

NOTAE NUMISMATICAE

ZAPISKI NUMIZMATYCZNE



Tom XIX

MUZEUM NARODOWE W KRAKOWIE
SEKCJA NUMIZMATYCZNA
KOMISJI ARCHEOLOGICZNEJ PAN
ODDZIAŁ W KRAKOWIE

Kraków 2024

NOTAE NUMISMATICAE

ZAPISKI NUMIZMATYCZNE

Tom XIX

MUZEUM NARODOWE W KRAKOWIE
SEKCJA NUMIZMATYCZNA
KOMISJI ARCHEOLOGICZNEJ PAN
ODDZIAŁ W KRAKOWIE

Kraków 2024

Komitet naukowy / Scientific Committee:

Prof. Peter van Alfen, Prof. Michael Alram, Prof. Aleksander Bursche, Prof. François de Callatay, Dr Karsten Dahmen, Prof. Georges Depeyrot, Dr Haim Gitler, Prof. Wiesław Kaczanowicz, Elżbieta Korczyńska, Prof. Katerini Liampi, Prof. Andrew Meadows, Prof. Mariusz Mielczarek, Dr Hab. Jiří Militký, Prof. Janusz A. Ostrowski, Prof. Maciej Salamon, Prof. Bernhard Weissner

Redakcja / Editorial Board:

Redaktor / Editor in Chief – Jarosław Bodzek

Zastępca redaktora / Associate Editor – Mateusz Woźniak

Sekretarze / Secretaries – Dorota Malarczyk, Anna Bochnak, Barbara Zając

Redaktor tematyczny / Theme Editor:

Peter van Alfen

Redaktor językowy / Linguistic Editor:

Peter van Alfen

Recenzenci / Reviewers:

Prof. Michele Asolati, Dr Hab. Bartosz Awianowicz, Dr Hab. Tomasz Bochnak, Dr Adam Degler, Dr Przemysław Dulęba, Dr Hab. Arkadiusz Dymowski, Prof. Svante Fischer, Dr Witold Garbaczewski, Prof. Koray Konuk, Prof. Stefan Krmniecek, Dr Hab. Kyrilo Myzgin, Prof. Marek Olbrycht, Dr Jan Pelsdonk, Dr Ruth Pliego, Dr Florian Matei-Popescu, Prof. Selene Psoma, Hugo Vanhoudt, Dr David Wigg-Wolf, Dr Hab. Michał Wojenka, Dr Hab. Marcin Wołoszyn, Prof. Bernhard Woytek, Dr Joanna Zagórska-Telega, Dr Bernward Ziehaus

Redaktorzy prowadzący / Managing Editors:

Barbara Zając, Dorota Malarczyk, Katarzyna Kwinta

Korekta / Proofreading:

Aeddan Shaw

Projekt graficzny i typografia / Graphic design and desk top publishing:

Luiza Berdak

Skład i łamanie / Typesetting and page layout:

Knight Press Dariusz F. Jasek

Adres redakcji / Address of the Editorial Office:

Muzeum Narodowe w Krakowie

ul. Marszałka Józefa Piłsudskiego 12, 31-109 Kraków

tel. (+48) 12 433 58 50, e-mail: notae@mnk.pl

<http://mnk.pl/notae-numismaticae-zapiski-numizmatyczne-1>

Wyłącznie odpowiedzialność za przestrzeganie praw autorskich dotyczących materiału ilustracyjnego ponoszą autorzy tekstów.
Authors of the texts bear the sole responsibility for observing the copyright illustrations.

Wersją pierwotną *Notae Numismaticae – Zapiski Numizmatyczne* jest wersja elektroniczna.

The electronic edition of the *Notae Numismaticae – Zapiski Numizmatyczne* is treated as its original version.

© Muzeum Narodowe w Krakowie i Autorzy, 2024

ISSN 1426-5435

SPIS TREŚCI / CONTENTS

- 9 Od redakcji
10 From the Editors

ARTYKUŁY / ARTICLES

- JAROSŁAW BODZEK
13 Remarks on a Unique Lycian Stater Struck in the Name of Autophradates
Uwagi na temat unikatowego licyjskiego statera bitego w imieniu Autofradatesa
- CATHARINE C. LORBER
35 Die Study of the Middle Facing Head Drachms of Thessalian Larissa
Studium stempli środkowej grupy drachm tesalskiej Larisy z wizerunkiem głowy w trzech-czwartych
- SELENE E. PSOMA
81 On a Motivation Clause of IOSPE P² 25 + 31
O klauzurze fundacyjnej IOSPE P² 25 + 31
- PRZEMYSŁAW DULĘBA
93 First Finds of Celtic Silver Coins from Lower Silesia
Pierwsze znaleziska srebrnych monet celtyckich z Dolnego Śląska
- TOMASZ BOCHNAK
107 A Celtic Stater Associated with the “Lesser Poland Coinage Group” from Site Kaliszany-Folwark 22, Discovered in Orłowiny, Opatów District, Świętokrzyskie Voivodeship
Celtycki stater „małopolskiej grupy menniczej” ze stanowiska Kaliszany-Folwark 22, odkryty w Orłowinach, powiat opatowski, województwo świętokrzyskie
- JAN BULAS, MAGDALENA OKOŃSKA-BULAS
125 The Rarest of Finds: A Discovery of a Kryspinów Type Stater from Charbinowice (Opatowiec Commune, Świętokrzyskie Voivodeship)
Najrzadsze znalezisko: odkrycie statera typu Kryspinów w Charbinowicach (gmina Opatowiec, województwo świętokrzyskie)
- WIOLETTA PAZOWSKA
139 A New Find of a Kryspinów-type Stater from the Archives of Piotr Adamkiewicz
Nowy egzemplarz statera typu Kryspinów z archiwum Piotra Adamkiewicza

- 149 ANDRZEJ ROMANOWSKI
The Function of Roman Coins in the Settlement Environment
of the Przeworsk Culture
Funkcja monet rzymskich w środowisku osadniczym kultury przeworskiej
- 183 KRZYSZTOF JARZĘCKI
An Ostrogothic Imitation of a Solidus of Anastasius I Found at Jeżewice
Ostrogockie naśladownictwo solida Anastazjusza I znalezione w Jeżewicach
- 193 MICHAŁ MOZYRSKI
Pouches of *Minimi* from Byzantine Egypt. How Should We Deal with Them?
Sakiewki minimi z Egiptu bizantyńskiego. Jak sobie z nimi radzić?
- 215 BARTOSZ AWIANOWICZ
How to Make a Rare Coin out of a Common One? Early Modern Forgeries
Using Original Ancient Coins
*Jak z monety popularnej zrobić rzadką? Wczesnonowożytnie fałszerstwa przy
użyciu oryginalnych monet antycznych*
- 229 BARTOSZ SZ. SZMONIEWSKI, DARIUSZ ROZMUS
A New Find of an Axe-like Iron Bar from Kroczyce, Zawiercie County,
Silesian Voivodeship
*Nowe znalezisko grzywny siekieropodobnej z Kroczyce, powiat zawierciański,
województwo śląskie*
- 243 DARIUSZ JASEK
A Manifestation of Friesland's Distinctiveness in its Late Medieval and Early
Modern Coinage
*Manifestacja odmienności Fryzji w jej późnośredniowiecznym
i wczesnonowożytnym mennictwie*
- 255 BARBARA ZAJĄC
Beginnings of the Paper Money Collection of the Numismatic Cabinet
of the National Museum in Krakow
*Początki kolekcji pieniądza papierowego Gabinetu Numizmatycznego Muzeum
Narodowego w Krakowie*

RECENZJE / REVIEWS

- 285 BARBARA ZAJĄC
BORIS CHRUBASIK, JUDITH K. SCHUTZ, ANDREW MEADOWS and
JAROSŁAW BODZEK (eds.), *Coinage in Imperial Space: Coins in the
Economy of the Achaemenid and Early Hellenistic World*, Phoenix 76 (2022),
Journal of the Classical Association of Canada, Toronto, ON 2023

- BARBARA ZAJĄC
- 292 ADAM DEGLER (ed.), *The Collection of Ancient Coins in Lviv Historical Museum / Колекція античних монет у Львівському історичному музеї / Zbiór monet antycznych w Lwowskim Muzeum Historycznym*, Yellow Point Publications, Wrocław–Lwów–Paryż 2023
- SZYMON JELLONEK
- 298 JIŘI MILITKÝ, PETR VESELÝ and LENKA VACINOVÁ, *Sylloge Nummorum Graecorum. Czech Republic. Vol. 1: The National Museum, Prague. Part 7: Seleucid Empire and Imitations, Syria, Phoenicia, Judaea, Mesopotamia, Commagene, Armenia and Arabia*, Prague 2023

KRONIKI / CHRONICLES

- MATEUSZ WOŹNIAK
- 303 *Kronika Gabinetu Numizmatycznego Muzeum Narodowego w Krakowie (2023)*
- 310 *The Chronicle of the Numismatic Cabinet of the National Museum in Krakow (2023)*
- JAROSŁAW BODZEK
- 318 *Kronika Sekcji Numizmatycznej Komisji Archeologicznej Polskiej Akademii Nauk Oddział w Krakowie (2024)*
- 320 *The Chronicle of the Numismatic Section of the Archaeological Commission of the Polish Academy of Sciences, Krakow Branch (2024)*

NEKROLOG / OBITUARY

- WOLFGANG FISCHER-BOSSERT
- 325 NEVILLE KEITH RUTTER (1939–2024)
- 327 *Bibliography of Neville Keith Rutter*



Lech Kokociński. Photo by Piotr Idem
Lech Kokociński. Fot. Piotr Idem

Szanowni Państwo,

oddajemy w Państwa ręce tom XIX *Notae Numismaticae – Zapisków Numizmatycznych*. Zgodnie z przyjętymi przez nas zasadami wszystkie teksty publikujemy w językach kongresowych, z angielskimi i polskimi abstraktami. Zawartość obecnego tomu oraz tomy archiwalne są zamieszczone w formie plików PDF na stronie internetowej Muzeum Narodowego w Krakowie (<https://mnk.pl/notae-numismaticae-zapiski-numizmatyczne-1>). Na stronie dostępne są ponadto wszelkie informacje ogólne o czasopiśmie oraz instrukcje dla autorów i recenzentów.

Bieżący Tom naszego czasopisma chcielibyśmy zadedykować Panu Mecenasowi Lechowi Kokocińskiemu, obchodzącemu w 2024 roku swoje 80-te urodziny. Lech Kokociński (ur. 1944), prawnik, sędzia i wieloletni pracownik Ministerstwa Kultury i Sztuki, z numizmatyką związany jest w zasadzie od zawsze. Przede wszystkim należy do grona najwybitniejszych kolekcjonerów numizmatów drugiej połowy XX i pierwszych dziesięcioleci XXI wieku. Jego zainteresowania kolekcjonerskie nie ograniczały się przy tym do wąskiego zakresu, lecz obejmowały szerokie spektrum obiektów: od monet antycznych poczynawszy, poprzez pieniądź papierowy, medale, aż po fałszerstwa monet i banknotów. Ważną część jego zbiorów stanowią starodruki i rękopisy numizmatyczne oraz inne obiekty o charakterze bibliofilskim, szczególnie *Lwowiana*. Mecenas Kokociński przez całe życie aktywnie włączał się w animowanie ruchu numizmatycznego. Od 1962 roku był członkiem Polskiego Towarzystwa Archeologicznego, od 1984 roku przewodniczył Sekcji Numizmatycznej Polskiego Towarzystwa Archeologicznego i Numizmatycznego, a w 1987 roku został Prezesem tej organizacji. W 1991 roku należał do założycieli Polskiego Towarzystwa Numizmatycznego i był jego pierwszym Prezesem, a następnie Prezesem Honorowym. Bliskie związki mecenasa Kokocińskiego z Gabinetem Numizmatycznym Muzeum Narodowego w Krakowie sięgają XX wieku. Jest członkiem Towarzystwa Przyjaciół Muzeum im. Emeryka Hutten-Czapskiego (od 1996 r.), a w latach 2011–2015 pełnił funkcję członka Rady Muzeum Narodowego w Krakowie. Wszedł też w skład Komitetu Honorowego projektu *Europejskie Centrum Numizmatyki Polskiej*, w ramach realizacji którego udało się otworzyć Muzeum im. Emeryka Hutten-Czapskiego w obecnym kształcie. Przede wszystkim jednak jest jednym z najważniejszych i najbardziej hojnych darczyńców na rzecz Muzeum. Wzbogacił zbiory Gabinetu Numizmatycznego o niemal 11 000 obiektów, w tym monety antyczne, bezprecedensową kolekcję pieniądza fałszywego, pieniądź papierowy i medale. Dodatkowo ofiarował do biblioteki Muzeum ponad 1000 pozycji różnych publikacji, starodruków i znakomite archiwalia związane z życiem i działalnością wybitnych numizmatyków czy towarzystw numizmatycznych, jak np. Związku Numizmatyków Lwowskich czy Towarzystwa Numizmatycznego w Krakowie. Z okazji Jubileuszu życzymy Lechowi Kokocińskiemu, naszemu Drogiemu Przyjacielowi, co najmniej 100 lat!

Redakcja

Dear Readers,

We are delighted to present you with volume 19 of *Notae Numismaticae – Zapiski Numizmatyczne*. As is our policy, we publish all texts in the congress languages, with English and Polish abstracts. The contents of current volume and archive numbers are available as PDF files on the website of the National Museum in Krakow (<https://mnk.pl/notae-numismaticae-zapiski-numizmatyczne-1>). The website also provides all general information about the journal, along with guidelines for authors and reviewers.

We would like to dedicate the current volume of our journal to Mr Lech Kokociński, who celebrated his 80th birthday in 2024. Lech Kokociński (born in 1944), lawyer, judge and long-time employee of the Ministry of Culture and Art, has been involved in numismatics for practically all his life. Above all, he is one of the most outstanding numismatic collectors of the second half of the 20th century and the first decades of the 21st century. His collecting interests were not limited to a narrow range, but covered a wide spectrum of objects, starting with the ancient coins, through paper money and medals, to counterfeits of coins and banknotes. An important part of his collection consists of antique prints and numismatic manuscripts as well as other bibliophile objects, especially *Lvoviana*. Throughout his life, Kokociński has actively participated in promoting the numismatic movement. He was a member of the Polish Archaeological Society from 1962, chaired the Numismatic Section of the Polish Archaeological and Numismatic Society from 1984 and became its president in 1987. In 1991, he was one of the founders and first president of the Polish Numismatic Society, later becoming Honorary President. The close relationship between Mr Kokociński and the Numismatic Department of the National Museum in Krakow dates back to the 20th century. He is a member of the Emeryk Hutten-Czapski Museum Friends Society (since 1996), and in the years between 2011–2015 he was a member of the Council of the National Museum in Krakow. He also became a member of the Honorary *European Center of Polish Numismatics* project, which led to the opening of the Emeryk Hutten-Czapski Museum its present form. Above all, however, he is one of the most important and generous donors to the Museum. He enriched the collection of the Numismatic Cabinet with almost 11,000 objects, including ancient coins, an unprecedented collection of counterfeit money, paper money and medals. In addition, he donated more than 1,000 items to the museum library, including various publications, antique books, and valuable archive material related to the life and work of prominent numismatists or numismatic societies, such as the Union of Lviv Numismatists and the Numismatic Society in Krakow. On the occasion of this milestone birthday, we wish Lech Kokociński, our dear friend, at least 100 years!

The Editors

ANDRZEJ ROMANOWSKI

National Museum in Warsaw

ORCID: 0000-0002-5041-8806

The Function of Roman Coins in the Settlement Environment of the Przeworsk Culture

ABSTRACT: The most numerous group of Roman imports in northern European Barbaricum are coins and which have been recorded in a variety of archaeological contexts. Observations of this category of finds indicate the diversity of their uses and associated interactions with their users. Roman coins are found both in the daily life of the *superiores barbari*, as well as in the sacred zone which often intermingle. The settlement environment of the population of the Przeworsk culture is an excellent example for this kind of research, indicating the complexity of behavior regarding the use of Roman coins beyond the limes. At the same time, it allows us to trace the role of Roman imports in foreign cultural environments and their influence on the formation of certain elements of the cultural identity of ancient societies.

KEY WORDS: Barbarian communities, Roman imports, Roman coin finds, Roman coin use, archaeological context

ABSTRAKT: *Funkcja monet rzymskich w środowisku osadniczym kultury przeworskiej*

Najliczniejszą grupą rzymskich importów w północnoeuropejskim Barbaricum są monety, które rejestrujemy w rozmaitych kontekstach archeologicznych. Obserwacje tej kategorii znalezisk wskazują na różnorodność ich zastosowań i związane z tym interakcje z użytkownikami. Rzymski pieniądz odnajdujemy zarówno w życiu codziennym *superiores barbari*, jak również w strefie sakralnej, które nierazdko się przenikają. Środowisko osadnicze ludności kultury przeworskiej jest doskonałym przykładem do przeprowadzenia tego rodzaju badań, wskazując na złożoność zachowań dotyczących użytkowania monet rzymskich poza limesem. Pozwala to równocześnie prześledzić rolę rzymskich importów w obcym środowisku kultu-

rowym i ich wpływ na kształtowanie pewnych elementów tożsamości kulturowej społeczeństw starożytnych.

SŁOWA KLUCZOWE: społeczności barbarzyńskie, importy rzymskie, znaleziska monet rzymskich, użytkowanie monet rzymskich, kontekst archeologiczny

INTRODUCTION

One of the basic categories of coin finds determined by archaeological context are settlement finds of a residential or manufacturing nature. Settlement finds are a particularly interesting group of monuments, allowing observations to be made in the spheres of everyday life (in *living culture*), providing an opportunity to reconstruct the actual circulation and function of coinage among the communities studied. Although some aspects of daily life intermingle with the symbolic and magical spheres, framed in this way the research material provides an opportunity to observe the most vivid aspect of coinage use. What is important here is not only the passive role of coins in the barbarian environment, but also their possible active influence on the behavior of users, in contact with a culturally foreign object with a specificity unique among imports. This is particularly important in the perspective of the numerous conditions affecting the selection of objects that shape *dead culture*. Coins collected in hoards or deposited in cemeteries and graves are characterized by a highly selective selection resulting from the special nature of these finds, one not always grasped by researchers.¹ Thus, material that is free or less dependent on these limitations is of exceptional research importance.²

This should be seen in the broader perspective of the problem of the biography of things, and their causality (*agency*) in the multifaceted interaction of man with the object and the object with man.³ However, this view is not limited to environmental relationships, but must also take into account a number of more complex conditions and limitations. It is important to recognize the circumstances that influence the valuation, the dynamics of deposit usage and post-depositional conditions.⁴ An important research element here are the factors that influence the reality surrounding the users of the coins, such as their customs, religion, political and economic relations, state of knowledge, and others. Many of these factors also apply to the present day,

¹ BURSCHE 2008: 403–407; KONTNY 2008: 107 (regarding burials of the Przeworsk culture).

² ROMANOWSKI 2024: 4–5.

³ Among others, DOMAŃSKA 2008: 34–36; KOBIAŁKA 2008: 227ff; KEMMERS and MYRBERG 2011: 87ff; MARCINIAK and CHWIEDUK 2012: 568–569 (further literature there); KRMNICEK 2023: 4–8; ROMANOWSKI 2023: 2.

⁴ NOE 1949: 235–237; HAGEN-JAHNKE and WALBURG 1987: 12–13; WIGG-WOLF 2009: 123; GHEY 2022: 58–59; HELLINGS 2022: 283.

where these conditions influence the perception of the past, as filtered through the researchers' cultural lenses (*Positive Fallacy*).⁵

A detailed analysis of archaeological contexts allows for the study of the diversity of the functions of coins and the processes to which they were subjected due to the different types of human activity within individual communities, as well as more broadly in intercultural relations.⁶ This not only applies to the times of the direct influx of money, but also indicates the possibility of the functioning of coins in later periods. It can therefore provide information about the longevity of the material of interest and the possible variability of its uses over time.

One of the key issues addressed by scholars of Roman coinage used beyond the limes is the function of coins in barbarian societies. Views on the role of coinage during the period of Roman influence in the territories occupied by these peoples evolved as time passed and the source base grew. Different views were expressed here, initially about the bullion and raw material significance of coins, with their monetary functions becoming widely recognized over time. The subject of debate was the extent of monetization, where Roman coins could be a common equivalent of exchange, or whether their use was limited to transactions between Roman merchants and tribal elders and in inter-tribal exchanges.⁷ Also, until recently, the view of the dual function of Roman coins held by barbarian tribes was widely accepted. In light of these considerations, coins were used primarily as circulating money, but they also had a lesser degree of bullion value and were used as a source of raw material for making ornaments.⁸

In recent years, a research trend has emerged which sees the issue of the functioning of ancient coinage in Barbaricum primarily through the lens of cultural anthropology. The basis for these considerations has become anthropological theories on non-market economics.⁹ In light of the assumptions formulated here, the need for economic profit did not exist or played an insignificant role in many ancient societies, and social relations were regulated by tradition, prestige and honor. Starting from such assumptions, it is now assumed that coinage was used primarily in northern Barbaricum for *special-purpose money* – as family gifts, dowries, tributes, fees for military assistance, etc. Coinage was a symbol of rank, prestige, loyalty and friendship in personal and political dealings. It secured community cohesion and other relationships, not only commercial. It is possible that the popular Roman

⁵ HOWGEGO and WILSON 2022: 8–9.

⁶ KEMMERS 2009: 140–141; KEMMERS and MYRBERG 2011: 89–91.

⁷ KOSTRZEWSKI 1949; KROPOTKIN 1954; WIELOWIEJSKI 1960.

⁸ MAJEWSKI 1957.

⁹ Represented by the substantivist and primitivist schools of K. Polanyi, G. Dalton and R. Hodges. Among others: POLANYI, ARENSBERG and MAYNADIER 1957; BOHANNAN 1959; REINING 1959; DALTON 1965a; IDEM 1965b; POLANYI 1968; HODGES 1982.

denarius was used to a very limited extent as a means of payment in the centers of power and trade, and also, as indicated by the numerous hoards for the accumulation of wealth.¹⁰

Roman coins were also used for ideological reasons. Their iconography, especially the portrait of the emperor, played an important role in Germanic symbolism. Coins and medallions were provided with holes, loops and settings and used as a symbol of prestige. In barbarian workshops, imitations and copies of Roman coins were also made.¹¹ Roman coinage was also used as a useful raw material. This is illustrated by finds of coins in context, indicating that they were used for secondary use in jewelry workshops – melted down or serving as some kind of “spare parts”.¹² Coins took various forms, losing their nominal value and this happened when they were transformed into ornaments, amulets, etc., when they became a symbol of prestige, the equivalent of insignia of power. In barbarian societies, the function of coins was not unified, and there was no clear separation in the modes of its use – economic, political and religious.¹³

Observations of Roman coin finds in archaeological contexts confirm the diversity and complexity of their functions in barbarian environments. An anthropological perspective, allows interpreting coin-use behavior in tribal societies where coins were not common money. Thus, the relationship between coins and their users, and the resulting social interactions, should be considered in a broader sense and not just economically. Invaluable in these considerations are finds recorded in settlements, which show the fact of their unitary use by broader social groups and provide an opportunity for closer recognition of their function.¹⁴

TERRITORIAL AND CHRONOLOGICAL SCOPE

The subject of observation was the finds of Roman coins from settlements, recorded in areas settled by the people of the Przeworsk culture, which played an extremely important role in shaping the cultural picture of Central European

¹⁰ BURSCHE 2008: 396–398, 407; VAN HEESCH 2008: 50; WIGG-WOLF 2008: 38.

¹¹ STRIBRNY 2003; LIND 2007; BURSCHE 2008: 400–401; PETER 2008; ROMANOWSKI 2010: 33, fn. 42–44; DEGLER 2016: 15; BURSCHE and MYZGIN 2017: 41; SIDAROVICH 2017: 129, fn. 19; DULĘBA and ROMANOWSKI 2018: 81–82ff, 83, fn. 90.

¹² Notable finds of this type made in Denmark, where melted and partially cut denarii were discovered, as well as pouches with pieces of metal used to repair war equipment and its silver ornaments – Gudme, Lundeberg (JENSEN and WATT 1993; THOMSEN 1994; PETERSEN 1994; JØRGENSEN 1998; BURSCHE 2008: 401, fn. 36), as well as in the Illerup Ådal marshes and other Jutland sites (ILKJÆR 1990; IDEM 1993; KROMANN 1992; BURSCHE 2008: 401). Discoveries of this type have also been made in Poland, e.g. in Frombork (PEISER and KEMKE 1914; BURSCHE 2008: 400–401), or (probably) in Jakuszowice (GODŁOWSKI 1995: 159; BURSCHE, KACZANOWSKI and RODZIŃSKA-NOWAK 2000: 117; BURSCHE 2008: 400–401, fn. 36).

¹³ BURSCHE 2008: 407–408; VAN HEESCH 2008: 50.

¹⁴ In some inland centers of power and commerce, more than 100 denarii and subaerati have been found – Jakuszowice, Kazimierza Wielka commune, Gródek Nadbużny, Hrubieszów commune (BURSCHE 2008: 398; BODZEK 2021: 34).

Barbaricum in the Late Iron Age. Identified with the Lugians and Vandals, the peoples occupied in various chronological episodes most of the territory of today's Poland (except Pomerania and Masuria), also expanding – in part – to neighboring lands. This formation emerged at the beginning of the younger pre-Roman period around 180 BC, and functioned for more than six centuries until the first half of the 5th century AD.¹⁵

The territorial scope of the study was determined on the basis of two criteria: geographical and cultural. The boundaries of the study areas were set on rivers and other permanent geographic objects, also taking into account the cultural character of the area and the extent of the compact settlement of the Przeworsk culture. Population movements and the time of settlement of each region were also relevant here. Taking into account such assumptions of the work, the analysis of the research material was made within five regions: Greater Poland, right-bank Mazovia with Podlachia and Lublin Province, Western Mazovia, Silesia and Lesser Poland¹⁶ (Map 1).

The chronological framework marks the time of the influx of Roman coins into the areas mentioned. Taking the dating of the found coins and the known archaeological contexts as a basis, the scope of the presented research covers phases from A₂ of the younger pre-Roman period (ca. 120 BC), to phase D₁ of the Migration Period (360/370–ca. 450 AD). Thus, the analysis of the collected material covered more than 500 years of the presence of the Przeworsk culture in the area in question. Coins found in such dated contexts have extremely marked dates of issue – the oldest is a Republican denarius of C. Thalny from 154 BC and the youngest is an AE 3 of Valentinian I from 364–375 (Charts 1a–1b, 2).¹⁷

MATERIAL BASE

The research material was recorded at 131 settlement sites from which 631 coins have been retrieved (Map 2). However, taking into account the number of coins reconstructed on the basis of transmissions, which also take into account the material that is elusive today, this number can be raised to 1,058 coins and more.¹⁸ Nevertheless, only the material obtained was taken into account in the analyses, with possible caveats based on historical data as well. Among the recorded material, 96 coins from 40 sites belong to finds of high information value (Group I), 78 coins from 33 sites belong to finds of medium information value (Group II), and 457

¹⁵ DĄBROWSKA 1988: 225; GRYGIEL 2004: 57ff, Tab. I, II, p. 81–82; MAĆZYŃSKA 2020: 451, 453, 461, 466.

¹⁶ ROMANOWSKI 2023: 4, 9–11.

¹⁷ From the villages of Karsy Małe, Pacanów commune, and Zagórzycze (II), Kazimierza Wielka commune, (IDEM 2023: 3–4; IDEM 2024: 5).

¹⁸ The materials included in this work, take into account the finds made by the end of 2018.

coins from 86 sites were assigned to finds of low information value (Group III).¹⁹ This means that 15.2% of the coins were taken in a close archaeological context within the settlement, 12.3% of the coins lay loosely in cultural layers outside the surveyed sites, and 72.5% of the coins came from the humus layer of the settlement site. As can be clearly seen, material from Group III finds is the most abundant, while in the other two groups, material is present to a comparable degree.²⁰

It should be noted that the proportions of finds in individual groups depend on the duration of the research, the methodology of the work, and the use of modern technical equipment. The specificity of the material in question and its dependence on basic contextual information (settlements) almost completely limits the way information is obtained to professional archaeological research (approx. 82%). It is also worth noting that, in addition to regular archaeological research, the source database has been enriched in recent years by very intensive rescue excavations related to infrastructure investments. The increase in the number of individual coin finds from settlements can also be attributed to the use of metal detectors, which have made it possible to retrieve artefacts more effectively from archaeological layers and, above all, from the topsoil during surface surveys.²¹

THE FUNCTION OF ROMAN COINS

The observation of coin finds in the settlement environment allows us to grasp the ways of their use by individual recipients in a broader social context. The analysis of this material indicates that the behavior associated with the use of this type of money varied considerably. Undoubtedly, it not only played a passive role being the object of various practices, but also must have actively influenced users, shaping new trends, traditions and outlooks on this type of imported objects – including their ideological dimension.²²

The observations undertaken in this study were based on the analysis of known archaeological contexts, taking into account their general and specific scopes. Thus, as far as possible, the zones within the settlements – either productive or residential – were established, while in the detailed aspect, the nature of the objects in which the coins were located was analyzed. Undoubtedly, an important role was contributed by the analysis of the physical characteristics of the coins, indicating their secondary use, the relationship with the user or the circumstances of final deposition.²³

¹⁹ On the cognitive value of the interpretive levels of the finds, see WIELOWIEJSKI 1980: 7–8; ROMANOWSKI 2012: 82ff; IDEM 2023: 26–29.

²⁰ ROMANOWSKI 2023: 33; IDEM 2024: 6–7; A comprehensive discussion of the methodology used in the presented research IDEM 2023: 26–32; IDEM 2024: 7–10.

²¹ On the representativeness of the presented material ROMANOWSKI 2023: 33–36; IDEM 2024: 6–7.

²² KEMMERS and MYRBERG 2011: 97ff; ROMANOWSKI 2023: 199.

²³ ROMANOWSKI 2023: 199.

The coins registered on the settlements were located in residential and manufacturing zones, or in objects of this nature. Sometimes, however, the function of the object in which the coin was found is not the same as the type of zone in which it was located, which should be taken into account in the considerations undertaken.²⁴ The unclear stratigraphic situation, the imprecisely documented scatter of monumental material and imperfections in the processing and publication of data mean that for more than 85% of the coins taken on settlements of the Przeworsk culture, it is impossible to determine the specific zone of their deposition. Among the data obtained, about 8% of the coins were deposited in the productive part and another 5% in the residential parts of the habitats. The indefinite zone also has the largest share in each region, with the exception of right-bank Mazovia, Podlachia and Lublin Province. In the latter case, however, the situation was shaped by the state of research – a small number of recorded sites and coins.²⁵ In contrast, the increased proportion of coins in the production zone seen in Greater Poland has to do with the location of the coin hoard in this zone and similarly in Lesser Poland, here, however, in the residential zone²⁶ (Chart 3).

Within each of the zones, we can distinguish further, more detailed archaeological contexts, indicating the possible use of coins within them and at particular sites. An interesting group among the coins from the production zones, are deposits taken from furnaces. Here we can distinguish two types of objects – kilns used in metallurgical production and kilns used for firing pottery, and we can also observe the varied form and nature of coin deposits.

As a special case in this group, the Siedlikowo Hoard draws the attention of the attentive reader. The way the hoard is hidden indicates a deposit of a nature to protect it from unauthorized taking.²⁷ The careful selection of the site and its preparation, suggests a connection between the owner of the deposit and the place where it was hidden. Thus, it could have been a metallurgist or jeweler, using the metallurgical workshop on a daily basis, with free access to the object. However, we cannot state

²⁴ E.g., the ensemble from Świlcza, *loco* commune which was located in a residential structure – in the annex of hut No. 1, located adjacent to the amber workshop (GRUSZCZYŃSKA 1977: 184; SCHUSTER 2016: 227; ROMANOWSKI 2023: 122, 165–166, 472–475, No. 115).

²⁵ Eight coins were recorded here at five settlement sites. This is due to, among other things, the unclear cultural and stratigraphic situation, which does not allow for the positioning of coins in layers related to the settlement of the Przeworsk culture. This problem is visible, especially in the case of surface finds within settlements (ROMANOWSKI 2023: 178).

²⁶ The hoard from Siedlikowo, Ostrzeszów commune (ROMANOWSKI 2023: 456–458, No. 103). Hoard from Świlcza, *loco* commune, borough. Here specifically, in a residential context remaining in connection with a manufacturing workshop (*Ibidem*: 472–475, No. 115).

²⁷ A hoard of 400 denarii dating from the issue of Domitian to Commodus (25 coins recovered). In addition to the denarii, the deposit included two silver partially gilded fibulae dating to the 3rd century, a silver lunula, a silver oval buckle characteristic of the D phase (360/370–480/490) and a silver bar weighing 155.323 g. The assemblage was deposited in a smelting furnace under slag, in the ground. Perhaps placed in an earthenware vessel on a stone pad (PETERSEN 1944: 77; GAŁĘZOWSKA 2016: 235; ROMANOWSKI 2023: 456–458, No. 103).

this with certainty, nor can we determine whether the hoard was deposited in the face of danger or acted as a cache for savings. The former circumstance may be indicated, however, by the *tpq* of this assemblage determined to be phase D (360/370–480/490) – the time of the Hunnic invasions. Another coin deposited in the relics of the smelting furnace, on the other hand, may have had a special function representing a kind of sacrifice. This may also be indicated by the fact that it was subjected to fire.²⁸ Several other coins had, or may have had, a connection with pottery, where they also had, as one might expect, a varied function. Here an important example is the Hadrian's denarius from the settlement in Zofipole, Igołomia-Wawrzeńczyce commune, deposited in a pottery kiln.²⁹ The coin was placed in a deformed ceramic vessel, at a time when the kiln was no longer performing production tasks. In this case, the denarius was not subjected to high temperatures. It is possible that we are dealing here, as in the case of the Kalisz-Piwnice coin, with a kind of sacrificial gift aimed at ensuring success in craft production, referring to the symbolism of fire as a force transforming matter and birth, initiation.³⁰ In addition to coins directly associated with furnaces, we note finds that can be linked most likely to them or to the objects where the furnaces were located – craft workshops.³¹

The latter category of objects occupies an important place in the observations undertaken, because within the production zones, coins were recorded in objects with the character of various types of manufacturing workshops. Here we can distinguish four types of workshops – amber, horn, weaving and, related to metalworking, bronzing.³² In the latter case, the presence of coins that were metal objects is quite obvious, while workshops specializing in other types of manufacturing clearly had a fairly wide range of activities. This is confirmed by the numerous objects collected there, made of various materials.³³ The variety evident in the workshops' inventories, as well as probably the fragmentary nature of some of the coins, indicates that the Roman coins taken there were part of a more complex fabrication, for which they may have been intermediates or raw materials. Some sort of sacred role for the coins,

²⁸ A Republican denarius from Kalisz-Piwnice, Kalisz commune deposited near the relics of a domed furnace, in a "debris" of small lumps of earthen floor (ROMANOWSKI 2010: 30; IDEM 2012: 85–86; IDEM 2023: 200).

²⁹ *Ibidem*: 200, 508–510, No. 130/2.

³⁰ ELIADE 1988: 188; KEMMERS and MYRBERG 2011: 102; DOBRZAŃSKA 2020: 124.

³¹ For example, in Bessów, Bochnia commune, Kalisz-Piwnice, Kalisz commune, and Kraków-Mogiła, Kraków commune (ROMANOWSKI 2023: 201, 298, No. 3/1, p. 368, No. 39/8, p. 385, No. 51/1).

³² Janowice, Lubanie commune, Przemyśl, *loco* commune, Regów, Baranów commune, Igołomia, Igołomia-Wawrzeńczyce commune (ROMANOWSKI 2023: 201, 356, Nos. 34/3, 11, p. 444, No. 92/1, p. 446, Nos. 94/2–4, p. 325, No. 28/2) and Aleksandrowice, Zabierzów commune, Jakuszowice, Kazimierza Wielka commune (*Ibidem*: 201, 294, No. 1/2, p. 336, No. 31/40).

³³ Ceramic (including fragments of *terra sigillata* vessels), metal: elements of costume – clasps, buckles, javelin spearhead, horn products and others.

which may have acted as offerings to ensure the smooth operation of the workshop, is also not excluded here.³⁴

Among the finds from the craftsmen's workshops, less obvious cases related to the functionality of the buildings were also noted. Some may have served some economic and production role,³⁵ while others were living quarters, either located within the workshops or closely adjacent to them. The latter include facilities, located on the settlements in Regów and Świlcza. Particularly significant here is the second of the objects, which can be interpreted as a craft deposit or an ancestral treasure. It was probably not a ritual deposit, and its failure to be taken was probably caused by violent reasons. Assemblages of this kind are a well-known phenomenon in the period of the migration of peoples, representing an unremarkable but also not very rich deposit. The set of artefacts collected here indicates³⁶ that this is not typical of the material in question, which are generally of a different nature.

Known inventories of residential structures report that coins were mainly found in cultural layers inside the rooms, along with objects of daily use. These were not sophisticated forms, including fragments of ceramic vessels, spinners, weaving accessories, clasps and animal bones, indicating the low status of the inhabitants. The presence of Roman coins in homes, although they remained in the zone of everyday use, may nevertheless have had special functions of a symbolic nature or were prestigious furnishing items.³⁷ It is possible that the presence of coins or other Roman imports, may have been attributes of higher status – a warrior or craftsman. Arguably, this is how the spectacular assemblage from Świlcza, which contained a set of other valuable objects in addition to coins, can be interpreted.

In general, it is impossible to identify regularities that could further characterize the function of coins in residential objects, but we can identify some exceptions here. These include coins whose location in the objects implies a special non-economic role – placed under the floors of the objects, in post holes or in vessels, probably fulfilling a sacrificial function, such as a foundation.³⁸ An example of this is the denarius of Antoninus Pius (Faustina I) of Kalisz-Piwonice deposited below the bottom of the building,³⁹ however, the more common form of such practices in the

³⁴ Although more significant here are probably the finds of coins in the furnace chambers. See, for example, Hadrian's denarius from Zofipole (ROMANOWSKI 2023: 201, 508, No. 130/2).

³⁵ Kuny, Władysławów commune, Łęki Kościelne I, Krzyżanów commune, Wąsosz Górny, Popów commune (ROMANOWSKI 2023: 201, 394, No. 58/1, p. 399, No. 62/1, p. 484, No. 121/1).

³⁶ 10 denarii arranged in a roll, accompanied by a number of objects secured in a leather pouch – ornaments of women's attire, belonging to a person of higher social status and which may have been a set of items for furnishing the grave, as well as cut and bent silver objects (RAU 2013: 198; SCHUSTER 2016: 251, 253, 254; ROMANOWSKI 2023: 201, 446, No. 94/4, pp. 472–473, Nos. 115/1–10).

³⁷ DESMONDE 1962: 32–33.

³⁸ BURSCH 2008: 405; KEMMERS and MYRBERG 2011: 101.

³⁹ DĄBROWSKI and KRZYŻANOWSKA 1955: 199, WIELOWIEJSKI 1980: 19; ROMANOWSKI 2023: 202, 368, No. 39/9.

material discussed here, is the deposit of coins in post holes.⁴⁰ We know of a number of examples here, with some of the coins so located, most likely additionally deposited in small ceramic vessels.⁴¹ Attention is drawn to their small size, which gave the possibility of depositing the foundation under the structural elements of buildings. It is also possible that we are dealing with this kind of offering in the case of the denarius of Trajan from Wola Branicka, Zgierz commune, which was deposited next to a bowl-shaped vessel with three legs, around which stones were arranged.⁴² Alternatively, the Titus as (for Domitian) from a site in Modlniczka, Wielka Wieś commune, can also be seen in a sacred context. The coin was deposited in an object interpreted as a sacrificial pit together with melted and over-melted parts of a garment, and fragments of a human skull.⁴³ Perhaps also, the sepulchral character in which the coins played some symbolic role, had one of the two unspecified denarii from the settlement in Boguchwała, *loco* commune. According to accounts, the coin was supposed to be in an urn with ashes in the dugout of the prehistoric settlement.⁴⁴

Among the material examined, two coin finds were also noted, drawing attention to their association with hearths, one of which was already located outside the settlement perimeter.⁴⁵ Coins deposited in the hearth and, in one of the cases, in the layer lying directly above it, direct attention again to the aforementioned specimens deposited in furnaces, or remaining in connection with them in the production zones of the settlements. It is not possible to exclude the special significance of coins in such contexts understood as a kind of sacrifice from this perspective, where their contact with fire may have played a symbolic role.⁴⁶

Concluding the discussion of archaeological contexts, it is worth recalling that within settlements, coins are found in various categories of finds. Although they are found in a general settlement context, individual cases determine the actual

⁴⁰ Among others, a denarius of Marcus Aurelius from a settlement in Chabielice, Szczerców commune, a subaeratus of Marcus Aurelius from Jenkowiec, Oleśnica commune, a denarius of Antoninus Pius from Przywóz, Wierzbilas commune (*Ibidem*: 202, 309, No. 13/1, p. 365, No. 38/2, p. 445, No. 93/1). A find of this type is also known from an economic site – a denarius of Antoninus Pius (Faustina I) from Kuny, Władysławów commune (*Ibidem*: 202, 394, No. 58/1).

⁴¹ Such a relationship probably included a subaeratus of Marcus Aurelius from Izdebno Kościelne, Grodzisk Mazowiecki commune, which was deposited in a turned ceramic bowl and is a finding analogous to the denarius found at the settlement in Starowiskitki II, Wiskitki commune, which was deposited inside a “miniature” vessel (ROMANOWSKI 2023: 202, 329, No. 30/1, p. 466, No. 110/2).

⁴² The nature of the stone structure remains unknown (KASIŃSKI 1936: 140; ROMANOWSKI 2023: 202, 203, 486, No. 123/1).

⁴³ The site, located in a swampy part of the river valley, refers to cult and sacrificial sites associated with the aquatic environment (BYRSKA-FUDALI and PRZYBYŁA 2012: 544–545; ROMANOWSKI 2023: 203, 412, No. 75/2).

⁴⁴ KUNISZ 1969: 140, No. 11; IDEM 1985: 31, No. 12; ROMANOWSKI 2023: 302, Nos. 6/1–2, p. 203.

⁴⁵ On the settlement in Kalisz-Piwnice (DĄBROWSKI and KRZYŻANOWSKA 1955: 198–199, WIELOWIEJSKI 1980: 19–20; ROMANOWSKI 2023: 203, 368, Nos. 39/6, 10).

⁴⁶ DĄBROWSKI and KRZYŻANOWSKA 1955: 199; WIELOWIEJSKI 1980: 29; ELIADE 1988: 188; KEMMERS and MYRBERG 2011: 102; DOBRZAŃSKA 2020: 124; ROMANOWSKI 2023: 203, 68, No. 39/10.

nature of the find. With this in mind, observations were made from the perspective of loose finds within the settlement, from archaeological objects of different nature, cult/sepulchral finds and hoards. Belonging to these categories is to some extent related to the assignment of a find to a particular interpretive group. Thus, we find that the majority of the analyzed material was represented by loose finds, which are related to Interpretive Groups II and III, followed by finds from objects – residential, manufacturing and cultic, included in Interpretive Group I. The last set, on the other hand, quite abundant in coins, were treasures which were positioned in both Group I and Group III materials.

Information about the function of coins is supplemented by observations of physical characteristics that are evidence of their secondary use. In the settlement finds of the Przeworsk culture, we record a significant and diverse group of such phenomena, which expands our interpretative possibilities regarding the behavior associated with this group.⁴⁷

Among the 126 reused coins, the largest group are heat-treated – 46% of all from this set. It should be noted here that the greater part of this type of finds is represented by coins from the hoard of denarii from Wtórek II, Ostrów Wielkopolski commune, and the omission of this set, equalizes the proportions of fire-treated coins in each region⁴⁸ (Chart 4). The identification of such traces was based on various visual features, including darkening to varying degrees or distorted coin surfaces.⁴⁹ The degree and form of the changes created in this way may indicate the possible circumstances under which they were created. Thus, we may see here a direct connection with the hearth or craft studio in which the furnace functioned (e.g., a metallurgical workshop), lingering in an object that caught fire or other unintentional actions.⁵⁰ The direct effect of high temperature is most evidently documented by melted or over-melted coins, which could also have caused more pieces to be welded together.⁵¹ We also observe here, however, other features of the surface of coins. These may include pitting of varying degrees of severity, which may be the result of over-melting of the surface rather than primary corrosion changes,

⁴⁷ Coins bearing traces of secondary use or suggesting such a possibility make up almost 20% of the group among all the finds discussed (ROMANOWSKI 2023: 204).

⁴⁸ This refers to 39 copies of the 58 total recorded (*Ibidem*: 204, 496–502, No. 125).

⁴⁹ As noted earlier, caution should be exercised in assessing the type of patina, as not every dark tarnish signifies the effect of high temperature, and may be the result of physicochemical changes associated with other sub-depositional conditions (see, for example: ROMANOWSKI 2012: 87; IDEM 2023: 204; DULĘBA and ROMANOWSKI 2018: 80–81).

⁵⁰ ROMANOWSKI 2012: 87; IDEM 2023: 204; DULĘBA and ROMANOWSKI 2018: 80. Perhaps an indication of how the coin was destroyed would be helpful in determining its melting temperature. Depending on the case, the temperature of the flame may have varied, potentially indicating the source of the fire.

⁵¹ E.g., two joined denarii from Kalisz-Piwnice (Nos. 39/11, 13) and an over-melted denarius of Trajan (?) from Nieprowice, Złota commune (ROMANOWSKI 2023: 204, 368, Nos. 39/11, 13, p. 423, No. 80/14).

and various types of discoloration⁵² (Figs. 1a–1b). Coins subjected to high temperatures sometimes occur at sites where other monuments and objects related to metallurgical activity have been recorded, fitting into such a context. However, they may also indicate the presence of a craftsman engaged in metallurgy or a workshop located in the settlement, the relics of which have not yet been discovered.⁵³

Another group of finds that can be linked to metallurgical production are coins fragmented due to their intentional splitting.⁵⁴ Their share in the analyzed group of finds is 21.4%, and they are recorded in finds from three regions – Greater Poland, Western Mazovia and Lesser Poland, with comparable numbers for the first and the last territory, while they occurred in about half as many in Western Mazovia. Systematizing this part of the material was based on observation of the nature of the breakthroughs and the degree of preservation of the coin disc. It should be noted, however, that the identification of the deliberate fragmentation of the coin is often difficult or impossible to ascertain. We should also mention here some noticeable peculiarities of coin splitting techniques, as indicated by the forms of breakthroughs and sometimes traces of the tools used.⁵⁵ Among other things, we can see here traces of breaking off or breaking the coin disc with pliers,⁵⁶ the use of some kind of blade – perhaps a chisel – to split it,⁵⁷ breaking off or cutting off the coin from two different sides, or its earlier incision and breaking off the last fragment.⁵⁸

Coins were fragmented in various configurations, so we note the division into $\frac{1}{4}$, $\frac{1}{2}$ or $\frac{3}{4}$ coins, and even into smaller parts that make up about 10% of the disc.⁵⁹ Among the split coins, mostly silver denominations were registered – denarii (including subaerati), antoniniani, but also bronze coins.⁶⁰ They are recorded in loose finds within settlements, but also in manufacturing workshops acting within the workshop as a semi-finished product or raw material for the manufacture of other

⁵² Sub-depositional conditions and weakening of physicochemical properties as a result of high temperature, may have influenced more aggressive destruction by corrosion (*Ibidem*: 204).

⁵³ ZAPOLSKA 2014: 109–110; DULĘBA and ROMANOWSKI 2021: 152; ROMANOWSKI 2023: 204.

⁵⁴ E.g., GODŁOWSKI 1995: 159; BURSCHE, KACZANOWSKI and RODZIŃSKA-NOWAK 2000: 111–112, 117; ZAPOLSKA 2014: 109–110; ROMANOWSKI 2017: 944.

⁵⁵ On coin splitting techniques, DULĘBA and ROMANOWSKI 2021: 152.

⁵⁶ ROMANOWSKI 2023: 205, 335–336, Nos. 31/24, 31, p. 424, No. 80/22.

⁵⁷ E.g., a denarius from Janków II, Blizanów commune (*Ibidem*: 205, 353, No. 33/26).

⁵⁸ This is indicated by characteristic double-edged breakthroughs with a small conical projection on their line, often located in the central part of the breakthrough (*Ibidem*: 205).

⁵⁹ E.g., denarii of Marcus Aurelius from Jakuszowice (31/84) and an unspecified one from Nieprovice (*Ibidem*: 205, 341, No. 31/84, p. 425, No. 80/33).

⁶⁰ Among others, denarii and antoniniani from the settlement in Jakuszowice, a Marcus Aurelius sestertius from Aleksandrowice, or an AE of Trajan Decius from Przemęczany, Radziemice commune (BURSCHE, KACZANOWSKI and RODZIŃSKA-NOWAK 2000: 110; ROMANOWSKI 2023: 205).

items. This use of coins would expand the spectrum of these workshops beyond their main specialization⁶¹ (Figs. 2a–2b).

In the material in question, an example of a coin (Trajan's denarius from Regów) was also recorded which had been subjected to high temperature and disc division, with an additional sequence of events that can be identified here. The action of fire probably occurred already after the coin had been divided, as may be indicated by the dark patina in its breakthrough, similar to that seen on the surfaces.⁶² For some of the fragments found, it is difficult to determine precisely whether we are dealing with an intentional division⁶³ and it is possible that they may have been destroyed by sub-depositional conditions.⁶⁴ In the absence of recorded manufacturing facilities, the presence of such finds on settlement sites may suggest the potential location of metallurgical or jewelry workshops, or the presence of artisans engaged in this type of manufacturing⁶⁵ (Fig. 3).

The bullion significance of Roman coins may be indicated by the notches made on their edges, which was done in order to check the quality of the metal from which they were made.⁶⁶ A test of this kind may have had to do with the use of coins in crafts, or indicate some role for them in trade.⁶⁷ This kind of practice has been recorded on settlements of the Przeworsk culture population in Greater Poland and Lesser Poland, with almost all of them coming from sites from the latter region.⁶⁸ Such a distribution of finds, however, is not rather a manifestation of regionalization of behavior, but a sample of material and the state of research. Specimens of this type account for 2% of all coins from settlements and 10.3% of secondary coins, positioning them as one of the largest groups in the material analyzed here. When examining coins with incised edges, we also encounter difficulties in interpreting the marks left on them. Problems can be caused by the proper reading of edge chipping, which may have been caused by the unintentional actions of users, or by mechanical damage of other origins.

⁶¹ E.g., denarii from the settlement in Janowice, Lubanie commune, taken in two amber workshops (ROMANOWSKI 2023: 205, 356–357, Nos. 34/3, 11).

⁶² ROMANOWSKI 2023: 206, 446, No. 94/1.

⁶³ Coins from Starowiskitki I, Wiskitki commune, Sulejów-Podklasztorze, Sulejów commune, and Walków-Kurnica, Osjaków commune (*Ibidem*: 206, 465, No. 109/2, p. 471, No. 114/1, p. 481, No. 120/15).

⁶⁴ Hadrian's subaeratus and the denarius of Antoninus Pius of Walków-Kurnica. Coins preserved about 2/3, with irregularly broken edges. The denarius of Antoninus Pius with heavily scratched surfaces, which may suggest heavy friction against stones or coarse soil grains (*Ibidem*: 206, p. 480, No. 120/5, 10).

⁶⁵ This is the case, for example, at the settlement in Przemęczany (DULĘBA and ROMANOWSKI 2021: 152; ROMANOWSKI 2023: 206, 443, No. 91/1).

⁶⁶ BURSCHE 2008: 398–399; DULĘBA and ROMANOWSKI 2018: 81.

⁶⁷ BURSCHE, KACZANOWSKI and RODZIŃSKA-NOWAK 2000: 110–111; BURSCHE 2008: 398–399; DULĘBA and ROMANOWSKI 2018: 81.

⁶⁸ 12, out of 13 recorded (ROMANOWSKI 2023: 206).

Among the recorded specimens, nominally silver coins were mainly incised – denarii and subaerati,⁶⁹ and the place on the edge of the coin was most likely chosen at random, as we do not see any regularity here. It is difficult to say what prompted users to check the quality of individual pieces. It is possible that in certain places, such as jewelers' workshops, this may have been a standard procedure, but the collected material does not confirm this kind of practice. We can guess that sometimes the recipient's distrust may have been aroused by the poor workmanship of the coin, as exemplified by the denarius of Antoninus Pius (Faustina I) of Nieprovice. The coin is characterized by shallow, indistinct relief and low weight (1.78 g).⁷⁰ Perhaps the use of coins in metallurgy where the quality of bullion was important is indicated by the edge incisions made on a denarius from a settlement in Czechy.⁷¹ The edge cut on two sides here is additionally bent, and the entire coin bears traces of mechanical interference in the form of a bent disc and traces of strikes on the surface.⁷² It is possible that the sestertius of Commodus from Igołomia, which, according to the description, has several notches on the edge, should be included in the discussed category of coins. We do not know what could have been intended to check the quality of this brass coin, but it is possible that the maker of the notches here suspected another precious metal – gold. However, we may also have here a misinterpretation of the edge losses, perhaps of an unintentional nature.⁷³

One of the most obvious features that indicates the non-economic use of Roman coins is the holes made in them. Coins prepared in this way were used as pendants and various types of appliqués, thus fulfilling functions related to emphasizing the prestige of the wearer.⁷⁴ Probably not without significance here was also the aesthetics and bullion value of the material used. Coins provided with holes is one of the most abundant features of secondary coinage use, which found its representation in almost all the discussed areas.⁷⁵ Finds of this type account for 3.4% of all coins recorded on settlements and 17.4% of coins with secondary use features.

⁶⁹ For example, a denarius of one Severus from a settlement in Czechy, Słomniki commune, a denarius of Antoninus Pius (Faustinus I) from Nieprovice, or possibly a group of coins from Jakuszowice, with chipped or incised edges (ROMANOWSKI 2023: 206, 311, No. 15/11, p. 424, No. 80/23, pp. 333–341, Nos. 31/ 11, 15, 24, 26, 29, 31, 35, 44, 57, 65, 70, 77, 88, 91, 93).

⁷⁰ DULĘBA and ROMANOWSKI 2018: 81, 91, No. 23; ROMANOWSKI 2023: 207.

⁷¹ ROMANOWSKI 2023: 207, 311, No. 15/11.

⁷² The coin is also covered with a dark patina, which may suggest the effects of high temperature. The authors of the position paper suggest that, in the case of this coin, the removal of the emperor's image was a deliberate act to depreciate the value of this specimen (DULĘBA and WYSOCKI 2016: 315, No. 11, Fig. 8, 11, p. 317). The validity of such a claim is debatable here, especially since the reverse surface is more damaged, and the entire coin bears equal signs of destruction. Perhaps, this is the result of processing the coin as a raw material for further processing (ROMANOWSKI 2023: 207).

⁷³ GAJEWSKI 1957: 64; ROMANOWSKI 2023: 207, 325, No. 28/3.

⁷⁴ BURSCHE 2008: 400.

⁷⁵ With the exception of the Lublin Province (ROMANOWSKI 2023: 207).

The distribution of the material in each region is essentially proportional to the total number of finds recorded there, and the most abundantly represented is in the Lesser Poland region.⁷⁶

The holes⁷⁷ were most often provided with 1st- to 2nd-century denarii, subaerati and tin-lead copies, but we note here also later issues – the Aurelian antoninianus and AE3 of Valentinian I.⁷⁸ The placement of the holes varied, and we observe them above and below the emperor's portrait on the obverse, as well as behind the ruler's head. We also note holes made on two sides of the coin – primarily on the sides on the horizontal axis, as well as on the vertical axis – above and below the imperial portrait.⁷⁹ This testifies to the different techniques of attachment and use of this type of decoration. Thus, the display of the portrait of the Roman emperor⁸⁰ took place here not only in the form of a vertically mounted pendant, but probably also as more complex jewelry products. Some of the holes have been destroyed due to unsuccessful attempts to puncture them or other mechanical damage.⁸¹ In some cases, however, it can be assumed, rubbing the edges of the coin as a result of intensive use of the ornament.⁸² Characteristic of pendant coins is the heavier wear on the surface of the reverse, which, due to the display of the emperor's portrait, was exposed to abrasion against the wearer's clothing.⁸³ Holes were made on both sides of the coin with punches – which can be evidenced by their irregular shapes⁸⁴ and probably with drills. Two cases – the denarii of Antoninus Pius from the Wtórek I hoard and Vespasian from the Wtórek II hoard indicate the possibility of filling in the holes, thus perhaps restoring their monetary function or changing it in accordance with another user's idea⁸⁵ (Figs. 4a–4c).

⁷⁶ In Lesser Poland, we note 63.6% of coins with holes, while some underestimation is evident in finds from Silesia – 4.5% (*Ibidem*: 207).

⁷⁷ Coins provided with holes, we also note in other categories of coin finds. Just a cursory observation indicates that this custom is recorded most often in loose finds and from cemeteries, with relatively low numbers in hoards. This indicates that this practice was practiced for coins that were redistributed from hoards or operated in a different zone of circulation. We can assume that this also applies to coins from settlements of the Przeworsk culture, where coins provided with holes are recorded in a relatively high number of 22 specimens (3.4% of all recorded coins) (ROMANOWSKI 2023: 208).

⁷⁸ From a settlement in Nieprowice and from Zagórzycze II, Kazimierza Wielka commune (*Ibidem*: 208, 425, No. 80/32, p. 505, No. 127/2).

⁷⁹ *Ibidem*: 335–342, Nos. 31/29, 65, 77, 97, pp. 423–425, Nos. 80/15, 32, p. 505, No. 127/2.

⁸⁰ Which is often attested to by the worn surface of the reverse (BURSCHE 2008: 400, on the use of traseology to observe the state of preservation IDEM 1998: 168).

⁸¹ E.g., Trajan's denarius from Łęgonice, Nowe Miasto nad Pilicą commune. The coin is $\frac{3}{4}$ preserved, and there is a trace of a hole in the breakthrough (MITKOWA-SZUBERT 1989: 99; LIANA 2005: 251–253, Fig. 8; ROMANOWSKI 2023: 208, 398, No. 61/1).

⁸² *Ibidem*: 338–342, Nos. 31/65, 96.

⁸³ BURSCHE 1998: 168; IDEM 2008: 400.

⁸⁴ E.g., a denarius from Sobieszyn, Ułęż commune (ROMANOWSKI 2023: 208, 461, No. 106/1).

⁸⁵ *Ibidem*: 208, 490, No. 124/26, p. 496, No. 125/2.

To a lesser extent we also recorded other remnants of secondary use of coins. These include actions aimed at destroying the ruler's portrait or possible technological processes resulting in the reduction of the representation or destruction of the coin's surface. While in one case we are dealing with just such an unclear action,⁸⁶ in two others we can assume intentional damage to the rulers' portraits. The denarii of Vespasian of Krzczonowice, commune of Ćmielów and Antoninus Pius (Faustina I) of Zagórzycze II have deep incisions made in the images of the emperors, located in exactly the same places and of similar form – longitudinal, diagonal depressions, separating the facial part of the portrait from the rest of the image. Less likely, is to check the quality of the bullion in this way. Determining the time and place of the destruction of the obverses could provide an answer as to whether it took place still within the Empire, or whether it would be a manifestation of the invalidation of the authority of the issuer made in *Barbaricum*⁸⁷ (Fig. 5).

Among the niche recorded features of secondary use of coins, there are specimens on which graffiti scratched on the surface was placed. Here we know of two examples – a denarius of Vespasian from a settlement in Walków-Kurnica, which probably had graffiti scratched on its surface in the right field of the obverse in the form of signs: *IX* or *X*, and a Republican denarius from Zagórzycze I, provided on the obverse with graffiti with the sign *X*. The symbols depicted here probably mimic Roman numerals, but the interpretation of these signs remains an open question.⁸⁸

An unusual find, on the scale of the entire monetary material from the settlements of the Przeworsk culture, is a gilded one of the Caligula sestertius from Kalisz-Piwnice.⁸⁹ The use of such a technique would indicate its ornamental or prestigious function, but there are reasonable doubts here about the correct interpretation of this secondary treatment. This is not a practice applied to sestertii in the area of settlements of the Przeworsk culture,⁹⁰ and probably also, throughout what today consti-

⁸⁶ According to known information, the obverse of the denarius from Sobieszyn was intentionally filed down with a file. Interesting in the context of this coin, is the intentional destruction of the image of the reverse of the subaeratus from the settlement in Kolonia-Nieszawa, Józefów-on-Vistula commune, which was probably also filed down with a file. Perhaps, in this way, the coin was being prepared to change its function to an ornamental element or some kind of appliqué, where the reverse was not to be exposed (ŁUCZKIEWICZ 1999: 116; STASIAK-CYRAN 2016: 72, 73, Fig. 26 A-B; ROMANOWSKI 2023: 208–209, 379, No. 46/2, p. 461, No. 106/1).

⁸⁷ Numerous examples of this type have been noted in finds of Roman coins in the Indian subcontinent and this applies to both gold and silver coins. The discussion of this phenomenon is primarily two-pronged and focuses on the possible invalidation of the issuer's authority or checking the quality of the bullion. It is also raised, the aspect of possible cult behavior. There is an extensive literature on this subject, a summary of views is presented, for example, DARLEY 2019: 73–78 (ROMANOWSKI 2023: 209, 392, No. 56/1, p. 505, No. 127/1).

⁸⁸ *Ibidem*: 209, 479, No. 120/1, p. 502, No. 126/5.

⁸⁹ ŁASZEWSKA 1958: 46–47; ROMANOWSKI 2012: 87; IDEM 2023: 209, 367, No. 39/3.

⁹⁰ Although we know of very dubious information about such an eventuality – the finding of a gilded coin of Septimius Severus from Węgrów, Długoleka commune. The coin suspected by K. Regling to be a 16th century product – a Renaissance medal imitating a Roman coin, in the type of so-called *padovans*. Here also information that it may have been a gilded bronze coin of Pertinax provided with a loop (CIOŁEK 2008: 272, fn. 773).

tutes Poland. Moreover, large coins of this denomination made of brass may have been seen here as attractive objects imitating gold, requiring no further treatment to enhance their attractiveness.⁹¹ In contrast, complex metallurgical techniques, including silver plating or gold plating known to barbarian jewelers, were used to make other denominations more attractive and in a different cultural environment.⁹² It is possible that the rubbing of the sestertius' surface may have given the impression of gilding, especially to the eye of the casual finder. Some symbolic or practical need to increase the value of this coin is possible here, but this cannot be confirmed.

Possible functions of Roman coins may also be indicated by elements that do not document secondary physical characteristics of coins, but may perhaps be of significance in the interpretation of certain phenomena. Thus, we signal here, the case of an antoninianus of Postumus from Krakow-Biezanów, borough of Krakow, which is a mint defect. The coin has a correctly struck obverse and a concave reflection of the obverse on the reverse (*brockage*).⁹³ This raises the question of whether the residents of the settlement recognized unusual features in the coin, and whether it may have had a special function or been disapproved of as a result. The last case is two denarii from Grodzisk Dolny, *loco* commune, which were linked together when found. This may suggest that it was a fragment of a larger assemblage that disintegrated or we are dealing with a small purse deposit.⁹⁴

The function of barbaric imitations and tin-lead copies should be addressed as a separate issue.⁹⁵ This group of 21 finds is recorded in four of the regions under discussion, and the largest part of them was located in Lesser Poland settlements. It is interesting to note the predominance of this type of wares over other types of imitations in all four regions.⁹⁶ Identification of tin-lead copies was based on their

⁹¹ As suggested by ŁASZEWSKA 1958: 47. This was the perception of the Balts, who preferred sesterce in trade (ZAPOLSKA 2013: 107).

⁹² An example is, for example, a gilded subaeratus from a Gothic settlement in Gródek Nadbużny, Hrubieszów commune (BURSCHE 2008: 401).

⁹³ BODZEK 2003: 183–184; ROMANOWSKI 2023: 210, 382, No. 48/2.

⁹⁴ MICYK 2007: 236, No. 24; ROMANOWSKI 2023: 210, 322, No. 25/1, 3.

⁹⁵ Peter (2008: 391) describes them in English “as cast copies (...) made from a copper-tin alloy”. Degler (2016: 15) used the phrase: “coins cast from base metal alloys”, which is a translation of English “base metal issues”; Sidarovich (2017: 129, fn. 19) proposes to call this type of imitation coins: “barbarian copies”, but does not specify the chemical composition of the alloys used; Duleba and Romanowski (2018: 81, 82) describe them as imitations made of tin-lead bronzes; Dymowski (2021: 112–113) as “copies”; similarly Dymowski and Myzgin (2019: 200–201). Myzgin (2023: 60; IDEM 2024: 182), Awianowicz (2024: 217ff), and other authors propose the Latin term “denarii flati”, i.e. cast denarii and, in the same place, propose the term “copy”, while simultaneously acknowledging the imprecision of this term due to the limited knowledge about their function in the context of “living culture”. On the sidelines of the terminological discussion, it should be noted that the proposed terms refer primarily to physical properties and production technology. It should therefore be remembered that the form does not necessarily imply the actual function of the object and could have been understood differently by the barbarian users (HOWGEGO and WILSON 2022: 8–9).

⁹⁶ Greater Poland, Western Mazovia, Silesia, and Lesser Poland. The number of such finds is probably underestimated, due to the possibility of identification and the need for more thorough verification, until recently

characteristic appearance,⁹⁷ but also on metallographic studies, which indicate that we are dealing here with a product intended to imitate the original coin. With the current state of research, we cannot say for what purpose the copies of this type noted in the Polish lands were produced, so a clear determination of their function is not possible.⁹⁸ It is possible, however, that they should be seen similarly to imitation coins made of silver, representing the canon with tarnished representations and legends, which were probably minted for prestige purposes⁹⁹ (Figs. 6a–6b).

The question of the functionality of Roman coin copies in the areas of Central European Barbaricum is still under discussion. The need to supplement the stock of Roman currency is indicated, but the reason for this need has not been clearly formulated. Despite the growing database, we lack convincing evidence to determine the nature of the copied issues. Although the form and composition of the alloys used in their production could have misled the barbarian recipient, we do not know whether this was the purpose of copying the denarii, perhaps giving the producer a material profit.¹⁰⁰ This type of production may have enabled the broader distribution of Roman coins, which in their original form were not available to the general public.¹⁰¹ Such demand may therefore have had non-economic motivations, reflecting barbarian customs related to religion or the need to enhance prestige. Production for such purposes,¹⁰² could also be less honest in nature, giving tribal elites the opportunity to distribute copied coins as prestigious gifts or to profit from this type of industry. However, open production is not excluded, with the recipients being rather less significant members of the community. The tribal elders had considerable reserves of denarii, which, with relatively low redistribution, could satisfy their own needs without the need to purchase copies.

CONCLUSIONS

Observations on the function of coins in the settlement environment indicate the variety of their uses and the wide range of behavior they generated. Roman coins

unnoticed coins of this type (ROMANOWSKI 2023: 210). In the Polish literature, such imitations have often been identified with subaerati (BURSCHE 1997: 35; BURSCHE, KACZANOWSKI and RODZIŃSKA-NOWAK 2000: 113ff; BODZEK 2003: 181; IDEM 2015: 120; BIBORSKI and BIBORSKI 2015 (appendix); DULĘBA and ROMANOWSKI 2018: 81–83, fn. 84).

⁹⁷ The gray-green patina and visible copper efflorescence on the surfaces of the coins, some of which are concentric in shape (DULĘBA and ROMANOWSKI 2018: 81, 82; ROMANOWSKI 2023: 211).

⁹⁸ AWIANOWICZ, DYMOWSKI and MYZGIN 2022: 137; DYMOWSKI 2021: 113–114; ROMANOWSKI 2023: 211; MYZGIN 2024: 209–210.

⁹⁹ Their place of production was most likely the territory of today's Ukraine (BURSCHE 2008: 399, 401; DYMOWSKI 2017: 111–122; IDEM 2024: 67ff; BURSCHE and NIEZABITOWSKA-WIŚNIEWSKA 2018: 248–266).

¹⁰⁰ On the example of Palmyrene coinage BUTCHER 2024: 164.

¹⁰¹ This can be indicated by, among other things, the relatively low presence of denarii at the settlements.

¹⁰² This possibility is indicated by MYZGIN 2024: 210.

were recorded in productive and residential zones, where they had diverse functions. In the former zone, they may have been part of complex craft production, where they acted as either semi-finished products or raw materials. They might also have played a sacred role here, being an offering to ensure the smooth operation of the workshop and the success of production. Functions of a religious nature also had foundation offerings, which could be dedicated to both production and residential facilities. In the latter, coins were usually found among unsophisticated livestock, suggesting the low status of their inhabitants. It should be assumed, however, that the very presence of coinage or other Roman imports, indicated a more significant role for their users.¹⁰³

The possibilities of determining the function of coins expanded the observations of individual physical characteristics, indicating their secondary use. Quite a wide range of such traces made it possible to identify their non-economic uses. Thus, we see the use of coins for metallurgical or jewelry production, as indicated by traces of high temperature action and fragmentation. Coins were used as ornaments in the form of pendants or appliqués, as evidenced by holes made in various configurations. In doing so, they played a prestigious role, thus entering the realm of symbolic perception of coins and the images placed on them. We also observe traces of other practices, probably sometimes of a symbolic nature – such as the destruction of the ruler's portrait, and sometimes of a practical nature – such as the gilding (?) of the coin. It is also possible that the two functions intermingle, as we see in the case of pendants or perhaps also the placement of graffiti on coins. In some cases, the use of the coin is uncertain. One such example would be barbaric tin-lead copies, whose function cannot be clearly determined.

In most cases we are dealing with single finds, set in different contexts or found loosely within the settlement. This category of monetary relics can be interpreted as a manifestation of individual and quite comprehensive activity of the settlement inhabitants. The few assemblages may have belonged to members of the tribal elders or wealthier strata – artisans or warriors, which may have been partly subject to redistribution and partly family treasures. The relatively small number of Roman coins recorded at settlement sites, and mostly denarii, indicates that they did not serve as a common means of exchange. If this is the case, we should see a larger number of coins here, especially the finer bronze denominations, which would have been better suited for everyday transactions than the precious denarii. It is also important to note here that the finds of Roman coins come from about one-third of the better-researched settlement sites, of which there are actually many more. Thus, we see a fairly widespread distribution of Roman coins, which, however, did not

¹⁰³ ROMANOWSKI 2023: 221.

reach all the inhabitants of these lands. This may indicate the wealth and role of individual settlements and their ability to accumulate Roman imports, (presumably also other local goods), especially coins. From such a perspective, we can see the activity of settlements which were of central regional importance. We can also assume that the settlements where Roman coins or, more broadly, industrial imports were recorded were inhabited by elites of greater or lesser importance and the varied but important role they played in these communities. It should also be noted that there is a significant correlation between the timing of the influx and use of coins and other Roman imports, which to a large extent functioned here simultaneously, creating an overall picture of technological and cultural transfer.¹⁰⁴

The encounter of Germanic communities with culturally foreign objects gave rise to the creation of new interpretations and embedding them in their own environment. This is how we should understand the adaptation of Roman coins to various functions related to technological processes, but also to fulfill an important role in the immaterial sphere – symbolic and spiritual. We can see here a certain set of behaviors and practices that were formed in connection with the influence of Roman money on barbarian users. Thus, the practical and symbolic adaptation of coins formed some part of the cultural identity of the Germanic inhabitants of our lands.¹⁰⁵

168

REFERENCES

- AWIANOWICZ, B. 2024. “Cast Counterfeit Coins or *pecunia flata*? Ancient Latin Sources and the Term *denarii flati*”. In: A. DYMOWSKI and K. MYZGIN (eds.), *Counterfeits, Imitations, and Copies of Roman Imperial Denarii. Making and Faking Coins on Both Sides of the Limes*, Warsaw Studies in Archaeology 8, Turnhout: 217–220. DOI: 10.1484/M.WSA-EB.5.141516
- AWIANOWICZ, B., DYMOWSKI, A. and MYZGIN, K. 2022. “The Counterfeit Roman Imperial Denarii on both Sides of the Limes according to the Written, Archaeological and Numismatic Sources. Was there any Transfer of Ideas, Technologies and Coins?”. In: M. OŁĘDZKI and A. DUBICKI (eds.), *Rome and the Barbarians. An Interplay between two Worlds*, Łódź: 129–144.
- BIBORSKI, A. and BIBORSKI, M. 2015. “Konserwatorskie analizy monet rzymskich z Aleksandrowic, woj. małopolskie”. In: J. CHOCHOROWSKI (ed.), *Via Archaeologica. Źródła z badań wykopaliskowych na trasie autostrady A4 w Małopolsce. Od epoki brązu do czasów nowożytnych. Wybrane odkrycia i znaleziska*, Kraków: 131–136.
- BODZEK, J. 2003. “Monety rzymskie z Opatowa, stan. 1, Mokrej, stan. 8 oraz z Wąsosz Górniego, stan. 2, woj. śląskie (aneks)”. In: R. MADYDA-LEGUTKO and J. ZAGÓRSKA-TELEGA, “Znaleziska monet rzymskich ze stanowisk kultury przeworskiej położonych w dorzeczu Liswarty”. In: A. BURSCHE and R. CIOŁEK (eds.), *Antyk i Barbarzyńcy. Księga dedykowana*

¹⁰⁴ The chronology of industrial imports recorded on settlements of the Przeworsk culture falls (internally differentiated, depending on the type of imported objects) mainly between phases B₂-C₃ (80–ca. 375) (ROMANOWSKI 2023: 222).

¹⁰⁵ *Ibidem*: 222–223.

- Profesorowi Jerzemu Kolendo w siedemdziesiątą rocznicę urodzin*, Warszawa: 295–296.
- BODZEK, J. 2015. “Monety rzymskie znalezione w Aleksandrowicach (kompleks stanowisk 2 i 3), pow. krakowski, woj. małopolskie”. In: J. CHOCHOROWSKI (ed.), *Via Archaeologica. Źródła z badań wykopaliskowych na trasie autostrady A4 w Małopolsce. Od epoki brązu do czasów nowożytnych. Wybrane odkrycia i znaleziska*, Kraków: 115–129.
- BODZEK, J. 2021. “20 Years Later: The Settlement Site of the Przeworsk Culture at Jakuszowice Revisited. A Numismatist’s Perspective”. In: R. CIOŁEK and R. CHOWANIEC (eds.), *Aleksandria. Studies on Items, Ideas and History Dedicated to Professor Aleksander Bursche on the Occasion of his 65th Birthday*, Wiesbaden: 33–44. DOI: 10.2307/j.ctv1h9djth.9
- BOHANNAN, P. 1959. “The Impact of Money on an African Subsistence Economy”, *The Journal of Economic History* 19 (4): 491–503.
- BURSCHE, A. 1997. “Denarii subaerati from the Jakuszowice settlement in north Małopolska”, *Wiadomości Numizmatyczne* 40/1–2 (155–156), *Polish Numismatic News* 6: 31–42.
- BURSCHE, A. 1998. *Złote medaliony rzymskie w Barbaricum. Symbolika prestiżu i władzy społeczeństw barbarzyńskich u schyłku starożytności*, Światowit Supplement Series A, Antiquity 2, Warszawa.
- BURSCHE, A. 2008. “Function of Roman coins in *Barbaricum* of Later Antiquity. An anthropological essay”. In: A. BURSCHE, R. CIOŁEK and R. WOLTERS (eds.), *Roman coins outside the Empire. Ways and Phases, Contexts and Functions. Proceedings of the ESF/SCH Exploratory Workshop Radziwill Palace, Nieborów (Poland), 3–6 September 2005*, Collection Moneta 82, Wetteren: 395–416.
- BURSCHE, A., KACZANOWSKI, P. and RODZIŃSKA-NOWAK, J. 2000. “Monety rzymskie z Jakuszowic”. In: R. MADYDA-LEGUTKO and T. BOCHNAK (eds.), *Superiores Barbari. Księga ku czci Profesora Kazimierza Godłowskiego*, Kraków: 101–130.
- BURSCHE, A. and NIEZABITOWSKA-WIŚNIEWSKA, B. 2018. “Two antique gold coins from Ulów in Roztocze”. In: B. NIEZABITOWSKA-WIŚNIEWSKA, P. ŁUCZKIEWICZ, S. SADOWSKI, M. STASIAK-CYRAN and M. ERDRICH (eds.), *Studia Barbarica. Profesorowi Andrzejowi Kokowskiemu w 65. rocznicę urodzin / Studia Barbarica. For Professor Andrzej Kokowski on his 65th Birthday*, vol. 2, Lublin: 248–267.
- BURSCHE, A. and MYZGIN, K. 2017. “K voprosu o tekhnologii proizvodstva rannikh varvarskikh podrazhaniy rimskim monetam (po rezul’tatam metallograficheskikh analizov)”. In: E.V. ZAKHAROV (ed.), *Numizmaticheskiye chteniya Gosudarstvennogo Istoricheskogo Muzeia 2017 goda. Materialy dokladov i soobshcheniy*, Moskva: 40–43.
- BUTCHER, K. 2024. “Small Coins, Big Implications?”. In: R. RAJA (ed.), *Palmyra in Perspective*, Studies in Palmyrene Archaeology and History 11, Turnhout: 163–174. DOI: 10.1484/M.SPAH-EB.5.136629
- BYRSKA-FUDALI, M. and PRZYBYŁA, M.M. 2012. “Badania ratownicze na stanowisku 2 w Modlniczce, gm. Wielka Wieś”. In: S. KADROW (ed.), *Raport 2007–2008*, vol. 1, Warszawa: 509–553.
- CIOŁEK, R. 2008. *Die Fundmünzen der römischen Zeit in Polen. Schlesien*, Collection Moneta 83, Wetteren.
- DALTON, G. 1965a. “Primitive money”, *American Anthropologist* 67: 44–65.
- DALTON, G. 1965b. “Primitive, archaic and modern economies: Karl Polanyi’s contribution to economic anthropology and comparative economy”. In: J. HELM (ed.), *Essays in Economic Anthropology Dedicated to the Memory of Karl Polanyi. Proceedings of the 1965 Annual Spring Meeting of the American Ethnological Society*, Seattle, WA: 1–24.
- DARLEY, R. 2019. “Worth and Value: Roman and Byzantine Coins in the Culture and Economy of Ancient Telangana”. In: N.R. VISALATCHY (ed.), *Telangana Through Ages: Perspectives*

from Early and Medieval Periods. *Proceedings of the Second International Seminar, Hyderabad, 19–20 January 2018*, Hyderabad: 64–82.

DĄBROWSKA, T. 1988. *Wczesne fazy kultury przeworskiej. Chronologia – zasięg – powiązania*, Warszawa.

DĄBROWSKI, K. and KRZYŻANOWSKA, A. 1955. “Odkrycia denarów w osadzie z okresu rzymskiego w Piwonicach, pow. Kalisz”, *Wiadomości Archeologiczne* 22 (2): 198–200.

DEGLER, A. 2016. *Catalogue of Ancient Coins in the Ossoliński National Institute*, part 6: *Coins of the Roman Empire. Pertinax–Severus Alexander*, Wrocław.

DESMONDE, W.H. 1962. *Magic, Myth, and Money. The Origin of Money in Religious Ritual*, Glencoe, IL.

DOBRZAŃSKA, H. 2020. “Zofipole po latach”, *Materiały Archeologiczne Nowej Huty* 26: 121–134.

DOMAŃSKA, E. 2008. “Problem rzeczy we współczesnej archeologii”. In: J. KOWALEWSKI, W. PIASEK and M. ŚLIWA (eds.), *Rzeczy i ludzie, humanistyka wobec materialności*, Olsztyn: 27–60.

DULĘBA, P. and ROMANOWSKI, A. 2018. “Rzymskie monety z osady kultury przeworskiej w Nieprawicach, pow. pińczowski, w świetle danych archeologicznych”, *Wiadomości Numizmatyczne* 62/1–2 (205–206): 61–99. DOI: 10.24425/wn.2018.125037

DULĘBA, P. and ROMANOWSKI, A. 2021. “New Finds of Roman Coins from the Przeworsk Culture Settlements in the Nidzica and Szreniawa River Basins”, *Notae Numismaticae – Zapiski Numizmatyczne* 16: 143–175. DOI: 10.52800/ajst.1.16.a7

DULĘBA, P. and WYSOCKI, P. 2016. “New data regarding the question of interregional contacts in the Iron Age. Results of a surface survey in Czechy, Kraków district”, *Sprawozdania Archeologiczne* 68: 301–325.

DYMOWSKI, A. 2017. “A Small Hoard of Roman Denarii Found in the Region of Kuyavia. The Provenance of Imitative Coins of Roman Imperial Denarii Found in the Territory of Poland”, *Notae Numismaticae – Zapiski Numizmatyczne* 12: 111–124. DOI: 10.11588/diglit.43282.10

DYMOWSKI, A. 2021. “Barbarian Copies of Roman Imperial Denarii”. In: R. CIOŁEK and R. CHOWANIEC (eds.), *Aleksandria. Studies on Items, Ideas and History Dedicated to Professor Aleksander Bursche on the Occasion of his 65th Birthday*, Wiesbaden: 111–116. DOI: 10.2307/j.ctv1h9djth.18

DYMOWSKI, A. 2024. “The ONAV Group of Barbarian Imitations and Copies of Roman Imperial Coins. Manufacturing of denarii subaerati in Eastern Europe in Antiquity”. In: A. DYMOWSKI and K. MYZGIN (eds.), *Counterfeits, Imitations, and Copies of Roman Imperial Denarii. Making and Faking Coins on Both Sides of the Limes*, Warsaw Studies in Archaeology 8, Turnhout: 67–108. DOI: 10.1484/M.WSA-EB.5.141510

DYMOWSKI, A. and MYZGIN, K. 2019. “‘Wspólna waluta’ barbarzyńców? Barbarzyńskie naśladownictwo denarów rzymskich z okresu Cesarstwa w skarbach znalezionych w Europie Środkowej, Wschodniej i Północnej”. In: E. DROBERJAR and B. KOMORÓCZY (eds.), *Príspevky k poznání barbarských komunit (Archeologie barbarů 2016 a 2018)*, Spisy Archeologického ústavu AV ČR Brno 70, Brno: 195–217.

ELIADE, M. 1988. *Historia wierzeń i idei religijnych*, vol. I: *Od epoki kamiennej do misteriów eleuzyńskich*, Warszawa.

GAJEWSKI, L. 1957. “Sprawozdanie z badań terenowych w rejonie Igołomia-Wschód w 1955 r.”, *Sprawozdania Archeologiczne* 3: 57–74.

GAŁĘZOWSKA, A. 2016. “Monety rzymskie w zbiorach Muzeum Archeologicznego w Poznaniu”, *Fontes Archaeologici Posnanienses* 52: 207–272.

- GHEY, E. 2022. "Hoarding in Roman Britain: An Archaeological and Contextual Approach". In: J. MAIRAT, A. WILSON and C. HOWGEGO (eds.), *Coin Hoards and Hoarding in the Roman World*, Oxford: 55–67. DOI: 10.1093/oso/9780198866381.003.0003
- GODŁOWSKI, K. 1995. "Das 'Fürstengrab' des 5. Jhs. und der 'Fürstensitz' in Jakuszowice in Südpolen". In: F. VALLET and M. KAZANSKI (eds.), *La noblesse romaine et les chefs barbares du III^e au VII^e siècle. Actes du Colloque International organisé par le Musée des Antiquités Nationales et l'URA 880 du CNRS (Saint-Germain-en-Laye, 16–19 mai 1992)*, Mémoires de l'Association française d'archéologie mérovingienne 9, Chelles: 155–179.
- GRUSZCZYŃSKA, A. 1977. "Świlcza, woj. rzeszowskie. Stanowisko 3", *Informator Archeologiczny (badania 1976)* 10: 161–162.
- GRYGIEL, M. 2004. "Problem chronologii i przynależności kulturowej materiałów o charakterze jastorfskim z Brześcia Kujawskiego, woj. kujawsko-pomorskie, w świetle ostatnich badań nad problematyką okresu przedrzymskiego w Polsce". In: H. MACHAJEWSKI (ed.), *Kultura jastorfska na Nizinie Wielkopolsko-Kujawskiej*, Poznań: 13–82.
- HAGEN-JAHNKE, U. and WALBURG, R. 1987. *Coin Hoards. The Example of Walle*, Frankfurt am Main.
- HELLINGS, B.D.R. 2022. "Coin Supply and Longevity of Circulation: Three Case Studies from Hoards in North-West Europe". In: J. MAIRAT, A. WILSON and C. HOWGEGO (eds.), *Coin Hoards and Hoarding in the Roman World*, Oxford: 282–293. DOI: 10.1093/oso/9780198866381.003.0013
- HODGES, R. 1982. *Dark Age Economics. The origins of towns and trade A.D. 600–1000*, New York.
- HOWGEGO, C. and WILSON, A. 2022. "Introduction: Coin Hoards and Hoarding in the Roman World". In: J. MAIRAT, A. WILSON and C. HOWGEGO (eds.), *Coin Hoards and Hoarding in the Roman World*, Oxford Studies on the Roman Economy, Oxford: 1–22. DOI: 10.1093/oso/9780198866381.003.0001
- ILKJÆR, J. 1990. *Illerup Ådal*, vols. 1–2: *Die Lanzen und Speere*, Jutland Archaeological Society Publications 25, Aarhus.
- ILKJÆR, J. 1993. *Illerup Ådal*, vols. 3–4: *Die Gürtel. Bestandteile und Zubehör*, Jutland Archaeological Society Publications 25, Aarhus.
- JENSEN, S. and WATT, M. 1993. "Trading sites and central places". In: S. HVASS and B. STORGAARD (eds.), *Digging into the Past. 25 Years of Archaeology in Denmark*, Copenhagen: 195–201.
- JØRGENSEN, L. 1998. "Fra nutidens pløjelag til jernalderens samfund – stormænd og håndværkere i gudme", *Årbog fra Svendborg & Omegns Museum*: 8–21.
- KASIŃSKI, W. 1936. "Stanowisko z okresu rzymskiego w Woli Branickiej w pow. Brzezińskim", *Z Otchłani Wieków* 11 (10–11): 140.
- KEMMERS, F. 2009. "Sender or receiver? Contexts of coin supply and coin use". In: H.-M. von KAENEL and F. KEMMERS (eds.), *Coins in Context 1. New perspectives for the interpretation of coin finds, Colloquium Frankfurt a. M., October 25–27, 2007*, Studien zu Fundmünzen der Antike 23, Mainz: 137–156.
- KEMMERS, F. and MYRBERG, N. 2011. "Rethinking numismatics. The archaeology of coins", *Archaeological Dialogues* 18 (1): 87–108. DOI: 10.1017/S1380203811000146
- KOBIAŁKA, D. 2008. "Biografia rzeczy jako perspektywa badawcza". In: P. KUCYPERA and S. WADYL (eds.), *Kultura materialna średniowiecza w Polsce*, Toruń: 227–239.
- KONTNY, B. 2008. "The war as seen by an archaeologist. Reconstruction of barbarian weapons and fighting techniques in the Roman Period based on the analysis of graves containing

- weapons. The case of the Przeworsk Culture". In: L. KOC SIS (ed.), *The Enemies of Rome. Proceedings of the 15th International Roman Military Equipment Conference, Budapest 2005*, Journal of Roman Military Equipment Studies 16, Budapest: 107–145.
- KOSTRZEWSKI, J. 1949. *Pradzieje Polski*, Poznań.
- KRMNICEK, S. 2023. "Contextual numismatics: a post-processual approach illustrated by application to Roman coins", *Heritage Science* 11 (256): 1–11. DOI: 10.1186/s40494-023-01081-5
- KROMANN, A. 1992. "The denarii from the moor of Illerup", *Nordisk Numismatisk Årsskrift* 1991: 45–54.
- KROPOTKIN, V.V. 1954. "Topografiya rimskikh i ranne-vizantiyskikh monet na territorii SSSR", *Vestnik Drevnej Istorii* 3 (49): 152–180.
- KUNISZ, A. 1969. *Chronologia napływu pieniądza rzymskiego na ziemię Małopolski*, Wrocław–Warszawa–Kraków.
- KUNISZ, A. 1985. *Znaleziska monet rzymskich z Małopolski*, Wrocław–Warszawa–Kraków–Gdańsk–Łódź.
- LIANA, T. 2005. "Osada z młodszego okresu rzymskiego w Łęgonicach, pow. grójecki", *Wiadomości Archeologiczne* 57: 241–295.
- LIND, L. 2007. "A group of barbarous Roman denarii represented in Sweden and Hungary (and Germany and Britain?)". In: M. ANDERSEN, H.W. HORSNÆS and J.CHR. MOESGAARD (eds.), *Magister Monetæ. Studies in honour of Jørgen Steen Jensen*, Publications of the National Museum, Studies in Archaeology & History 13, Copenhagen: 53–58.
- ŁASZCZEWSKA, T. 1958. "Piwnice, pow. Kalisz", *Wiadomości Numizmatyczne* 2/2 (4): 46–47.
- ŁUCZKIEWICZ, P. 1999. "Osada kultury przeworskiej z młodszego okresu przedrzymskiego w Sobieszynie, stan. 14, pow. Ryki, woj. lubelskie", *Archeologia Polski Środkowowschodniej* 4: 115–118.
- MAJEWSKI, K. 1957. "Kontakty plemion zamieszkujących ziemię polską z prowincjami rzymskimi w pierwszych wiekach naszej ery". In: *Pierwsza sesja Archeologiczna Instytutu Historii Kultury Materialnej Polskiej Akademii Nauk, Warszawa, 5 V–8 V 1955*, Warszawa–Wrocław: 188–209.
- MARCINIAK, A. and CHWIEDUK, A. 2012. "Agency". In: S. TABACZYŃSKI, A. MARCINIAK, D. CYNGOT and A. ZALEWSKA (eds.), *Przeszłość społeczna. Próba konceptualizacji*, Poznań: 564–570.
- MACZYŃSKA, M. 2020. "Southern and Central Poland". In: A. BURSCHE, J. HINES and A. ZAPOLSKA (eds.), *The Migration Period between the Oder and the Vistula*, vol. 1, East Central and Eastern Europe in the Middle Ages, 450–1450, vol. 59, Leiden: 451–466. DOI: 10.1163/9789004422421_014
- MICYK, P. 2007. *Monety rzymskie na osadach i cmentarzyskach ludności kultury przeworskiej*, unpublished MA Thesis, Jagiellonian University, Kraków.
- MITKOWA-SZUBERT, K. 1989. "Znaleziska monet antycznych w Państwowym Muzeum Archeologicznym w Warszawie", *Wiadomości Numizmatyczne* 31/1–2 (119–120): 98–100.
- MYZGIN, K. 2023. "Analiza numizmatyczna skarbu / Numismatic analysis of the hoard". In: B. BARTECKI, A. HYRCHAŁA and K. MYZGIN (eds.), *Skarb z Cichobórze. Studia nad depozytem rzymskich denarów oraz ich naśladownictw / The Cichobórze Hoard. A Study of the Deposit of Roman Denarii and Their Imitations*, Hrubieszów: 38–89.
- MYZGIN, K. 2024. "Denarii flat". In: A. DYMOWSKI and K. MYZGIN (eds.), *Counterfeits, Imitations, and Copies of Roman Imperial Denarii. Making and Faking Coins on Both Sides of the Limes*, Warsaw Studies in Archaeology 8, Turnhout: 181–216. DOI: 10.1484/M.WSA-EB.5.141515

- NOE, S.P. 1949. "Hoard Evidence and Its Importance", *Hesperia Supplements* 8: *Commemorative Studies in Honor of Theodore Leslie Shear*: 235–242.
- PEISER, F.E. and KEMKE, H. 1914. "Der Depotfund von Frauenburg", *Sitzungsberichte der Altertumsgesellschaft Prussia* 23 (1): 58–79.
- PETER, M. 2008. "Imitations of Roman coins in non-Roman contexts: some remarks". In: A. BURSCHE, R. CIOŁEK and R. WOLTERS (eds.), *Roman coins outside the Empire. Ways and Phases, Contexts and Functions. Proceedings of the ESF/SCH Exploratory Workshop Radziwill Palace, Nieborów (Poland), 3–6 September 2005*, Collection Moneta 82, Wetteren: 389–394.
- PETERSEN, E. 1944. "Bekannte und unbekannte germanische Funde der frühen Völkerwanderungszeit aus dem Osten", *Posener Jahrbuch für Vorgeschichte* 1: 75–86.
- PETERSEN, P.V. 1994. "Excavations at sites of treasure trove finds at Gudme". In: P.O. NIELSEN, K. RANDSBORG and H. THRANE (eds.), *The Archaeology of Gudme and Lundeberg. Papers presented at a Conference at Svendborg, October 1991*, *Arkæologiske studier* 10, Copenhagen: 30–40.
- POLANYI, K. 1968. "The semantics of money-uses". In: G. DALTON (ed.), *Primitive, Archaic and Modern Economies. Essays of Karl Polanyi*, Boston, MA: 175–203.
- POLANYI, K., ARENSBERG, C.M. and PEARSON, H.W. 1957. *Trade and Market in the Early Empires. Economies in History and Theory*, New York.
- RAU, A. 2013. "Some observations on Migration Period 'Hacksilber' hoards with Roman components". In: B. LUDOWICI (ed.), *Individual and Individuality? Approaches towards an Archaeology of Personhood in the First Millennium AD*, *Neue Studien zur Sachsenforschung* 4, Hannover: 189–203.
- REINING, C.C. 1959. "The Role of Money in the Zande Economy", *American Anthropologist* 61 (1): 39–43.
- ROMANOWSKI, A. 2010. "Dolina środkowej Prosnys w świetle znalezisk monet rzymskich". In: S. SUCHODOLSKI and M. ZAWADZKI (eds.), *Od Kalisii do Kalisza. Skarby doliny Prosnys. Katalog wystawy. Zamek Królewski w Warszawie, 30 kwietnia 2010 – 30 maja 2010*, Warszawa: 29–41.
- ROMANOWSKI, A. 2012. "Możliwości interpretacyjne znalezisk monet rzymskich z osad (na przykładzie osady kultury przeworskiej w Kaliszu-Piwonicach)", *Numismatický Sborník* 26 (1): 81–90.
- ROMANOWSKI, A. 2017. "Roman coin finds from Przeworsk Culture settlements in Lesser Poland (Małopolska)". In: M. CACCAMO CALTABIANO (ed.), *XV International Numismatic Congress Taormina 2015. Proceedings*, vol. 2, Roma–Messina: 941–945.
- ROMANOWSKI, A. 2023. *Znaleziska monet rzymskich z osad kultury przeworskiej*, unpublished PhD Thesis, University of Warsaw.
- ROMANOWSKI, A. 2024. "Context and Time. Inflow and Longevity of Use of Roman Coins in the Settlements of the Przeworsk Culture", *Wiadomości Numizmatyczne* 68 (212): 3–24. DOI: 10.23858/WN68.2024.001
- SCHUSTER, J. 2016. "The Świlcza Hoard. An Extraneous 5th Century AD Complex from the Northern Carpathian Foreland", *Wiadomości Archeologiczne* 67: 227–263.
- SIDAROVICH, V. 2017. "Barbarian Imitations of Ancient Coins in the Territory of Belarus", *Notae Numismaticae – Zapiski Numizmatyczne* 12: 125–141. DOI: 10.11588/diglit.43282.11
- STASIAK-CYRAN, M. 2016. "Charakterystyka osady w Nieszawie Kolonii w świetle analizy źródeł archeologicznych i badań interdyscyplinarnych". In: M. STASIAK-CYRAN (ed.), *Nieszawa Kolonia stanowisko 5, powiat Opole Lubelskie. Interdyscyplinarna monografia osady z okresu rzymskiego*, Lublin: 10–210.

- STRIBRNY, K. 2003. *Funktionsanalyse barbarisierter, barbarischer Denare mittels numismatischer und metallurgischer Methoden. Zur Erforschung der sarmatische-germanischen Kontakte im 3. Jahrhundert n. Chr.*, Studien zu Fundmünzen der Antike 18, Mainz.
- THOMSEN, P.O. 1994. "Lundeborg – an early port of trade in south east Funen". In: P.O. NIELSEN, K. RANDSBORG and H. THRANE (eds.), *The Archaeology of Gudme and Lundeborg. Papers presented at a Conference at Svendborg, October 1991*, Arkæologiske studier 10, Copenhagen: 23–29.
- VAN HEESCH, J. 2008. "On the edge of the market economy: coins used in social transactions, as ornaments and as bullion in the Roman Empire". In: A. BURSCHE, R. CIOŁEK and R. WOLTERS (eds.), *Roman coins outside the Empire. Ways and Phases, Contexts and Functions. Proceedings of the ESF/SCH Exploratory Workshop Radziwiłł Palace, Nieborów (Poland), 3–6 September 2005*, Collection Moneta 82, Wetteren: 49–57.
- WIELOWIEJSKI, J. 1960. *Przemiany gospodarczo-społeczne u ludności południowej Polski w okresie późnolateńskiego i rzymskiego*, Materiały Starożytne 6, Warszawa.
- WIELOWIEJSKI, P. 1980. *Monety znajdowane na terenie osad i cmentarzysk kultury przeworskiej*, unpublished MA Thesis, University of Warsaw.
- WIGG-WOLF, D. 2008. "Coinage on the periphery". In: A. BURSCHE, R. CIOŁEK and R. WOLTERS (eds.), *Roman coins outside the Empire. Ways and Phases, Contexts and Functions. Proceedings of the ESF/SCH Exploratory Workshop Radziwiłł Palace, Nieborów (Poland), 3–6 September 2005*, Collection Moneta 82, Wetteren: 35–47.
- WIGG-WOLF, D. 2009. "Sites as context". In: H.-M. von KAENEL and F. KEMMERS (eds.), *Coins in Context I. New perspectives for the interpretation of coin finds. Colloquium Frankfurt a. M., October 25–27, 2007*, Studien zu Fundmünzen der Antike 23, Mainz: 109–125.
- ZAPOLSKA, A. 2013. "The Influx of Roman Coins to the West Balt Culture Environment", *Notae Numismaticae – Zapiski Numizmatyczne* 8: 105–123. DOI: 10.11588/diglit.31072.13
- ZAPOLSKA, A. 2014. "The Coins from the Goldsmith Hoard of Frombork Reconsidered", *Notae Numismaticae – Zapiski Numizmatyczne* 9: 95–116. DOI: 10.11588/diglit.31073.10

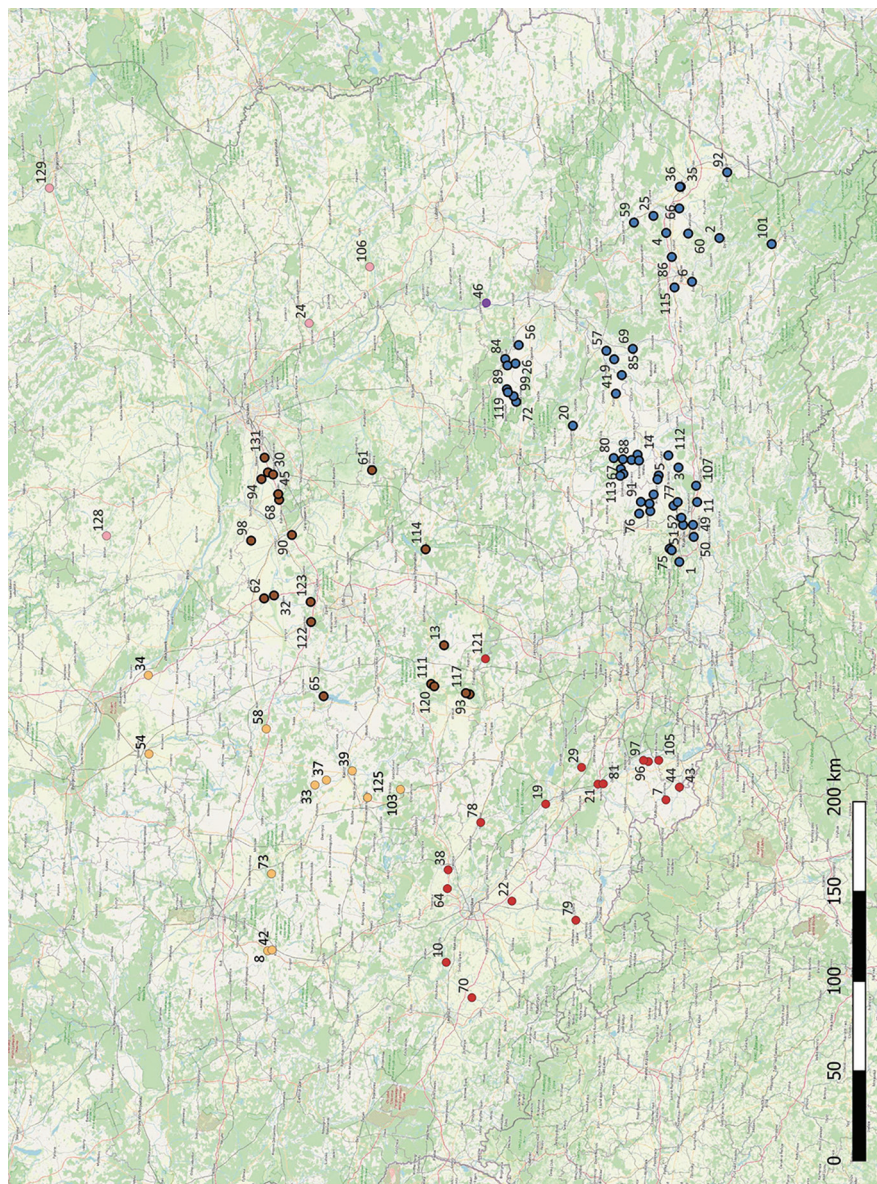
Author's address:

Andrzej Romanowski
National Museum in Warsaw
Al. Jerozolimskie 3, 00-495 Warsaw, Poland
aromanowski@mnw.art.pl

MAP 1	The territorial scope of the study and its internal regional division (made by A. Romanowski)
MAP 2	Scattering of Roman coin finds from Przeworsk culture settlements. Collective map (finds numbering according to ROMANOWSKI 2023)
PLATES 1–2	Chart 1 (a–b). Finds of Roman coins from settlements of the Przeworsk culture by issuers (prepared by A. Romanowski)
PLATE 3	Chart 2. Finds of Roman coins from settlements of the Przeworsk culture. Denomination structure (prepared by A. Romanowski) Chart 3. Finds of Roman coins from the settlements of the Przeworsk Culture. Contexts of finds – residential and production areas (prepared by A. Romanowski)
PLATE 4	Chart 4. Finds of Roman coins from the settlements of the Przeworsk Culture. Coin functions – traces of secondary use (prepared by A. Romanowski)
PLATE 5	Figs. 1a–1b. Examples of coins exposed to high temperature: a. Nieprowice, Złota commune (photo by P. Dulęba); b. Kalisz-Piwonice, Kalisz commune (photo by A. Kędzierski) Figs. 2a–2b. Examples of fragmented coins: a. Janków Drugi, Blizanów commune (photo by A. Kędzierski); b. Przemęczany, Radzienice commune (photo by P. Dulęba) Fig. 3. An example of fragmented coin: Regów, Baranów commune (photo by A. Romanowski) Figs. 4a–4c. Examples of coins with holes: a. Izdebnó Kościelne, Grodzisk Mazowiecki commune (photo by A. Romanowski); b–c. Nieprowice, Złota commune (photo by P. Dulęba) Fig. 5. An example of a coin with a cut surface (in the portrait): Zagórzycze II, Kazimierza Wielka commune (photo by J. Bodzek) Figs. 6a–6b. Examples of cast copies made from a copper-tin or tin-lead alloy: a. Jastrzębniki, Blizanów commune (photo by A. Kędzierski); b. Nieprowice, Złota commune (photo by P. Dulęba)



Map. 1. The territorial scope of the study and its internal regional division (made by A. Romanowski)



Map. 2. Scattering of Roman coin finds from Przeworsk culture settlements. Collective map (finds numbering according to ROMANOWSKI 2023)

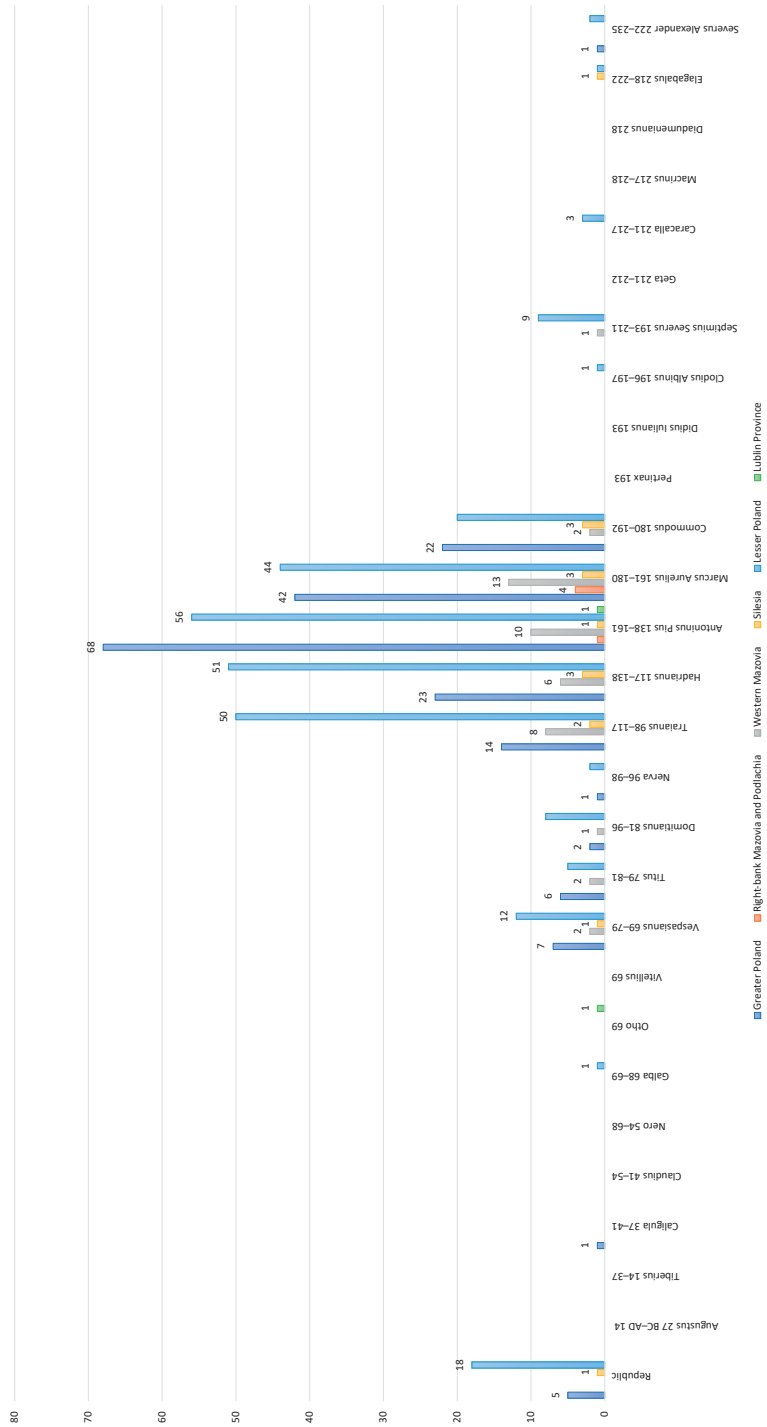


Chart 1a. Finds of Roman coins from settlements of the Przeworsk culture by issuers
(prepared by A. Romanowski)

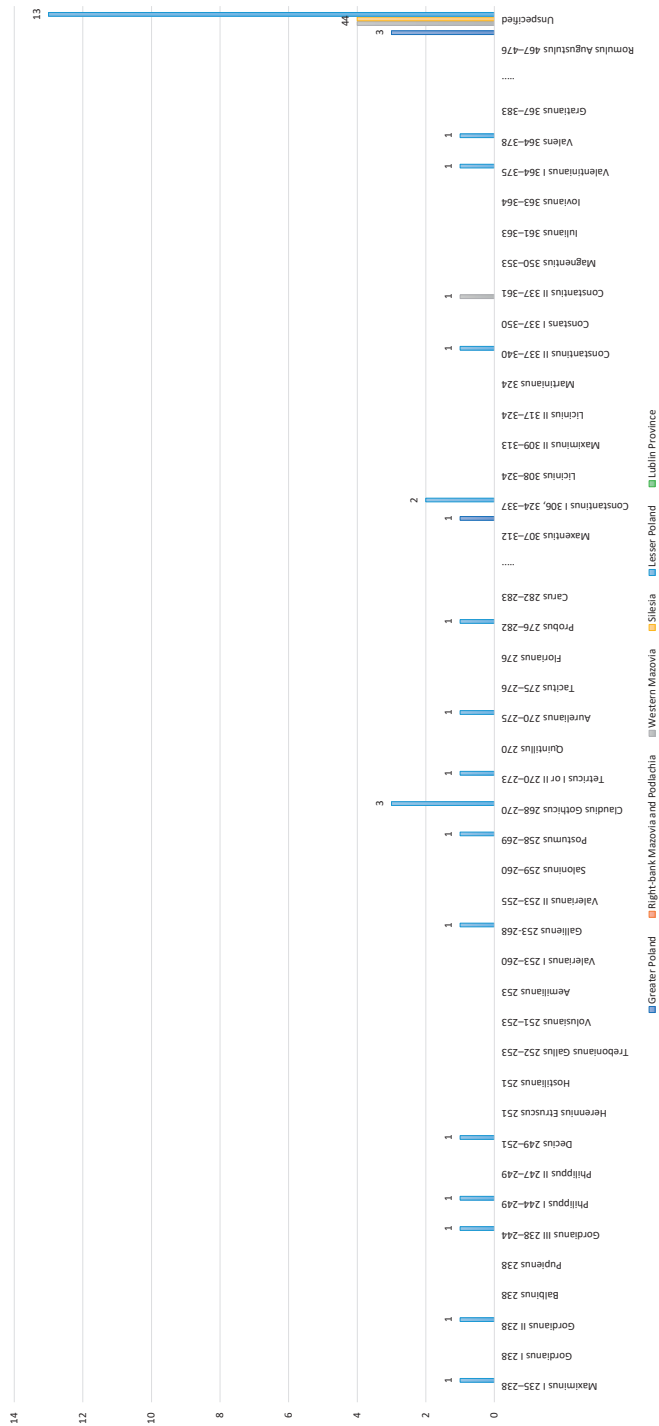


Chart 1b. Finds of Roman coins from settlements of the Przeworsk culture by issuers
(prepared by A. Romanowski)

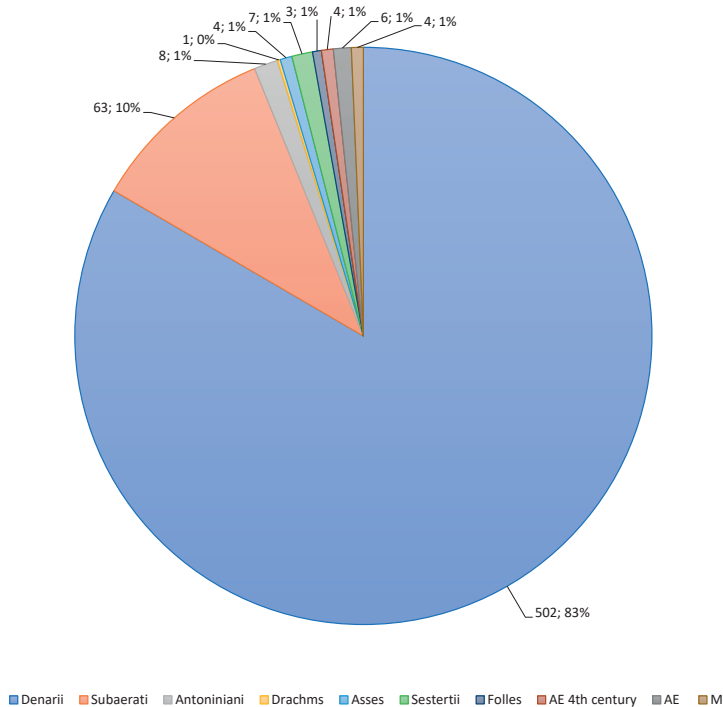


Chart 2. Finds of Roman coins from settlements of the Przeworsk culture. Denomination structure (prepared by A. Romanowski)

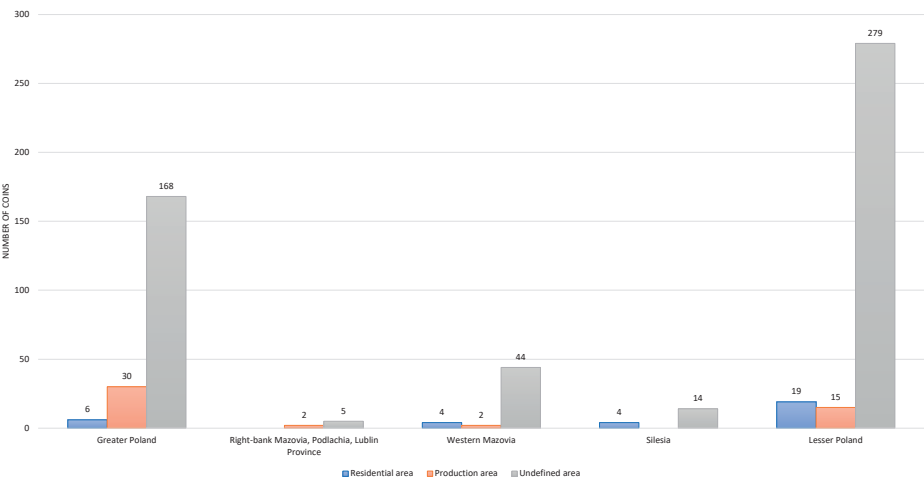


Chart 3. Finds of Roman coins from the settlements of the Przeworsk Culture. Contexts of finds – residential and production areas (prepared by A. Romanowski)

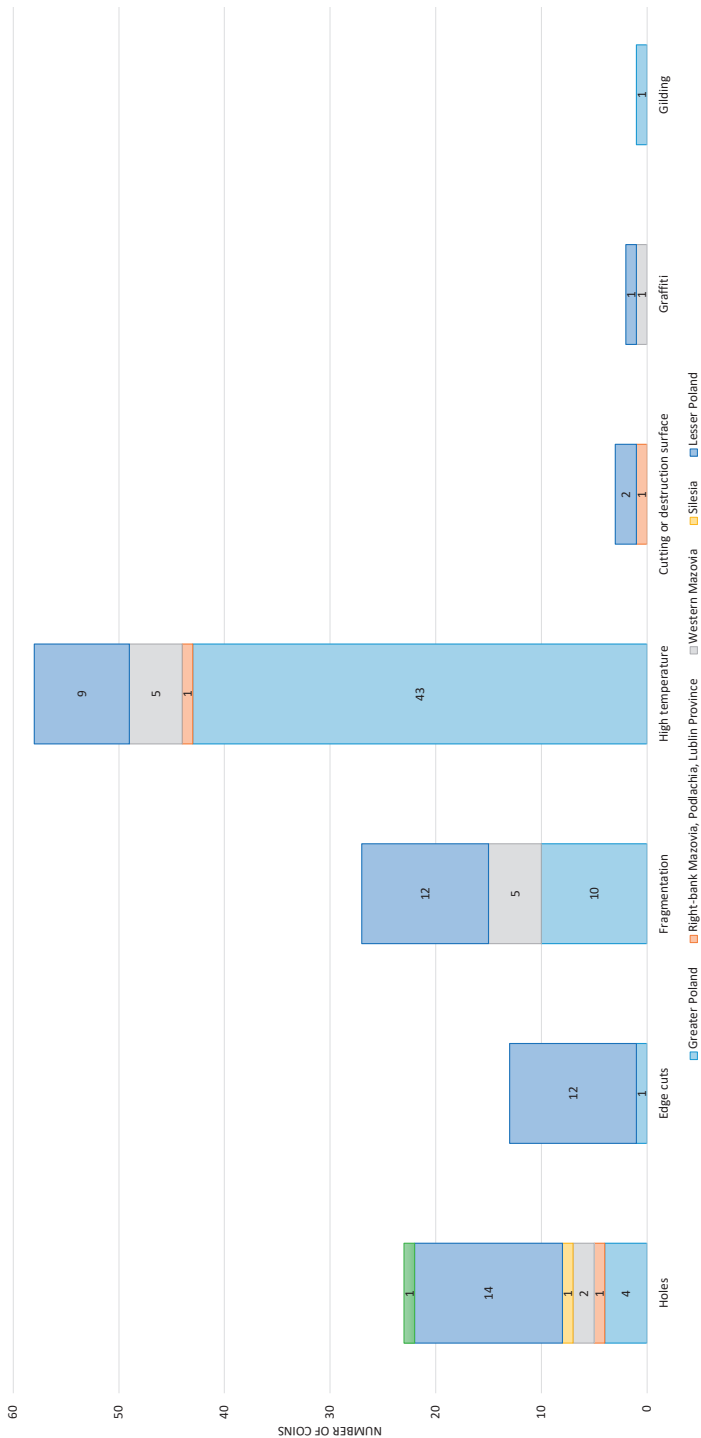
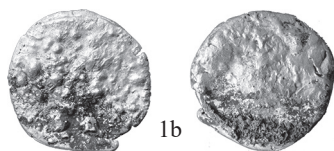


Chart 4. Finds of Roman coins from the settlements of the Przeworsk Culture. Coin functions – traces of secondary use (prepared by A. Romanowski)



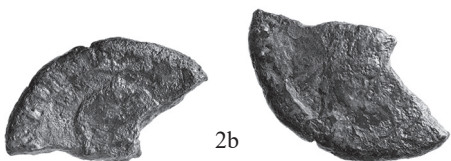
1a



1b



2a



2b



3



4a



4b



4c



5



6a



6b