

NOTAE NUMISMATICAE

ZAPISKI NUMIZMATYCZNE



Tom XX

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

Kraków 2025

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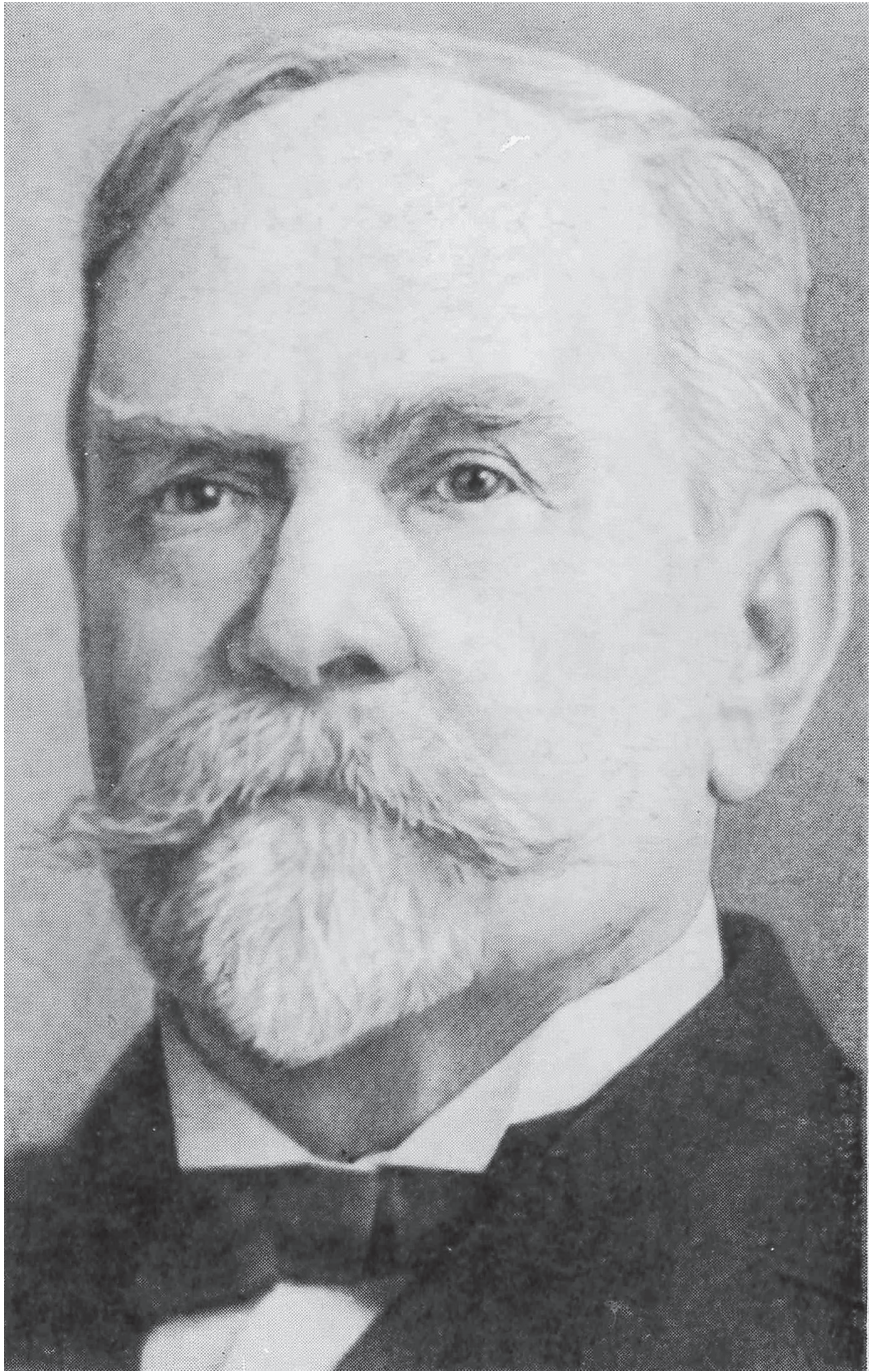
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Zygmunt Mineyko (1840–1925). Fot. Archiwum Muzeum Narodowego w Krakowie
Zygmunt Mineyko (1840–1925). Photo: Archives of the National Museum in Krakow

Szanowni Państwo,

oddajemy w Państwa ręce tom XX *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.

Sto lat temu 27 grudnia 1925 roku zmarł w Atenach Zygmunt Mineyko (1840–1925), człowiek o niezwykłym życiorysie, oddany Ojczyźnie patriota, weteran Powstania Styczniowego, emigrant, a jednocześnie filhellen i honorowy obywatel Grecji. Jego zasługi na polu walki z rosyjskim zaborcą, emigracyjna tułaczka i wkład w budowę Państwa Greckiego są dosyć dobrze znane, głównie dzięki spisany przez niego samego pamiętnikom przechowywanym w Bibliotece Jagiellońskiej w Krakowie, w części wydanych drukiem w 1971 roku pod tytułem *Z Tajgi pod Akropol*. Dzięki publikacjom polskich i greckich archeologów znane są również dokonania Mineyki na polu archeologii, a w szczególności jego udział w badaniach na terenie położonego w Epirze słynnego sanktuarium Zeusa w Dodonie.

Zygmunt Mineyko interesował się również numizmatyką i nie były to zainteresowania powierzchowne. Spod jego pióra wyszło – niestety nigdy nieopublikowane – dzieło poświęcone jak sam pisał „objawom numizmatyki”. Rękopis tej pracy przechowywany obecnie we Lwowie, w dawnych zbiorach Zakładu Narodowego im. Ossolińskich, pozwala uznać ją za bardzo nowoczesne i wyprzedzające swe czasy opracowanie. Zygmunt Mineyko jest również ściśle powiązany z historią zbiorów numizmatycznych Muzeum Narodowego w Krakowie. W latach 1924 i 1926 do zbiorów krakowskiego Muzeum Narodowego trafiło w dwóch transzach prawie sto antycznych monet podarowanych przez Stanisława Mineykę (1875–1924), syna Zygmunta. Choć formalnie ofiarodawcą był Stanisław najprawdopodobniej inspiratorem daru był jego ojciec, który z powodzeniem realizował ideę wzbogacania polskich instytucji naukowych i muzeów zespołami starożytnych monet. Dary takie zostały lub miały zostać przekazane Muzeum Narodowemu w Warszawie, Uniwersytetowi Wileńskiemu, Uniwersytetowi Jagiellońskiemu oraz jak wspomniano Muzeum Narodowemu w Krakowie. Niniejszy tom naszego czasopisma pragniemy dedykować pamięci Zygmunta i Stanisława Mineyków.

Redakcja

Dear Readers,

We are delighted to present you with volume 20 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.

One hundred years ago, on 27 December 1925, Zygmunt Mineyko (1840–1925) died in Athens. He was a man with an extraordinary life story, a devoted patriot, a veteran of the January Uprising, an emigrant, and at the same time a philhellene and honorary citizen of Greece. His achievements in the fight against the Russian invader, his wanderings as an emigrant, and his contribution to the building of the Greek state are quite well known, mainly thanks to his memoirs, stored in the Jagiellonian Library in Krakow, some of which were published in 1971 under the title *Z Tajgi pod Akropol* (From the Taiga to the Acropolis). Thanks to publications by Polish and Greek archaeologists, Mineyko's achievements in the field of archaeology are also well known, in particular his participation in research at the famous sanctuary of Zeus in Dodona, located in Epirus.

Zygmunt Mineyko was also interested in numismatics, and this interest was far from superficial. He wrote a work devoted to what he called “the manifestations of numismatics”, which, unfortunately, was never published. The manuscript of this work, currently stored in Lviv, in the former collections of the Ossoliński National Institute, allows us to consider it a very modern and ahead-of-its-time study. Zygmunt Mineyko is also closely associated with the history of the numismatic collections of the National Museum in Krakow. In 1924 and 1926, almost a hundred ancient coins donated by Stanisław Mineyko (1875–1924), Zygmunt's son, were added in two tranches to the collection of the National Museum in Krakow. Although Stanisław was formally the donor, it was most likely his father who inspired the donation, as he had successfully implemented the idea of enriching Polish scientific institutions and museums with collections of ancient coins. Such donations were or were to be donated to the National Museum in Warsaw, Vilnius University, the Jagiellonian University in Krakow, and, as mentioned, the National Museum in Krakow. We would like to dedicate this volume to the memory of Zygmunt and Stanisław Mineyko.

The Editors

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A New Specimen of the Krakow Type Stater¹

ABSTRACT: This article presents an analysis of a newly identified specimen of a Late Krakow type stater. It originates from the broadly defined vicinity of Krakow and is associated with the Late La Tène coinage of the Tyniec group. The Celtic coinage of Lesser Poland, which emerged outside the Boii's main settlement area, is an important research topic that sheds light on the production of coins within prehistoric communities. Newly discovered finds provide valuable data on the production, distribution and characteristics of the local coinage.

KEY WORDS: Celtic Coinage, Boian Coinage, Tyniec Group, Krakow type stater

ABSTRAKT: *Nowy egzemplarz statera typu krakowskiego*

Artykuł prezentuje analizę nowego egzemplarza statera późnego typu krakowskiego pochodzącego z szeroko pojmowanych okolic Krakowa, związanego z późnolateńskim mennictwem grupy tynieckiej. Małopolskie emisje mennictwa celtyckiego, które pojawiły się poza zwartym osadnictwem bojskim, stanowią istotne zagadnienie badawcze, pozwalające lepiej zrozumieć mechanizmy emisji monet w społecznościach pradziejowych. Nowe znaleziska dostarczają przy tym cennych danych o produkcji, dystrybucji i charakterze lokalnego mennictwa.

SŁOWA KLUCZOWE: mennictwo celtyckie, mennictwo bojskie, grupa tyniecka, stater typu krakowskiego

¹ The author would like to thank Dr Ewelina Miśta-Jakubowska and Ms Renata Czech-Błońska for carrying out the compositional analysis of the alloy of the published coin.

In recent years, there has been a noticeable increase in the number of coins associated with the Tyniec group's minting activity,² which is dated to the Late La Tène period. This includes not only the Kryspinów type of stater, but also the more numerous and better recognized Krakow type. The latest specimen, originating from a private collection, has been donated to the Numismatic Cabinet of the National Museum in Krakow. According to the information provided, the coin has been in a private collection since at least the 1950s. According to the typology established by Łukasz Bul,³ it represents the Late Krakow type. This specimen is an important addition to studies of Lesser Poland issues, primarily because it allows for advanced analysis – a rare opportunity in the case of the Krakow type, given that most known coins are held in private collections.

The Tyniec group is considered a cultural entity that combines elements of the La Tène and Przeworsk cultures, as well as, to a lesser extent, influences from the Púchov and Dacian cultures. The group's settlements were located in the Lesser Poland Upland and the western part of Podkarpacie, and date mainly to the latter part of the LT D phase. One of the Tyniec group's most significant activities was minting local coins belonging to the Boii monetary system. These coins were struck according to the Greek weight standard. The basic monetary units were the gold stater and its fractional denominations, as well as the silver obol. The Boii coinage system was bimetallic; they did not produce bronze coins, as was often the case among the tribes of western Europe. Boian coinage is generally divided into two periods: the pre-oppidum phase corresponding to LT C and the oppidum phase corresponding to LT D, with territorial differences also evident. According to Paulsen, the Boii minting zone covered a vast area extending from Bohemia and Moravia to south-western Slovakia and the Danubian part of Austria.⁴ It is now widely recognized that this zone also encompassed Polish territory. The Boian coinage is internally diverse and should be regarded as a collective term for related monetary systems.⁵ A typical issue for the oppidum period – to which the Lesser Poland coinage also belongs – consists of the so-called “mussel staters”, characterised by a convex obverse often featuring a stylised hand, and a distinctly concave reverse with an elongated, crescent-shaped ridge at the bottom.

The coins of the Tyniec group predominantly represent full staters, which can be divided into two main types: the Krakow type and the Kryspinów type. Production was clearly concentrated on the Krakow type, of which over 40 specimens are

² BOCHNAK 2024; BULAS and OKOŃSKA-BULAS 2024; PAZOWSKA 2024b.

³ BUL 2022.

⁴ PAULSEN 1933.

⁵ MILITKÝ 2019.

known.⁶ By contrast, the Kryspinów type is represented by only five coins. An additional 1/8 fraction has also been identified, in the form of a single type – the Pelczyska – with around a dozen examples known. These coins are not typologically related to the aforementioned staters. A crucial difference between the Lesser Poland coinage and that of the compact Boii settlement zone is the absence of silver coinage. Evidence of the minting activity of the Tyniec group comes not only from the numismatic finds themselves. Another extremely important category of artefacts for analysis consists of the clay molds used for producing coin blanks. Such molds have been discovered at settlement sites in Krakow-Mogiła, Zakrzów and Krakow-Pleszów.⁷ The presence of casting molds at these three Tyniec group sites may be indicative of a significant scale of coin production. Karl Castelin's research⁸ was of fundamental importance to the study of Lesser Poland coinage. He was the first to introduce the term "Krakow Type" and establish its classification. The number of known specimens increased significantly thanks to the publications of Marcin Rudnicki⁹ and Łukasz Bul,¹⁰ which were devoted entirely to Krakow type staters. Each author presented their own detailed typology.

Rudnicki's typology was based on 17 specimens known at the time. The author distinguished two variants of the Krakow type based on their iconography: an earlier one, referred to as the prototypical form (I), and a later one, representing the fully developed variant of the type (II).

In his typology, Bul divided the 29 specimens known to him into three types – Early, Classic, and Late – corresponding to successive stages in the development of iconography (Fig. 1). Following Rudnicki's reasoning, this researcher questioned the validity of maintaining a single type designation for such a heterogeneous group of coins as the Krakow type.

Initially, French scholars interpreted the iconography of the Krakow type as representing a ship. This view was also supported by the erroneous attribution of the stater to the coinage of the Menapii tribe.¹¹ Castelin subsequently regarded the coins as imitations of Boian mussel staters, though with different design elements, having correctly identified their provenance.¹² The new, recurring iconographic pattern most likely emerged as a result of die defects that were deliberately replicated by

⁶ Data collected from the author's archive and from information kindly provided by Mr Łukasz Bul, to whom I extend my sincere thanks.

⁷ RUDNICKI 2012: 46.

⁸ CASTELIN 1970: 91–96; IDEM 1976: 260–267.

⁹ RUDNICKI 2012.

¹⁰ BUL 2022.

¹¹ MURET and CHABOUILLET 1889: 219.

¹² CASTELIN 1976: 262–263.

the mint workers. This theory was first proposed by Castelin¹³ and later accepted by Rudnicki.¹⁴

The new specimen of Krakow type stater (Fig. 2) is attributed to the Late type, according to Bul’s typology¹⁵ and group IIC/2 in Rudnicki’s typology.¹⁶ Bul’s typology has been adopted for the present study, as Rudnicki’s classification system – which is based mainly on detailed iconographic analysis – may requires refinement in light of the significant increase in newly discovered specimens. Currently, 19 published coins are assigned to the Late Krakow type.

The described specimen weighs 5.21 g and measures 17.5 mm in diameter. The weight range for Late type specimens is between 6.3 g and 4.06 g.¹⁷ Metallurgical analysis (Tab. 1) revealed that the alloy contains a high proportion of silver – around 77% – with gold accounting for approximately 17% and copper for around 4.5%. This silver content is consistent with previously recorded measurements for the Late Krakow type.¹⁸ While the coin’s iconography does not differ significantly from that of other Late type specimens, this group is not entirely homogeneous.

	Ag	Au	Cu	Pb	Zn	Bi	Fe
Obverse	77.3 ±0.1	16.08 ±0.03	4.05 ±0.01	0.6 ±0.005	0.3 ±0.003	0.06 ±0.002	0.05 ±0.002
Reverse	76.5 ±0.09	17.05 ±0.03	4.03 ±0.01	0.8 ±0.006	0.3 ±0.004	0.06 ±0.002	0.06 ±0.002

Table 1. XRF measurement results for the Krakow stater from the National Museum in Krakow: XRF composition $\pm 1\sigma$ (wt.%). The measurements were carried out at the Laboratory of Archaeometallurgy and Conservation of Archaeological Artefacts, Institute of Archaeology, Jagiellonian University

The obverse of the coin is distinctly convex. This bulge flattens towards the bottom of the coin, where the outline of a “hand” motif can be seen – a feature also found on other mussel staters. This consists of a rounded prominence from which lines extend upwards and often terminate in dots. This motif is clearly visible on Classic Krakow type staters (Figs. 1b, 2), suggesting that the same obverse dies were reused for the type classified as “Late”, when they were already significantly worn.

The reverse of the coin appears to be a simplified version of designs found on Classic Krakow type. It is possible that the earlier type’s dies were reworked to

¹³ *Ibidem*.

¹⁴ RUDNICKI 2012: 20–21.

¹⁵ BUL 2022: 53–57.

¹⁶ RUDNICKI 2012: 27–37.

¹⁷ BUL 2022: Cat. 3.1, 3.13; PAZOWSKA 2024a.

¹⁸ BOCHNAK 2020: 38.

create a clearer image. A crescent-shaped ridge runs from the bottom of the reverse almost to the center of the coin. The lower edge is separated from this ridge by a distinct groove, a feature that also appears on other Late type specimens. This is most likely a technical feature related to the minting process rather than having iconographic significance. In the center of the reverse, there is a sickle-like ridge extending from the upper edge of the crescent and oriented to the right. A thin rib runs from its end to the right arm of the crescent. Between these three elements are two vertically aligned dots. The left edge of the crescent appears to end in a dot, alongside which runs a row of smaller dots – a faint motif also visible on Classic Krakow type specimens. The upper part of the coin is covered in ribs that radiate towards the center and are only visible near the edge. This is probably due to die surface wear or incomplete striking.¹⁹ On the right-hand side of the ring of rays, there are indistinct ridges and ribs – features also observed in the Classic Krakow type. One rib extends from the edge of the coin and connects with another at right angles, forming a shape reminiscent of the letter “T”. The lower ridge is poorly defined and pointed.

The specimen also exhibits several unintentional features. One of these is surface damage in the form of a cut running almost across the entire diameter of the coin. This mark is most likely of modern origin and is probably the result of an attempt to extract the coin from the ground.

Another distinctive feature of the specimen in question is the damage to its edges, a characteristic frequently encountered in Celtic gold coinage. The deepest indentation is visible on the right-hand side of the crescent-shaped termination on the reverse. Three much smaller notches can be observed at the top and along the right edge of the coin when viewed from the reverse. Examination of the edges of other Krakow type staters suggests that such damage is not uncommon; however, losses of this magnitude have not been recorded before.

To date, the alloy composition has been analyzed for five Krakow type specimens, only one of which has been classified as belonging to the Late type.²⁰ The coin is one of the lowest in weight in the assemblage at 5.14 g. Elemental analysis revealed a slightly different composition to the coin presented here with the presence of 0.7% gold, 80.7% silver and 11.5% copper. While the silver content is similar in the two Late type specimens, there is a more significant difference in the proportions of gold and copper. Debasement processes can clearly be traced in the Krakow issues, as reflected by the increasing proportion of silver at the expense of gold. The highest

¹⁹ See KIEFERLING 2025, in the current issue of *Notae Numismaticae – Zapiski Numizmatyczne*.

²⁰ BOCHNAK 2020.

recorded gold content (70.03%²¹) is found in an Early type specimen. Interestingly, however, the copper content of these alloys appears unaffected by these processes. Similar levels of copper are observed in specimens with the lowest and highest gold indices – 11.5% and 10%, respectively. The lowest proportion of copper is found in a specimen of the Classic Krakow type, which has a composition of 61.2% gold, 35.5% silver and 2.9% copper.²²

Analyzing the described stater made it possible to identify four other Late Krakow type staters that were most likely struck using the same reverse die.²³ Certain iconographic elements appear to have been reworked during the die's period of use, which complicates precise identification. There is considerable variation in the weight of coins struck from this particular die – the heaviest specimen weighs 5.91 g, while the lightest weighs 5.12 g. This may indicate either a prolonged period of die use or rapid debasement. Alternatively, it may reflect instability in the weight of the coinage itself.

Both iconographic analysis and weight studies play a crucial role in determining the chronology of the Krakow type staters. As Castelin noted, the mass of staters decreases over time, resulting from the progressive reduction in the gold content of the alloy. According to weight standards, the earliest Krakow type issues date to the start of Minting Period C, as defined by Castelin. This corresponds to the first third of the 1st century BC.²⁴

According to Rudnicki's considerations on dating, coins representing the Classic and Late Krakow type should be associated with Minting Period D and E. At that time, minting activity was also taking place at the Bratislava oppidum, which continued to operate until the 40s of the 1st century BC. In this period, staters rarely exceeded a weight of 6.5 g. The subsequent Minting Period E, as distinguished by that scholar, is thought to have lasted until the beginning of the Roman period.²⁵

A shorter chronology for the Krakow type staters has recently been proposed by Bul,²⁶ based on an iconographic analysis identifying a denarius of Sextus Pompey as the secondary prototype for this group of coins. This analogy enables the identification of a *terminus post quem* for the Early Krakow type at 42 BC. These conclusions, however, cannot be accepted, as the coins in question clearly belong to the tradition of Boii mussel staters, and the proposed analogy with Roman denarii finds no support either in numismatic analysis or in the archaeological record.

²¹ ČAMBAL and BUDAJ 2016: 13, Cat. 1.

²² BUL 2022: Cat. 2.2.

²³ *Ibidem*: 58, Cat. 3.4, 3.5, 3.6, 3.7.

²⁴ RUDNICKI 2012: 39–40.

²⁵ *Ibidem*: 39.

²⁶ BUL 2022: 53.

Two specimens of the Krakow type have been found in closed contexts, specifically in hoards. However, hoards represent a specific type of context, and the time of their deposition does not necessarily coincide with the period during which the coins they contain were minted. The deposits originate from Slovakia: Folkušová (Martin District)²⁷ and Straník Mountain (Žilina District).²⁸ Based on the Veľký Bysterec type coins found in them, they can be broadly dated from the Late La Tène period to the beginning of the Roman period.²⁹ The Veľký Bysterec type is associated with the Púchov culture. Of the coins found in these hoards, one specimen is an Early Krakow type and one is a Late Krakow type. Another noteworthy find is the hoard of Eraviscan coins from Czechy (Krakow County),³⁰ near which a Late Krakow type stater was also found. Eraviscan coins and their imitations are likewise associated with the Púchov culture.³¹

The majority of finds of the Krakow type of stater come from Polish territory. The find spot is either known or approximately indicated for 19 specimens. These specimens are clearly concentrated along the upper course of the Vistula River. The most numerous group, the Late type, exhibits the widest geographical distribution. This may reflect an intensification of contact networks and population mobility. Two Late type coins are known from the Inowrocław District in Kuyavia,³² from which most Kuyavian issues originate.³³ Krakow type staters have also been found outside of Polish territory, including in Ukraine, where five specimens (all of the Late type)³⁴ have reportedly been discovered, and in Slovakia, where the aforementioned finds originated.³⁵ Individual coins have also been reported in Tuklaty (Kolín District, Czechia),³⁶ near Zagreb (Croatia)³⁷ and in the Netherlands (exact location unknown).³⁸ The finds from geographically distant areas like Croatia and the Netherlands were published at the turn of the 19th and 20th centuries. The reliability of their recorded provenance raises significant doubts.³⁹

Each newly acquired specimen of a coin minted on Polish territory constitutes an invaluable source of knowledge about the La Tène societies that once inhabited these

²⁷ PIETA 2014: 144.

²⁸ ČAMBAL and BUDAJ 2016.

²⁹ MILITKÝ 2023: 76.

³⁰ DULĘBA and WYSOCKI 2017.

³¹ *Ibidem*: 56.

³² BUL 2022: Cat. 3.13, 3.15.

³³ PAZOWSKA 2026: Fig. 2.

³⁴ BUL 2022: Cat. 3.1, 3.7, 3.11, 3.12.

³⁵ PIETA 2014: Fig. 14.7; ČAMBAL and BUDAJ 2016: Cat. 1.

³⁶ RUDNICKI 2012: Cat. 15.

³⁷ *Ibidem*: Cat. 1.

³⁸ ROYMANS and VAN DER SANDEN 1980: 184, 246, Tab. 11, no. XVIII–I.

³⁹ RUDNICKI 2012: Cat. 1, 12.

lands. Individual finds significantly contribute to our understanding of economic processes reflected in coin weights and alloy composition. Equally important is determining the scale of minting activity, which is best illustrated through die studies. Every newly identified die indicates the existence of dozens of other coins that were struck using it, enabling us to estimate the extent of contemporary coin production more accurately.

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Fig. 1: a. Early Krakow type; b. Classic Krakow type; c. Late Krakow type, according to Bul 2022. Photographs from the Archive of P. Adamkiewicz (PAZOWSKA 2024a)



Fig. 2. Krakow stater from the collection of the National Museum in Krakow, Inv. no. MNK-VII-A-11707. Photo: National Museum in Krakow