The ancient geography of India, The Buddhist period*, vol. I, London.

Darley R.

- 2013 *Indo-Byzantine exchange, 4th to 7th centuries: a global history*, PhD. Thesis, University of Birmingham, pp. 258–267.
- 2019 Self, other and the use and appropriation of late Roman coins in peninsular India (4th-7th centuries CE), [in:] Negotiating Cultural Identity, ed. H.P. Ray, London, pp. 60–84.

De Romanis F.

2012 Julio-Claudian denarii and aurei in Campania and India, Annali 58, pp. 161–192.

Dikshit M.G.

1952 Some beads from Kondāpūr, Hyderabad Archaeological Series, No. 16, Hyderabad.

Francis W. et al.

1988 Gazetteer of South India, vol. I, New Delhi.

Frazer J.G.

1898 Pausanias's, Description of Greece, translated with a commentary by J.G. Frazer, vol. I, London-New York.

Ganorkar M.C., Pandit Rao V., Gayathri P.

2004 Scientific study of Roman Coins in India, [in:] Foreign Coins Found in the Indian Subcontinent, 4th International Colloquium, 8th–10th January, 1995, eds D.M. MacDowall and A. Jha, Nashik, pp. 79–84.

Gupta P.L.

- 1957 *Nasthulapur hoard of silver Roman and punch-marked coins*, Journal of The Numismatic Society of India, vol. XIX, pp. 1–4.
- 1965 Roman Coins from Andhra Pradesh, Andhra Pradesh Government Museum, Series 10, Hyderabad.
- 1972 An interesting Treasure-Trove from Weepangandla (Mahboobnagar), Journal of The Numismatic Society of India, vol. XXXIV, pp. 1–8.

Higham C.F.W.

2004 Encyclopedia of ancient Asian civilizations, New York.

Indian Archaeology (no author)

- 1957 Explorations and Excavations, Indian Archaeology 1956–1957 A Review, pp. 5–38.
- 1964 Explorations and Excavations, Indian Archaeology 1961–1962 A Review, pp. 1–63.
- 1979a Explorations and Excavations, Indian Archaeology 1974–1975 A Review 1979, pp. 1–52.
- 1979b Explorations and Excavations, Indian Archaeology 1975–1976 A Review 1979, pp. 1–59.
- 1980 Explorations and Excavations, Indian Archaeology 1976–1977 A Review 1980, pp. 1–56.
- 1993 Explorations and Excavations, Indian Archaeology 1988–1989 A Review, 1993, pp. 1–91
- 1994 Explorations and Excavations, Indian Archaeology 1989–1990 A Review, pp. 1–111.

Johrden K., Wolters R.

2008 Die römischen Fundmünzen in Indien, [in:] Roman Coins outside the Empire, Proceedings of the ESF/SCH Exploratory Workshop, Radziwill Palace, Nieborów (Poland), 3–6 September 2005, Collection Moneta 82, eds A. Bursche, R. Ciołek and R. Wolters, Wetteren, pp. 341–354.

Jones W.H.S., Ormerod H.A.

1918 *Pausanias, Description of Greece* (with an English translation by W.H.S. Jones, D. Litt and H.A. Ormerod, M.A., in 4 volumes, Cambridge-Harvard-London.

Khan A.W.

1963 A Monograph on Yēlēśwaram Excavations, Hyderabad.

Krishnamurthy R.

2016 Navalai coin hoard, a fresh study, [in:] Sangam Age Tamil Coins and Ancient Foreign Coins fund in Tamilnadu, Chennai, pp. 260–266.

Krishna Reddy K.

2011 Indian history, New Dehli.

Krishna Sastry V.V.

1992 Roman gold coins. Recent discoveries in Andhra Pradesh, Hyderabad.

Longhurst A.H.

1999 The Buddhist antiquities of Nāgārjunakonda, Madras Presidency, Memoirs of The Archaeological Survey of India, No. 54, Janpath-New Delhi.

MacDowall D.W.

- 1991 Indian Imports of Roman Silver Coins, [in:] Coinage, Trade and Economy, January 8th—11th, 199, 3rd International Colloquium, ed. A.K. Jha, Nashik, pp. 145–163.
- 1996 The evidence of the Gazetteer of Roman artefacts in India, [in:] Tradition and Archaeology, Early Maritime Contacts in the Indian Ocean, eds H.P. Ray and J.–F. Salles, Lyon-New Delhi, pp. 79–95.
- 2004 The Indo–Roman Metal Trade, [in:] Foreign Coins Found in the Indian Subcontinent, 4th International Colloquium, 8th–10th January, 1995, eds D.M. MacDowall and A. Jha, Nashik, pp. 39–44.
- 2008 The context and function of the Roman coins fund in India, [in:] Roman Coins outside the Empire, Proceedings of the ESF/SCH Exploratory Workshop, Radziwiłł Palace, Nieborów (Poland), 3–6 September 2005, Collection Moneta 82, eds A. Bursche, R. Ciołek and R. Wolters, Wetteren, pp. 331–340.

Maheshwari G.

2012 Archaeological excavation at Kondapur, Sangareddy Taluk, Medak district, Andhra Pradesh: fresh evidence, [in:] Purā-Jagat, Indian Archaeology, history and culture. Latest researches, in honour of Late Shri Jagat Pati Joshi, vol. I, eds C. Margabandhu et al., Delhi, pp. 163–167.

Meyer J.Ch.

2007 Roman Coins as a Source for Roman Trading Activities in the Indian Ocean, [in:] Definite places, translocal exchange, ed. E.H. Seland, Oxford, pp. 59–67.

Mitchiner M.

1998 The Coinage and History of Southern India: Part One Karnataka-Andhra, London.

Morrison K.D.

1997 Commerce and Culture in South Asia: Perspective from Archaeology and History, Annual Review of Anthropology 26, pp. 87–108.

Nath Sen S.

1999 Ancient Indian history and civilization, New Delhi-Bangalore-Calcutta.

Prinsep J.

1832 On the Ancient Roman Coins in the Cabinet of the Asiatic Society, Journal of the Asiatic Society in Bengal, vol. I, pp. 392–408.

Ramachandran T.N.

1999 *Nagarjunakonda 1938*, Memoirs of the Archaeological Survey of India, 71, Janpath-New Delhi.

Raja Reddy D.

2005 An Overwiew of Andhra Region Coins, Studies in South Indian Coins, vol. 15, pp. 7–29.

Ray H.P.

1996 Early coastal trade in the Bay of Bengal, [in:] The Indian Ocean in Antiquity, ed. J. Reade, London, pp. 351–364.

Ray S.C.

1991 A Revised Study into the Numismatic Evidence of the Indo-Roman Trade, [in:] Coinage Trade and Economy, ed. A.K. Jha, Nashik, pp. 138–144.

Sarkar H., Misra B.N.

2006 Nagajunaconda, New Delhi.

Sarma I.K.

- 1992 Roman coins from Andhra Pradesh: Their Context, Chronology and Cultural Significance, Studies in South Indian Coins, 2, pp. 35–50.
- 1994 A critical study of the numismatic evidences from Nagarjunakonda excavations, Studies in South Indian Coins, 4, pp. 79–86.

Sastry K.

- 1992 Roman gold coins. Recent discoveries in Andhra Pradesh, Hyderabad.
- 2004 Roman Coin finds in the Karimnagar Region of Andhra, [in:] Foreign Coins Found in the Indian Subcontinent, 4th International Colloquium, 8th–10th January, 1995, eds D.M. MacDowall and A. Jha, Nashik, pp. 59–67.

Sastry K., Subrahmanyam B., Rama Krishna Rao N.

1992 Thotlakonda (A Buddhist site in Andhra Pradesh), Andhra Pradesh Government Archaeological Series, No. 68, Huderabad.

Schoff W.H.

1912 The Periplus of the Erytraean Sea. Travel and Trade in the Indian Ocean by a Merchant of the First Century (with an English translation by W.H. Schoff), New York.

Shastri A.M.

- 1993 *Kondapur: A Satavahana Silver Coins Mint*, Studies in South Indian Coins, vol. III, pp. 81–85.
- 2004 Some Aspects of Roman Coins in India, [in:] Foreign Coins Found in the Indian Subcontinent, 4th International Colloquium, 8th–10th January, 1995, eds D.M. MacDowall and A. Jha, Nashik, pp. 45–52.

Singh U.

2008 A History of Ancient and Early Medieval India: From the Stone Age to the 12th century, Delhi-London-Tokyo.

Sinopoli C.M.

2001 On the edge of empire: form and substance in the Satavahana dynasty, [in:] Empires: Perspectives from Archaeology and History, ed. S.E. Alcock, Cambridge, pp. 155–178.

Skinner M.C.

2012 Urbanization and Interactions in the Early Historic Deccan: The Sātavāhana, Western Kṣatrapa, and Ikṣvāku Dynasties, MA. Thesis, University of Washington.

Smagur E.

- 2018 From coin to bulla: A cultural response to the influx of Roman denarii into India, Numismatic Digest, vol. 42, pp. 63–78.
- 2020 Regulated Roman Coins and Their Imitations from India: Did Roman Coins Circulate as Money in the Subcontinent?, Notae Numismaticae/ Zapiski Numizmatyczne, XV, pp. 21– 46.

Smagur E., Romanowski A.

2020 review: B. Subrahmanyan, G.V. Rama Krishna Rao and p. Brahma Chary; (ed.) p. Chenna Reddy, Roman Gold Coins. "A Treasure Trove from Penuganchiprolu", Museum Series No. 31, Hyderabad (Department of Archaeology and Museums, Government of Andhra Pradesh), 2008, pp. 36 (plus front matter not paginated). ISBN 978-81-920727-1-5.1, The Numismatic Chronicle 18, pp. 484–490.

Sree Padma B.

1993 Coins and Maritime Trade of Andhra Country, Studies in South Indian Coins, vol. 3, pp. 97–100.

Sridhar T.S., Suresh S., Sundararajan N.

2011 Roman Coins in the Government Museum Chennai. With a Detailed Catalogue of the Denarii Hoard from Budinatham (Tamil Nadu), Chennai.

Subrahmanyan B., Rama Krishna Rao G.V., Brahma Chary P.

2008 Roman gold coins. A Treasure Trove Penuganchiprolu, Museum Series, 31, Hyderabad.

Suresh S.

- 2004 Symbols of Trade. Roman and Pseudo-Roman Objects found in India. New Delhi.
- 2013 Countermarks on the Roman coins found at Budinatham (Tamil Nadu), Studies in South Indian Coins, vol. 23, pp. 31–38.
- 2015 Coin, commerce and culture: New light on some of the Roman coin finds in coastal Andhra Pradesh, Studies in South Indian Coins, vol. 25, pp. 12–15.

Sydenham Col.,

1789 Extract of a Letter from Col. Sydenham to Lord Macartney, dated St. Thomas' Mount, near Madras, Oct. 14, 1786. Communicated by Dr. Lort, V. P., Archaeologia 9, pp. 81–83.

Thapar R.

1978 Ancient India Social History: Some Interpretations, London.

2002 The Penguin History of Early India From the Origins to AD 1300, London.

Tomber R.

2008 *Indo – Roman Trade: From Pots to Pepper*, London.

Thurston E.

1889 *On a recent discovery of Roman coins in Southern India*, Numismatic Chronicle 3, ser. 9, pp. 325–328.

Turner P.J.

1989 Roman coins from India, London.

Unnithan N.G.

1963 *Eyyal hoard of silver punch-marked and Roman coins*, Journal of the Numismatic Society of India, 25, pp. 22–28.

Yazdani G.

1941 Excavations at Kondapur (An Andhra Town, Cir. 200 B.C. to 200 A.D.), Annals of the Bhandarkar Oriental Institute 22, pp. 171–185.

MONETA RZYMSKA WE WCZESNOHISTORYCZNEJ ANDHRZE

(Streszczenie)

W pierwszych wiekach po Chrystusie, subkontynent indyjski wszedł w orbitę handlowych zainteresowań rzymskiego państwa. Przedmiotem wymiany był szereg towarów, wśród których znalazły się monety rzymskie. Ich napływ dokumentują liczne znaleziska, a także przekazy autorów antycznych. Aby lepiej zrozumieć rolę jaką odgrywał rzymski pieniadz w tych relaciach oraz jak jego obecność wpłyneła na kulture i mieszkańców wczesnohistorycznych Indii, należy podejmować szerokopłaszczyznowe, kompleksowe badania, w tym dotyczące napływu, cyrkulacji i funkcji tych obcych dla Indusów monet. Widząc potrzebę prowadzenia badań dla poszczególnych regionów Indii jako przedmiot rozważań wybrano terytoriom Andhry, gdzie licznie rejestrowane sa znaleziska monet rzymskich. Obszar ten, jest zlokalizowany w południowo-wschodnich Indiach nad Zatoka Bengalska, w dorzeczu dwóch wielkich rzek - Kriszny i Godawari. Dla potrzeb tego opracowania wyznaczono granice regionu, biorąc pod uwagę uwarunkowania historycznogeograficzne, nie zaś granice administracyjne dzisiejszego stanu Andhra Pradesh. Na podstawie dostępnych danych dotyczących fizjografii i historii Andhry, wytyczono granice na rzekach, odtwarzając możliwy zasięg wczesnohistorycznego okresu w dziejach tego terytorium. Zakres czasowy pracy, wyznaczają daty emisji monet i czas ich napływu. W praktyce jest to zatem okres od ok. połowy I w. do poczatków wieku IV, przy czym najbardziej reprezentatywny materiał występuje do lat 20. III w. Przez większość interesującego nas okresu, Andhra była pod władaniem państwa Satawahanów, aby po jego upadku przejść częściowo w ręce dynastii Ikshwaku a później Pallawas. W wyniku przeprowadzonej kwerendy, do badań zebrano materiał monetarny, pochodzący z 32 stanowisk, na których zarejestrowano 2115 monet rzymskich. Wśród nich monety oryginalne to 1859 egz., a lokalne imitacje to 128 sztuk. W zarejestrowanym materiale wydzielono 11 skarbów, 8 stanowisk ze znaleziskami luźnymi i 13 stanowisk osadniczych. W stosunku do opracowania P.J. Turner (1989), notujemy ponad stuprocentowy przyrost informacji, biorac pod uwage liczbe stanowisk, jednak liczba zawartych w nich monet jest niewielka. Materiał został opracowany w ramach poszczególnych kategorii znalezisk, ze szczególnym uwzględnieniem rodzaju kruszcu w przypadku skarbów. zarejestrowanych 11 skarbów monet rzymskich, dwa z nich to zespoły monet srebrnych. Ogółem zarejestrowano w nich 1570 oryginalnych rzymskich denarów i ich imitacji Najstarsze reprezentowane są przez monety Augusta (z lat 2-14 przed Chr.), najmłodsze zaś przez denary Nerona (54 r.). Rozkład chronologiczny monet wskazuje, że jest to fala napływu srebrnego pieniadza rzymskiego, która opuściła Cesarstwo Rzymskie za czasów panowania Nerona, przed reforma z roku 64. Brak monet wybitych po 54 r. wskazuje na przerwanie dalszego napływu rzymskiego srebra na teren Andhry już w końcu lat 50. lub początku 60. I w. Mimo wielu cech wtórnych, m.in. nacięć czy punch-marks, mogących świadczyć o długiej cyrkulacji monet, zespoły denarów maja cechy depozytów o charakterze pierwotnym. Może to sugerować ich obieg w ramach jednej puli monetarnej badź powtórne gromadzenie przed ostateczną depozycją, która nastąpiła przed napływem kolejnej fali monet rzymskich pod koniec II w. Niewielka liczba imitacji denarów w depozytach o krótkiej chronologii wskazuje, że powstały w czasie cyrkulacji monet oryginalnych

i miały związek z tą pulą monetarną. Na omawianym terenie, zarejestrowano także dziewięć zespołów monet złotych – aureusów i ich naśladownictw. Skarby monet złotych zawierają 372 egzemplarze, a ich rozpiętość chronologiczna to ok. 350 lat. Najstarszymi zarejestrowanymi monetami są aureusy Augusta, najmłodsze zaś reprezentuje imitacja Konstantyna I. Chronologiczny rozkład zdeponowanych w skarbach monet złotych, wskazuje na trzy podstawowe pule, które znalazły się w obiegu na terenach Andhry. Pierwsza z nich to monety dynastii julijsko-klaudyjskiej datowane od emisji Augusta do Nerona (zwłaszcza do reformy z 64 r.), która opuściła Cesarstwo Rzymskie w samym końcu panowania tego ostatniego władcy. Drugi strumień złotego pieniadza rzymskiego, mógł wypłynać z Rzymu za panowania Kommodusa. Ta pula pienieżna zawierająca monety emitowane od czasów Wespazjana, mogła być przypuszczalnie formowana na terenie Cesarstwa po roku 107, kiedy to reforma przeprowadzona przez Trajana, nakazywała wycofać z rynku wszystkie denary i aureusy sprzed reformy Nerona w 64 r. Kolejna - trzecia fala napływu rzymskich monet, to już złoto Sewerów, która mogła opuścić Cesarstwo w końcu lat 20. III w. Lokalne imitacje monet złotych widzimy we wszystkich wspomnianych pulach monet złotych, z wyraźnym wzrostem ich wystepowania za Antoninów, szczególnie Antonina Piusa. Pewne przesłanki wskazuja, że możemy mieć do czynienia jeszcze z dwoma innymi strumieniami monet. W przypadku monet srebrnych, może być to wcześniejszy horyzont znalezisk, których napływ należałoby datować na czasy Tyberiusza lub jego najbliższych następców – Kaliguli czy Klaudiusza, w przypadku aureusów niewykluczony jest ich napływ w czasach konstantyńskich w początkach IV w. Ze wzgledu jednak na brak w pełni reprezentatywnego materiału, pozostaja one w sferze przypuszczeń. Oprócz skarbów omówiono także inne zarejestrowane kategorie znalezisk luźne i osadnicze. Znalezisk z cmentarzysk lub grobów nie stwierdzono. Jeśli chodzi o znaleziska luźne, pozbawione kontekstu archeologicznego, to zarejestrowano je w 8 miejscowościach w liczbie 16 egzemplarzy, przy czym 14 z nich to monety złote - oryginalne i imitacje, a 2 monety w tej kategorii znalezisk to okazy srebrne - oryginalne denary. Wyraźnie widzimy tu przewagę monet złotych, przeważnie aureusów, nad monetami srebrnymi, co stoi w opozycji do sytuacji znanej ze skarbów, gdzie w masie monetarnej bardzo wyraźnie przeważają denary. Rozkład czasowy monet złotych z tego typu znalezisk, wskazuje nam podstawowe cechy chronologiczne jakie widzimy w strukturze monet zawartych w skarbach. Wyraźnie zaznaczone trzy pule monetarne – pierwsza zaznaczona przez monetę Nerona, druga kilkoma monetami Antoninów i trzecia, sygnalizowana imitacjami aureusów Septymiusza Sewera. Ostatnia grupa znalezisk, omówiona w niniejszym opracowaniu, to znaleziska osadnicze szeroko związane ze stanowiskami o takim charakterze, tj. osadami mieszkalnymi, centrami produkcyjnymi, miejscami kultu. Na omawianym terytorium zanotowano 13 stanowisk, na których odkryto 29 monet rzymskich lub ich imitacji. Wśród nich 17 egzemplarzy to monety złote bądź pozłacane, a monety srebrne w tej kategorii znalezisk to 12 egzemplarzy. W tym wypadku widzimy proporcje nieco zbliżone do znalezisk monet zawartych w znaleziskach luźnych, co pokazywałoby ewentualnie tożsamą relację kruszcową obu kategorii, odmienną jednak od skarbów. Jeśli chodzi o strukturę nominałową, widzimy bardzo interesujący rozkład imitacji, które mają tu znacznie wiekszy udział niż naśladownictwa zawarte w znaleziskach luźnych a zwłaszcza w skarbach. Być może podobnie jak w przypadku znalezisk luźnych, te zachwiane proporcje wskazują na produkcję imitacji, które nie weszły w skład skarbów,



lub co mniej prawdopodobne ich redystrybucję ze skarbów. Struktura chronologiczna znalezisk osadniczych, odzwierciedla dwie z czterech wskazanych wcześniej fal napływu rzymskiego pieniadza widoczne w skarbach i znaleziskach luźnych – julijsko-klaudyjską i z czasów Antoninów. Jeśli chodzi o liczbę stanowisk z zarejestrowanymi znaleziskami monet rzymskich, to ich liczba rozkłada się dość równomiernie w przypadku wszystkich trzech omawianych kategorii, choć grupą wiodącą są tu znaleziska osadnicze. Z kolei, jeśli chodzi o liczbę zarejestrowanych monet, to ich gros znajduje się w skarbach – 98%, przy marginalnej obecności w znaleziskach innych typów. Wskazuje to, że rzymskie monety na terenie Andhry były przede wszystkim tezauryzowane, zaś ich redystrybucja lub innego rodzaju rozproszenie miało minimalny wymiar. Zróżnicowane konteksty archeologiczne znanych odkryć, wskazują na szerokie spektrum użytkowania monet, w sferze gospodarczej, kultowej i prywatnej. Rejestrujemy znaleziska dokonane w reliktach hinduistycznych i buddyjskich światyń, w stupach i wiharach, a także w strefach miejskich o charakterze handlowym czy związanym z produkcją rzemieślniczą. Niektóre z depozytów zawierają także biżuterie czy ułamki monet kruszcowych – rzymskich i lokalnych, co może sugerować zestaw surowca i wyrobów jubilera, który mógł być właścicielem skarbu. Z drugiej strony obecność ozdób, może wskazywać na charakter prywatnego zasobu, np. ślubnego daru. Istotnym zagadnieniem jest funkcja rzymskich monet i ich naśladownictw na terytorium Indii, a jedna z podstawowych dyskutowanych kwestii, jest ewentualna rola rzymskich monet na subkontynencie indyjskim jako pieniądza monetarnego. Poglądy badaczy nie są tu zgodne, wahając się pomiędzy stwierdzeniem monetarnej funkcji rzymskiego pieniądza lub sprowadzając go do jego kruszcowej roli. Analiza źródeł pisanych, obserwacje kontekstów archeologicznych i materiału monetarnego zarejestrowanego w Indiach wskazują jednak, że monety rzymskie pośród różnych funkcji, mogły spełniać obie wspomniane wyżej - kruszcową i monetarną. W rozważaniach tych wzięto m.in. pod uwagę dzieła antyczne: Historia Naturalis Pliniusza Starszego, anonimowy Periplus Maris Erythraei. . Zaproponowano także nieco inne spojrzenie, niż prezentowane w starszej literaturze, na fragment tekstu Descriptio Graecae Pauzaniasza z połowy II w., dotyczący charakteru wymiany handlowej miedzy Indiami a Zachodem. Efektem podjetych rozważań, jest wysuniecie hipotezy o możliwości wykorzystania monet rzymskich na subkontynencie indyjskim jako środka wymiany, czy płatności, nie wykluczając równocześnie jego roli kruszcowej. Te aspekty funkcjonalności rzymskich monet, nie wyczerpują jednak wachlarza ich zastosowań. Niewątpliwie wykorzystywane były także, jako cenne obiekty, podnoszące prestiż ich właścicieli. Najlepiej chyba możemy to zaobserwować na przykładzie biżuterii wykonywanej z importowanych monet, które standardowo zaopatrywane były w dwa otwory, służace do ich adaptacji na zawieszki. Na funkcje monet rzymskich jako ozdób bądź surowca w działalności jubilerskiej wskazują także konteksty archeologiczne z Andhry. Monety rzymskie, ich imitacje i ozdoby z nich wykonane, były także przedmiotem specjalnych zabiegów o charakterze religijnym, o czym świadczą znaleziska zarejestrowane w kilku miejscach kultu – buddyjskich stupach, gdzie depozyty z monetami były elementem ich konsekracji. Rzymskie monety znajdujemy jednak także na terenie zabudowań świątynnych o charakterze mieszkalnym, gospodarczym, co wskazuje nam na jakąś aktywność ekonomiczna klasztorów i ich mieszkańców. W kontekście funkcji, warto również zwrócić uwagę na problematykę lokalnych imitacji monet rzymskich. Analiza znalezisk, przede wszystkim skarbów, wskazuje, że nie było to zjawisko o charakterze

masowym i odpowiadało na pewne stałe potrzeby miejscowych odbiorców. Biorąc pod uwagę relatywnie niską liczbę znalezisk nie ma przesłanek, aby sądzić, że było to uzupełnianie rynku wobec stopniowego zmniejszania się napływu rzymskich monet. Niewykluczone, że imitacje były pieniadzem do specjalnego typu użytkowania, z czasem przenikając do reszty rzymskiej masy monetarnej w Andhrze. Możliwe że powstawały dla celów rytualnych, prestiżowej wymiany czy dla rozliczeń między świątyniami. Znaleziska wszystkich omawianych kategorii znalezisk, koncentrują się przede wszystkim w dorzeczu rzeki Kryszna, w jej dolnym biegu i dopływach północnych. Generalnie zauważalne jest ciążenie rozrzutu w kierunku wybrzeża Zatoki Bengalskiej w tym rejonie. Znaleziska monet złotych rozmieszczone sa dość równomiernie w centralnej cześci Andhry, natomiast nieliczne miejsca znalezienia monet srebrnych, układają się wzdłuż linii z południowegowschodu na północny-zachód w dorzeczu obu wielkich rzek. Obserwacja znalezisk denarów w świetle obecności Satawahanów na tych terenach, daje możliwość rozważań dotyczących ewentualnego związku rzymskiego pieniądza z tą dynastią lub jej poprzednikami w Andhrze. Niewielka liczba znalezisk, wskazuje na ograniczona redystrybucje rzymskich monet i ich naśladownictw, co idzie w parze z niewielka liczba zarejestrowanych monet w ogóle. Podjete badania, doprowadziły do stwierdzenia kilku zwiazanych obecnościa rzymskiego kwestii, Z wczesnohistorycznej Andhrze. Monety rzymskie na terytorium wczesnohistorycznej Andhry są obecne przez kilka stuleci, począwszy od drugiej połowy wieku I do wieku IV, a także przypuszczalnie w dalszej perspektywie, odnoszącej się już do relacji subkontynentu z Bizancjum. Są one efektem wymiany handlowej, bedacej elementem relacji gospodarczych pomiedzy państwem rzymskim a Indiami. Napływ monet rzymskich nie miał stałego charakteru, a okresowo przybyłych puli pienieżnych: prawdopodobny strumień denarów monet za czasów Tyberiusza lub jego najbliższych następców, napływ srebrnych i złotych monet dynastii julisko-klaudyjskiej, w ostatnich latach panowania Nerona (głównie monety sprzed reformy z 64 r.), napływ aureusów dynastii Antoninów (z domieszką monet Flawiuszy) w czasach panowania Kommodusa, napływ aureusów w czasach Sewerów (prawdopodobnie w końcu lat 20. III w.) oraz także przypuszczalny strumień monet złotych za panowania dynastii Konstantynów. Wiekszość zarejestrowanych monet pochodzi ze skarbów, co świadczy przede wszystkim o tezauryzacyjnym przeznaczeniu rzymskich monet. Skarby denarów wskazuja na możliwy pierwotny charakter tych zespołów monet, co sugeruje ich obieg w ramach jednej puli monetarnej i w dość hermetycznej strefie obiegu. Zespoły monet złotych mają z kolei na ogół charakter wtórny, kształtowany w długim okresie czasu, gdzie widać jednak wyraźnie pule związane z falami napływu rzymskiego pieniadza. Jednym z ważnych elementów, który wpłynał na strukture monet rzymskich eksportowanych do Indii, miała selekcja monet o dobrej jakości kruszcu. Pozostałe typy znalezisk – luźne i osadnicze, są odbiciem chronologii widocznej w skarbach z ich pewnym wewnętrznym zróżnicowaniem. W Andhrze rejestrujemy niemal wszystkie znane z Indii przykłady kontekstów archeologicznych, co wskazuje na dość szerokie zastosowanie monet rzymskich, dostosowane do miejscowych potrzeb i osadzone w lokalnej kulturze. Istotną obserwacją jest fakt, że monety rzymskie mogły być w jakimś zakresie używane jako środek wymiany czy płatności. Znaczenie i zapotrzebowanie na rzymski pieniądz na subkontynencie może potwierdzać także produkcja imitacji, która nie była raczej implementacją rynku, a zaspokajaniem innego rodzaju potrzeb ekonomicznych bądź prestiżowych. Znaleziska rzymskich monet skoncentrowane są głównie w dorzeczu rzeki Kryszny i ujściu Godawari, czyli w centralnej części Andhry. Czas napływu rzymskiego pieniądza wskazuje, że był on związany przede wszystkim z okresem władania w Andhrze dynastii Satawahanów. Ogólną obserwacją jest kwestia zasadniczo niewielkiej liczby zarejestrowanych monet rzymskich w relacji do terytorium i jego roli w handlu, wskazująca, że monety były tylko elementem handlu indo-rzymskiego i to zapewne nie kluczowym.

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