THE TRANSCARPATHIAN FINDS OF GETO-DACIAN COINS

The problem of the earliest coins found in Poland and its immediate neighbourhood has for long been the subject of lively discussions. These coins date back to the last centuries B.C. and therefore their presence in archaeological context is an important addition to available material sources used in the study of socio-economic development of the societies that lived in the territory of Poland and in adjoining countries north of the Carpathians in the La Tène period.

This period represents an important stage in the cultural development of Poland. Two interrelated cultures, the East-Pomeranian and the Bell Grave culture, which in the Early and Middle La Tène period extended over considerable part of Poland and the Western Ukraine, were in the Middle La Tène replaced by the Przeworsk and Oksywic cultures. The latter was strongly influenced by the Celtic culture, and in its southern periphery, notably in Little Poland, it came into direct contact with the Celts. Isolated traces of Celtic settlement are also recorded in Lower Silesia and Kuiavia. The progress in the development of socio-economic relations, observed at that time in several cultures of Central Europe, took place in this area, too, and one of its manifestations was the introduction of monetary money.

It was, however, much earlier, in the Bronze Age, that metal artifacts were hoarded, presumably serving as pre-monetary money. This is attested by bronze hoards which in the course of time began to disappear (iron hoards being very occasional) (Tabaczyński 1958, pp. 33–35). This disappearance of the hoards consisting of metal artifacts at the turn of the Hallstatt and La Tène periods was accompanied by a new phenomenon, namely the appearance of the first coins of Greek origin.

The finds of Greek coins (mainly single) recently listed and verified by S. Kubiak (1978) are fairly numerous. Among the coins that were struck and probably imported in the last centuries B.C., the most frequent are the Ptolemaic issues (6 finds: 18 bronzes and 2 tetradrachms), followed
by the coins of Alexander the Great (4 finds: 3 bronzes, a drachm, a tetradrachm), by the Syracusan coins (end of the 3rd to the 2nd century B.C.—4 finds: 3 bronzes and a tetradrachm), and finally by the Olbian coins (3 finds: 3 bronzes). Only 6 finds can be assigned to the Late La Tène, most coins having been struck at an earlier date.

Other finds worthy of note include a perforated Larissa drachm (5.444 g) of 395–344 B.C., found in a grave in the environs of Lvov (Mikołajczyk 1981)—a tetradrachm of Alexander the Great from Galich, and a gold stater of this king of an unidentified mint, found in 1965 at Litovec, formerly in Vladimir district (Puczkowski 1969, p. 247).

In the Late La Tène period, new sorts of coins, derived, this being still more important, from quite different sources, made their appearance in Poland. For the most part they were Celtic pieces and Roman Republican coins. Of the several dozen Celtic coins, mostly gold staters and their fractions (1/3, 1/8, 1/24), recorded in this country, the earliest examples were struck in Bohemia about the middle of the 2nd century B.C., and may have appeared in Poland by the end of the century. Other coins came from “Boian” mints operating in Moravia in the first half of the 1st century B.C., and the latest pieces from mints hypothetically located in Silesia (Głubczyce Upland) and in the environs of Cracow [Woźniak 1967], where earlier Celtic issues were imitated.

Only few Celtic coins of silver and bronze could have been struck in the more distant mints: in Bavaria and Carinthia (Karlstein type), in Germany (vindelic type) and in the Iberian Peninsula (cf. Morawiecki 1980).


The three different (though interrelated) categories of the earliest coins recorded in Poland and the Western Ukraine can now be supplemented by a fourth group composed of Geto-Dacian coins.

The enrichment of the numismatic sources both in qualitative and quantitative respect has been made possible thanks to two factors. The first is the comprehensive study of Dacian coinage in the 3rd–1st centuries B.C. by C. Preda, whose work has shed new light on the origin, chronology, cultural and ethnic background, output, and circulation of the Geto–Dacian coins, first mentioned in Polish literature by I. Winkler (1966) and J. Gromnicki (1973). The problem of coins struck in pre-Roman Dacia has moreover a wider significance since these coins are also recorded in Yugoslavia, Bulgaria, Hungary, the Transcarpathian Ukraine, and Slovakia. The other factor is provided by the finds, recently revealed, of Celtic and Geto-Dacian coins from Little Poland and the Western Ukraine, which found their way to the collections of the Archaeological and Ethnographical Museum in Łódź. The range of the circulation of the coins minted in Dacia has thus been
Plate I. Geto-Dacian coins found north of the Carpathians. 1: Cracow-environs, 2: Przemyśl-Zasanie, 3—5: Dubno-environs, 6: Volhynia—unknown locality, 7: Luck-environs. (Drawn by M. Cyrkowa)
widened beyond the Carpathians (if we disregard the Moldavian finds made so far).

1. Cracow—environs

A concave coin of poor silver found at unknown time (before 1949) and in undetermined circumstances.

Obv.: Within pearl border a strongly barbarized head of Zeus or Heracles to right. Eye, brow, nose, mouth and hair (similar to a horse’s mane) schematically and distinctly rendered.

Rv.: Within pearl border a horse to right, with a rider on its back, his figure reduced to knee-bent legs and short trunk. Horse’s muzzle represented by dashes forming a rectangle; a dash beneath the horse’s belly. Shallow die.

Tetradracm. Weight 10.35 g. Diameter 30–32 mm.
Type: Rădulești-Hunedoara (Transylvania, Rataenci?)
Date: second half of the 2nd–early 1st cent. B.C.
Inv. No. MAEŁ-N-A 2138
Pl. I: 1.

Lit.: Jażdżewski 1951; p. 123, pl. 40; Gupieniec 1954, p. 29, pl. IV: 6; Woźniak 1967, p. 225, no. 118, pl. II: 11 (the coin is dated here after Pink to the second quarter of the 1st cent. B.C.); Mikolajczyk 1980.

2. Przemysł—Zasanie

In 1980? during building operations at Krasiński Street No. 7, an undetermined number of coins came to light, including a Geto-Dacian coin.

Obv.: Barbarized head to right.

Rv.: Barbarized horse to left, with three dots instead of rider. Shallow die.

Didrachm. Weight 6.75 g. Diameter 23 mm.
Type: Vîrtej-București (central Muntenia, Popești ? Piejigii ?)
Date: 110–early 1st century B.C.
Inv. No. MAEŁ-N-A 11369.
Pl. I: 2.

Lit.: Gupieniec 1977, pp. 1–2; Mikolajczyk 1980.

3. Dubno—environs, U.S.S.R. (Volhynia)

Three concave coins of poor silver found by a farmer in the 1920s.

Obv.: Strongly barbarized head of Zeus or Heracles to right. Hair shaped as a tear-drop, tied with a band, surrounded with dots, with laurel leaves above; before the nose, an indeterminate mark; before the mouth, a rhomb. All within pearl border. Shallow die.

Rv.: Horse with a rider represented by a pearly wreath to left. All within pearl border. Shallow die.

Tetradracms (3 pieces). Respective weights: 11.62; 11.52; 10.50 g.
Diameter 32–33 mm.
Type: Toc-Cherelus (Transylvania, Rataenci ?)
Date: second half of the 2nd–early 1st cent. B.C.
Inv. No. MAEŁ-N-A 11358–11360.
Pl. I: 3–5.
Lit.: Mikolajczyk 1978, p. 240, fig. 1; 1980.
4. Volhynia—unknown locality.
   A silver coin found in unknown circumstances and at unknown time
   (probably before World War II).
   Obv.: Head of Alexander (Heracles) clad in lion’s skin to right.
   Rv.: Zeus enthroned to left, holding a bird? in outstretched hand.
   No inscriptions.
Tetradrachm. Weight 13.65 g. Diameter 25 mm.
Type: mixed imitation of Philip II—Alexander the Great (Walachia ?)
Date: end of the 3rd–end of the 2nd cent. B.C.
Inv. No. MAEŁ-N-A 11370.
Lit.: Gupieniec 1977, p. 3; Mikolajczyk 1980.
5. Luck—environs.
   A silver coin with a trace of deep incision, found at an unknown
   time (presumably in the inter-war period) and in undetermined circum-
   stances.
   Obv.: Head of Zeus to right.
   Rv.: Horseman to left with traces of inscription nearby.
Tetradrachm. Weight 12.10 g. Diameter 23 mm.
Type: Huși-Vovriști (central Moldavia, Celts; Bastarnae ?).
Date: end of the 3rd–mid-2nd century B.C.
Inv. No. MAEŁ-A-11450.
Pl. I: 7.
   This list can be supplemented by previously recorded finds which only
   now have acquired a new significance (Fig. 1).
   A concave silver coin found at a mill sluice-gate before 1959.
   Obv.: Head of Zeus.
   Rv.: Stylized horseman holding a palm-branch.
Tetradrachm. Weight 12.41 g.
Type: Crișeni-Berchiș (Transylvania, Celts, Taurisci ?)
Date: second half of the 3rd–1st half of the 2nd cent. B.C. Private
   collection of the ex-director of the Museum at Suwałki (non vidi),
   Antoni Patla, then sold by "Desa" shop in Warsaw (information provided by
   Z. Filipowicz, M. A., director of the Museum at Suwałki).
Lit.: Kubiaik 1959, p. 97.
   A silver coin found in the 19th century.
Fig. 1. Northern finds of Geto-Dacian coins. 1: Cracow-environs, 2: Przemyśl-Zasanie, 3: Dubno-environs, 4: Volhynia — unknown locality, 5: Luck-environs, 6: Krzywółka, province of Suwałki, 7: Działoszyn, province of Zielona Góra, 8: Medyka, province of Przemyśl, 9: Lipovce, region of Lvov, 10: Skomorochy, region of Lvov, 11: Lipovnica, region of Ivano-Frankovsk, 12—14: Southern Poland. (Drawn by M. Cyrkowa)

Obv.: Head of Zeus to right.
Rv.: Horseman to left; from the rider’s cap a long S-shaped veil hangs down. Before horse’s muzzle, an undetermined mark.
Tetradrachm. Weight ? (this type averaged about 14 g in weight).
Type: Crişeni-Berciaş—phase a (Transylvania, Celts, Taurisci ?).
Date: second half of the 3rd—1st half of the 2nd cent. B.C.
Pl. II: 1.

"a silver tetradrachm [...] imitating coins of Philip II [...] with characteristic incisions on the reverse, represented by two intercrossing straight lines [...]" found in the second half of the 19th century.

Obv.: Head of Zeus to right.
Rv.: Horseman to right; beneath the horse’s front leg 0, above the rider, inscription.
Drachm ? Weight ? (70 to 75 per cent of tetradrachms of this type weigh 13—14 g, the remaining only 11—12 g). Diameter ?
Type: Huşi-Vovrişti (central Moldavia, Celts, Bastarnae ?).
Date: end the 3rd—mid-2nd cent. B.C.
Pl. II: 2.
Plate II. Geto-Dacian coins found north of the Carpathians. 1: Działoszyn, province of Jelenia Góra, 2: Medyka, province of Przemyśl (after a photograph in the paper by M. Aleksiewicz), 3: Lipovce, region of Lvov (after Fiala), 4–7: Southern Poland? (after Piotrowicz). (Drawn by M. Cyrkowa)
Private collection of Mr Krywiak (*non vidi*).
Lit.: Aleksiewicz 1958, p. 13, pl. X: 1; Žaki 1961, p. 207, pl. IV: 6; Woźniak 1967, p. 226, no. 15, pl. II: 10—the drawing of the coin to scale 1:1 shown there excludes a tetradrachm and suggests a drachm (of Crişeni type?).

9. Lipovce, formerly district of Przemyślany (near Złoczów), region of Lvov.

A hoard of some 20 coins was discovered in 1873, one fourth of which found their way to the collection of the duke E. Windisch-Grätz in Vienna.

a. Obv.: Head of Zeus to right within pearl border.

Rv.: Horseman to right; above, inscription VMII, beneath horse, a mark M. Traces of incision.

Tetradrachm. Weight 14.10 g. Diameter 26 mm.
Type: Huși-Voivriestî (central Moldavia, Celts, Bastarnae?).
Date: end of the 3rd—mid-2nd cent. B.C.

Pl. II: 3.

b. Obv.: as above.

Rv.: Horseman to left; above, traces of inscription.

Traces of incisions.

Tetradrachm. Weight 13.80 g. Diameter 25 mm.
Type and date as above.

c. Obv.: as above.

Rv.: Horseman with right hand up; beneath horse ΠV. Traces of incisions.

Tetradrachm. Weight 13.20 g. Diameter 22 mm.
Type and date as above.

d. Obv.: Within line border laurelled head of Zeus to right.

Rv.: Horseman to right; above, inscription VMX. Traces of incisions.

Tetradrachm. Weight 11.30 g. Diameter 20 mm.
Type and data as above.

e. Obv.: Head of Zeus to right, executed in a better and more plastic style than those mentioned above.

Rv.: Horseman to left; above inscription ΦΙΑ. Traces of incisions.

Tetradrachm. Weight 12.90 g. Diameter 23 mm.
Type and date as above.

f. Obv.: Laurelled head of Zeus to right.

Rv.: Horseman to right, holding a palm-branch; above, partly deformed inscription + ΙΑΙΠΠΠΙΔΑΥ. No traces of incisions.

Imitation of silver stater of Philip II.
Type: ?
Date: end of the 3rd—mid-2nd century B.C.
Lit.: Fiala 1900, pp. 199—200, nos. 2797—2801, pl. V: 2797 (coins a—e);
Piotrowicz 1932, p. 419; Much 1889, pl. 41, p. 28 (coin f ?); Forrer 1908, p. 171; Pink 1939, p. 36; Preda 1973, p. 122, No. 44.

10. Skomorochy, region of Lvov.

A gold and a silver coin found before 1850. The latter imitated stater of Philip II with a horseman on the reverse. Details of descriptions are missing.


Localization or finds uncertain.

11. Lipovnica, region of Ivano-Frankovsk.

(this may be the deformed name of Lipovce).

“Imitation of tetradrachm of Philip II.”


12. Cracow ? southern Poland ?

Two tetradrachms were found in unknown circumstances.

Tetradrachm. Weight 13.2 g.

Type: Sighet (Transylvania, Celts, Taurisci ?).

Date: second half of the 3rd—first half of the 1st cent. B.C.

Lit.: Pink 1939; p. 84; Winkler 1971, p. 99; Woźniak 1978, p. 104, questions the localization of this find.

13. Southern Poland ?

a. Obv.: Laurelled head of Zeus to right.

Rv.: Horseman to right, holding a palm-branch; above, inscription +IAII-ПОY, at the end, monogram Α.

Tetradrachm. Weight 13.80 g.

Type: early series of imitations of tetradrachms of Philip II, group A (cf. Preda 1975, p. 35, pl. 3).

Pl. II: 4.

b. Obv.: Laurelled head of Zeus to right.

Rv.: Horseman to right, holding a palm-branch; above, inscription ΥΠΠ-ΙΥ, between horse’s legs monogram Ι.

Tetradrachm. Weight 14.40 g.

Type: early series of imitations of tetradrachms of Philip II, group B (cf. Preda 1975, pl. 4).

Pl. II: 5.

Lit.: Piotrowicz 1932—1933; p. 421, fig. 3a—c. Collections of the National Museum, Cracow.

c. Obv.: Laurelled head of Zeus to right.

Rv.: Horseman to right; above, illegible marks.
Tetradrachm. Weight 11.30 g.
Type: Huși-Vovriști (?) (central Moldavia, Celts, Bastarnae ?)
Date: second half of the 3rd—first half of the 2nd cent. B.C.
Pl. II: 6.
14. Southern Poland?
  Obv.: Head of Zeus to right.
  Obv.: Horseman to left. From the rider’s cap a long S-shaped veil hangs down.
Tetradrachm. Weight 14.50 g.
Type: Crișeni-Berchiș (Transylvania, Taurisci ?).
Date: second half of the 3rd—first half of the 2nd cent. B.C.
Pl. II: 7.
Lit.: Piotrowicz 1932—1933: p. 423, fig. 4c. Collections of the Museum of Art of the Jagiellonian University.

The above mentioned finds, usually of single coins, include pieces struck in both phases of the Geto-Dacian coinage. The major section of these coins are tetradrachms of the 1st phase (250—150 B.C.) of the Huși-Vovriști type (Medyka, environs of Luck, Lipovce), then of the Crișeni-Berchiș type (Krzywólka, Dzialoszyn) and finally of the Sighet type (if the localization of the Cracow find is a correct one). The first type is associated with the Bastarnae in Moldavia and the other two with the Celtic Taurisci in northern Transylvania (Fig. 2). In view of the direct and major share of the Celts in the monetary output of Dacia in the 1st minting phase, these tetradrachms can be regarded as Celto-Geto-Dacian issues. Of considerable interest is the distribution of the finds of coins struck in Transylvania over Little Poland and the Baltic region and of those struck in Moldavia over the Western Ukraine. This may suggest at least two ways by which the Celto-Geto-Dacian silver spread northwards:
a) the route leading from Transylvania via Slovakia, perhaps by-passing the mountains, and through the Moravian Gate; b) the route running along the Dniester and the Seret as far as their sources to Volhynia. In both cases the Celts seem to have been instrumental in circulating coined money in the Middle La Tène period. This happened much earlier than the introduction of Celtic coinage in Bohemia, Moravia and Slovakia, and partially also into the areas north of the Carpathians and the Sudeten. The Celto-Geto-Dacian coins in question would thus make the first wave of the inflow of barbarian imitations to the northern area, the wave which could have brought the earlier Greek issues, too.

Of considerable interest are, moreover, finds of later Geto-Dacian coins struck in the 2nd minting phase (150—70 B.C.). They include a hoard of tetradrachms from the environs of Dubno, a tetradrachm found near Cracow, and a didrachm (part of a hoard?) from Przemyśl-Zasanie. The coins from the first two finds were struck in southern Transylvania, and the
didrachm in central Muntenia, presumably in the environs of Bucharest (Popeşti settlement ?).

In contrast to the coinage of the 1st phase, that of the 2nd phase is purely Geto-Dacian in character, without marked Celtic influence. The areas where tetradrachms of the Toc-Cherelus and Răduleştii-Hunedoara type were made and circulated are regarded as the home of the Dacian Ratacenci, and Muntenia
as that of the Getic Pifigii (Fig. 3). This may imply the change in the ethnic and cultural interpretation of these coins which at the beginnings of the Late La Tène period reached the southern and eastern limits of the Przeworsk culture (Cracow-Dubno-Przemyśl). Moreover, the changes in the direction and routes by which the Geto-Dacian silver spread northwards, this time presumably crossing the mountains, should be taken into account.
The Late La Tène period witnessed a considerable enlivening in monetary exchange and in demand for metal money on the fringes of the Western Carpathians. Far-flung trade, attested by finds of imported goods and by coins, was carried by stages, probably by means of local markets located in larger settlements. It seems that the only partners in the trade with the foreign merchants were the tribal elders who enjoyed both social and economic privileges and who redistributed the acquired metal money which thus found its way to domestic exchange. At that time the range of coin circulation was not yet extensive, though coins served already not only as metal but also as money (Wielowiejski 1960, pp. 242—245).

Finally, mints were set up in the area in question. In the Slovakian Carpathians, coinciding with the Puchov culture, silver coins of the Velky Bysterec type and gold "Cotinian" coins were struck (Woźniak 1966, pp. 74—76). The influence of the Celtic civilization was similarly manifested north of the Carpathians, in the area of the so-called Tyniec group, in the immediate neighbourhood of Cracow. Around the middle of the 1st century B.C., a mint was established near Cracow, producing gold staters and 1/8 staters of debased value (Hachulska-Ledwos 1976, pp. 180—183; Hachulska-Ledwos, Woźniak 1976; pp. 202—206; Woźniak 1978; pp. 106—111).

The economic development, notably in money circulation, stimulated by the Celtic world, cleared the way across the Western Carpathians (Woźniak 1966, p. 80; Kunisz 1966, p. 188). One route lead from the Upper Hron along the Dunajec and the Poprad to the Nowy Sącz valley, and the other ran through the Tylicz, Dukla, and Łupkowa passes (Wielowiejski 1960, pp. 202—203).

These routes led southwards to western and northern Dacia and to Transylvania, i.e., to areas inhabited by the Geto-Dacian tribes. In the last centuries B.C. an additional ethnic element was contributed by the Celts who, however, about the middle of the 2nd century B.C. merged with the local ethnic substratum and became Dacized while in the 1st century B.C. their remnants were driven far westwards by the expansive autochthons.

Therefore, notably in view of the new numismatic finds, it is hardly possible to favour the opinion that the Celts were the sole agents in spreading new and fundamental cultural and economic phenomena in this part of the Carpathians.

The ethnic interpretation of the La Tène cultures occurring in the Carpathian basin and north of it is uncertain. It seems that we should not ignore the Dacii whose presence outside the limits of the ancient Dacia was repeatedly mentioned in archaeological literature.

T. Sulimirski thinks that as early as the 3rd century B.C. the Dacii had crossed the Transylvanian frontiers and reached Slovakia where they settled down mixing with the local population. The outcome of the Thraco-Daco-Celtic symbiosis in western Slovakia was the Puchov culture. The higher
parts of the Carpathians, which so far have not produced archaeological finds that would throw light on the cultural and ethnic character of the mountain settlement in the La Tène, could not have formed a cultural barrier for the people inhabiting the southern slopes of this mountain range. The blanks on the map of sites from the period in question might represent areas penetrated by mixed Celto-Dacian groups which coming from western Slovakia through the Low Beskids passes as early as the 2nd century B.C. could have reached the environs of Jasło, Krosno, Sanok, and Przemyśl (Sulimirski 1974, p. 81—89). The view on the northward penetration of the Dacii through the Carpathian passes in the Late La Tène period is also shared by K. Jaźdżewski (1981). More tangible traces of this expansion are to be found on the sites of the Lipica culture, dating from the Late La Tène period and located on the northern side of the Carpathians, in a triangle between Drogobyč, Kosov and Lvov (Śmieszko 1931, pp. 171—177, 178—182). T. Sulimirski (1974, p. 89—91) detects in the Lipica culture ethnic elements left by the Celts who presumably were members of the ruling class. It was not until the 2nd century B.C. that under the pressure of the Przeworsk people coming from north-west, the Dacii retreated southwards to where they had been before starting on their northward migration.

Findings of the Dacian origin are rarely recorded in archaeological material from Poland. They include a wheel-turned vessel found in grave no. 68 in the cemetery at Blonie, province of Tarnobrzeg (Woźniak 1979, p. 158). There is also a vessel from Dalewice near Proszowice whose shape and ornament imitate certain Greek pottery forms and which indicates contacts with the Scythian or Thracian culture in the Black Sea region (Gromnicki 1973, p. 11). Moreover, the environs of Tarnobrzeg have yielded a bronze stannos dated to the Late La Tène period; it was probably produced in a Greek workshop in the Black Sea area and could have been brought by the Greek merchants themselves (Wielowiejski 1960, p. 208—209).

A group of clay vessels including amphorae, jugs, beakers, and bowls, which were part of grave furniture, found at Giebultów near Cracow and dating from the second half of the 1st century A.D. (Reyma 1940, p. 185—186), attests contacts, though of later date, with the Lipica culture and even with the Dacian territory and the Black Sea centres.

In the light of this context of particular significance is the discovery made in a settlement of the Przeworsk culture at Janikowo, province of Bydgoszcz, consisting of a cult building with a clay floor engraved with two regular concentric rectangles. Studies by T. Makiewicz (1976) have shown that the feature, dated to the 3rd phase of the Late La Tène period, has numerous analogies among decorated clay hearths discovered in Geto-Dacian settlements of the 1st century B.C. at Popești (court of a chieftain of a Getic tribe), in Bucharest-Mihai Voda (Dacian settlement), at Poiana-Tecuci, jud. Galati and at Meleia and Fetele Alba, jud. Hunedoara.
in Transylvania. Moreover, the decoration of the Janikowo floor is identical with those at Poiana-Tecuci and at Bucharest-Mihai Voda. The Janikowo settlement might have been inhabited by the Celts in the 1st century B.C. However, the cult feature described above and fragment of a clay bowl similar in shape to Dacian vessels of this kind justify Makiewicz’s speculations as to the possibility of linking the settlement in question with the Dacian culture. Perhaps Janikowo is another, though weak, link between two different culture areas, a link which, moreover, does not exclude Celtic agency.

The thesis about the Celtic agency in spreading Geto-Dacian coins north of the Carpathians (Winkler 1971, p. 97—105) seems to be valid only with regard to (Celto)Geto-Dacian coinage of the 1st minting phase. For lack of sufficient evidence we should abstain, unlike some scholars (Piaskowski 1968, p. 197—203; Preda 1973, p. 129—131), from speculations whether the coins of the 1st phase found at Lipovce (not to mention finds of unidentified type from Lipovonica and Skomorochy) can be associated with the migrations of the Bastarnae around the Carpathians.

The area in question has yielded other imitations of tetradrachms. Coins of the Thasos type, copied by the close of the 2nd and in the early 1st century B.C. by the Celts in southern Romania and on the northern coast of the Black Sea (Forrer 1908, p. 20, pl. I; Pink 1960, p. 36) came to light at Gródek Jagielloński. Another example of unknown provenance was in the collections of the Jagiellonian University (Piotrowicz 1932, pp. 419—421, 424, Fig. 5). An imitation of the Thracian tetradrachm of Lyzimachos (weighing 10 g) was found at Trembowla in 1930 (Piotrowicz 1932, p. 413, Fig. 1). The imitation is dated to the close of the 3rd century B.C. and located in Thracia (Forrer 1908, pp. 202—204).

The earliest coins that penetrated the areas north of the Carpathians represent a veritable nominal mosaic. In accordance with the Phocaean standard, the tetradrachms of Philip weighed 14.5 g. The stater struck on the Attic standard, current in Hellenistic Greece, equalled in weight 2 drachms (8.73 g), and the weight of the silver tetradrachm of Alexander the Great and Philip III and of the Thasos tetradrachm was 17.46 g. Yet the gold Celtic staters and their fractions mentioned above depart strongly from their Greek prototypes, the earlier issues weighing less by 3 to 8 per cent and the later by 20 to 30 per cent, not to mention the gold standard.

The same holds good of the Geto-Dacian tetradrachms. The coins struck in the 1st minting phase weigh 12,10; 11.30; 12.42; 12.90; 13.20; 13.65; 13.80; and 14.0 g, and the coins of the 2nd phase, 10.35; 10.50; 11.52; and 11.62 (didrachm 6.75), thus respectively less by 20—30 per cent and 33—40 per cent. Since the Celtic and Geto-Dacian imitations differed considerably in metrological aspect from the Macedonian prototypes, it is difficult to establish the ratio between silver and gold imitations. In the Greece of Alexander the Great the ratio was 1:10, i.e., a gold stater equalled
5 tetradrachms. The ratio between silver and copper is yet more difficult to assess. The ratio in Greece was 1:96, yet it frequently changed: in Ptolemaic Egypt it was 1:161 and in Olbia of the 3rd—2nd centuries B.C. 1:400.

The finds of ancient coins from before A.D. recorded in Poland and the Western Ukraine contain three basic metals used in ancient mining: bronze, gold, and silver. Coins struck in various metals and consequently of different values came to the lands north of the Carpathian from definite coinage areas.

Bronzes came from two opposite parts of the Hellenistic world: from Sicily (Syracuse and Messina), Carthage, and the Iberian Peninsula (Celtic imitations) in south-west, and from Olbia, Pantikapaion, Amison, and Ptolemaic Egypt. Gold arrived in the area in question from Celtic mints in Bohemia, Moravia and Silesia, i.e., from the immediate neighbourhood. Silver, on the other hand, was derived from mints located in Greece (Delphi, Orchomenos, Thrus, Athens), Macedonia, Thracia, Minor Asia (Milet, Side), Parthia, and Bactria as well as from Geto-Dacian and certain Celtic mints, presumably situated in the Hungarian basin. Generally speaking, silver came from the south.

Thus in the La Tène period coined gold in the area in question was apparently the sphere of Celtic coinage. Moreover, it was derived from mints lying in the immediate neighbourhood of Poland, and perhaps even in its south-western peripheries. Bronzes came from two opposite directions and silver from south. This route crossed the area where operated Geto-Dacian mints which could have supplied the Transcarpathian region not only with metal money as such but also with definite coins of high denominations. This economic aspect also seems to suggest a more important role played by the Geto-Dacian tribes in the retransmission of coined money to the north of the Carpathians.

NOTES

1 Polish museum collections contain other Geto-Dacian tetradrachms, unfortunately of unknown provenance. The Archaeological and Ethnographical Museum in Łódź has a tetradrachm of Alexander the Great—Philip III (group 3) (Preda 1975, p. 330, pl. LXXIII) with illegible obverse (Mikołajczyk 1977, Fig. 18), and the National Museum in Cracow has a tetradrachm of Larissa type (Allen 1975, pp. 65—67, Fig. 2).

2 The earliest gold staters recorded in Poland weighed about 8.0; 8.2; 8.42; 8.45; 1/3 staters—2.52; 2.71—2.85; 1/8 staters—0.90—1.08; 1/24 staters—0.30; 0.34; 0.36 g. The later gold Celtic coins are still more reduced in weight: staters—6.06; 6.10; 6.23; 6.56; 6.70; 1/3 staters—1.92—1.94; 2.17; 1/8 staters—0.70 g.

LITERATURE

Aleksiewicz M., 1948: Zarys osadnictwa w okresie lateńskim i rzymskim oraz wpływów kultury prowincjonalno-rzymskiej na ziemię województwa rzeszowskiego. [Outline of Set-
tlement in the La Tène and Roman Periods and the Influence of the Provincial Roman Culture on the Territory of the Rzeszów Province], “Rocznik Województwa Rzeszowskiego,” Vol. 1, No. 1.


1980: *Zbiory numizmatyczne Muzeum Archeologicznego i Etnograficznego w Łodzi*, [Numismatic Collections of the Archaeological and Ethnographical Museum in Łódź], “Prace i Ma-
ateriały Muzeum Archeologicznego i Etnograficznego w Łodzi,” seria numizmatyczna i konserwatorska, No. 1.


Reymann T., 1940: Zespół importów rzymskich z grobu ciałopального w Giebultowie w pow. krakowskim, [A Set of Roman Imports From a Cremation Burial at Giebultów, District of Cracow], „Wiadomości Archeologiczne”, vol. 16.


Smiszko M., 1931: Kultury wczesnego okresu epoki Cesarstwa Rzymskiego w Małopolsce wschodniej, [The Cultures of the Early Phase of the Roman Imperial Period in Eastern Little Poland], Lwów.


1967: Monety celtyckie z ziem polskich, [Celtic Coins From the Polish Lands], „Wiadomości Numizmatyczne”, vol. 11. no. 4, pp. 201—231.


1979: Osadnictwo celtyckie w Polsce, [The Celtic Settlement in Poland], Wrocław-Warszawa—Kraków.