ANCIENT COINS FROM THE COLLECTION OF THE FORMER ASTRA MUSEUM IN SIBIU

SUMMARY

In this paper we present 23 coins identified as belonging to the numismatic collection of the ASTRA (Transylvanian Association for Romanian literature and culture) Museum in Sibiu, which had been shifted in 1950 to the Brukenthal Museum (Sibiu). These coins were collected at the end of the nineteenth century and during the first half of our century, without the concern for noting the place of the discovery, only the giver's name (at best).

The Corinthian silver coin donated by dr. Aurel Novac and the tetradrachm minted by Ptolemaeus XIII, donated by dr. Aurel Cosma, are non-specific pieces for the ancient monetary circulation in the Dacian area, being probably an acquisition.

The other coins are as follows: four tetradrachms of Alexander the Great type; one original Thasos tetradrachm, minted at about 100 B.C.; four imitations after late Thasos issues; two Dacian tetradrachms, early imitations after the posthumuous issues of Philip II; one Dacian coin, type Criciova A, minted at about 200 B.C.; one Dacian coin, type Rasa, minted at the beginning of the third century B.C.; one Dacian coin, minted at about 200 B.C.: one Dacian coin, with affinities in the Celtic area, minted at about 200 B.C.; one Dacian coin, type Crişeni-Berchiş; one Dacian coin, type Aninoasa-Dobreşti; one Dacian coin, type Ramna B/c; one Dacian coin, type Dumbrăveni A; two Dacian coins, type Toc-Chereluş B.

Having no written information about the origin of the coins, we can consider only, as a supposition, that the discovery area is Transylvania.

EXPLANATION OF THE PLATES

Pl. I - III. Ancient coins from the collection of the former ASTRA Museum in Sibiu.

COMMENTS ON THE CHRONOLOGY OF THE FINAL MINTING PERIOD OF THE APOLLONIAN-DYRRHACHIAN DRACHMS

GYULA PETRÁNYI

The drachms of the Greek-Illyrian city states, Apollonia and Dyrrhachium, with cow and calf on the obverse and a double geometrical (stellate) pattern on the reverse (fig.1) are well known from numerous hoards from the Balkan region. Since Ceka's monography [1] the most thorough research was performed by Niculae Conovici who published a different chronological frame and suggested a sequence for the last dozens of emissions [2] and gave metrological data [3].

Meanwhile I also managed to establish a sequence for quite a few emissions of the final period of production [4] based on known data combined with my own observations. The result differs from that of Conovici's at several points and for this reason my results will be presented in this article for debate.

I repeat Conovici's grouping of coins here for easier reference but without his suggestions for dating as it will not be discussed in this article:

Apollonia

Group A: Obv. Cow to right. Rev. Square.
Subgroup A-1: Obv. Name abbreviated.
Subgroup A-2: Obv. Full name, no symbols.
Subgroup A-3: Obv. Full name, symbols.
Group B: Obv. Cow to left. Rev. Sides of the square are bent.
Subgroup B-1: Obv. Symbols.
Subgroup B-2: Obv. No symbols, with or without monogramme.

Dyrrhachium

Group 1: Obv. Name abbreviated.
Group 2: Obv. Full name, no symbols.
Group 3: Obv. No borders, symbol in the exergue.
Group 4: Obv. Multiple symbols, several obverse names occur with a given reverse name.
Group 5: one or two obverse names only with a given eponymos.

This frame is acceptable, but I found some controversies in his publications:

1. *Apollonia*. Despite the remarkable observation that those emissions which are frequent in Romanian hoards but not present in Bulgarian ones were the latest issues [5], at least two emissions fulfilling these criteria were not placed accordingly at the end of the Apollonian series (Ceka 3: Agias/Epikadou, Ceka 88: Niken/Autoboulou).

BSNR, LXXXVI – LXXXVII, 1992–1993, p. 67 – 75

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2. Ceka 21 (Aristen/Mnasia) has no symbol on the obverse but is listed in Subgroup B-1.

3. Ceka 7 (Aibatios/Chairenos) and Ceka 91 (Xenokles/Chairenos) were taken as synchronous emissions and were placed unseparated in Subgroup B-2 despite that Ceka 7 has a symbol in the exergue.

4. *For both towns*. Hoard contents arranged in his suggested sequence show gaps (missing emissions within the series) towards the closure. This is unlikely from statistical point of view especially in big hoards where the presence of unbroken series of emissions would be expected, including rare ones.

5. There is a wide oscillation of weight from emission to emission.

WORKING HYPOTHESIS AND METHODS

The biggest problem is that relatively little information comes from the area where these coins were produced. We see long series of very similar coins of two towns without knowing the circulation pattern within the towns themselves. Most hoards consist of coins from both towns, but many contain emissions exclusively or predominantly from one town, either Apollonia or Dyrrhachium. There must have been places were these coins remained separated, the most plausibly within the towns themselves. Elsewhere discrimination was unlikely and the coins intermixed freely. I see only one explanation for the homogenous hoards which are found very far from the parent towns: these are sums remaining intact between the source and their remote burial. Otherwise in a secondary circulation they could not escape intermixing with the similar coins of the sister town. As the source cannot be elsewhere than within the minting town and still during the coin producing period, homogenous hoards are samples from the original circulation and their comparison can be used to draw conclusions for a relative chronology. In theory, later additions of coins to a hoard of the same type cannot be ruled out but this is unlikely for the majority of cases. Presence of completely different coin types (Macedonian, Roman etc.) in the hoards does not interfere above hypothesis regarding the Illyrian content.

Using a different approach, Melinda Torbágyi pointed out [6] that numerous hoards (the majority in Romania) contain many Appollonian pieces of a relatively small number of emissions, seven of there are the most frequent: Ceka 3, 24, 27, 83, 88, 91 and 115. Based on differences of hoard contents she came to the following conclusions:

Firstly, the Zaklopača hoard [7] containing no Ceka 24 and very few Ceka 115 was concealed somewhat earlier than those hoards containing all the frequent emissions, including these two.

Secondly, the emissions of the Čelopek hoard [8] (Ceka 3, 21, 24, 104) must be from the end of production, possibly in a close sequence.

I combined this reasoning with the comparison of the homogenous hoards to find a relative chronology for as many emissions as possible. As additive support to the sequence I also looked for style characteristics, name occurrences, and metrological data.

Statistics were based on all coin weights coming to my knowledge, this in comparison to that of Conovici's means a little less material from Romania, hardly any from Bulgaria, but many pieces from other sources like public and private collections and sales catalogues. Arithmetic mean and 95% confidential limits were calculated for emissions and for groups. Mode was expressed by the maximalized central step (the 0.1 g weight band containing the maximal weight [9]) for emissions where the number of coins exceeded 30. Mean weight and mode from Conovici's publication were taken for reference only since the use of statistical tests between two sets of overlapping samples were inappropriate.

RESULTS

Apollonia

The comparison of hoard contents suggested me, too, that the seven most frequent emissions (listed in Conovici's Group B-2: no symbols) must form an unbroken series. However, to establish their sequence and relationship to the other emissions required further observations.



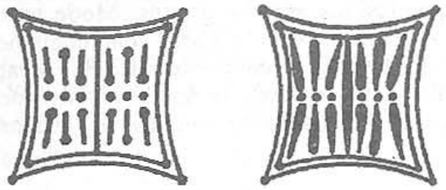
Fig. 1. Apollonian drachm. Maarkos/Lysania, 3.22 g, 17.5 mm. Note the form of A in legends and the rays of the reverse pattern.

I noticed that in these emissions the latter alpha is cut with a horizontal connection line (A, A-alpha, see fig. 1) instead of the usual V-connection (Λ, V-alpha, a characteristic of the majority of Apollonian and almost all Dyrrhachian drachms). There are four more emissions with A-alpha and no symbols which are less frequent but still well represented in these hoards: Ceka 24, 75, 98 and 104. A possible existence of more emissions featuring A-alpha and no symbols is still to be verified and their relationship to these 11 should be considered.

Within the 11 emissions I detected two types of the reverse pattern (see fig. 2). The rays are similar to drumsticks of five emissions: Ceka 27, 75, 83, 91 and 98 (as on fig. 1 and 2/a).

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On the other six emissions the rays resemble petals, and the separation line is spindle-shaped, leaving less free space in the fields (see fig. 2/b). This can be found on Ceka 3, 21, 24, 88, 104 and 115; with minor emission-specific variations only (the separation line also has a central dot in Ceka 3, the rays are horizontally arranged in Ceka 88, etc.). The Čelopek hoard is made up entirely of this type. I



a. b.

Fig. 2. Schematic representation of two different reverse types in the last period of Apollonia.
a: drumstick-type, b: petal-type rays.

did not find any of the petal-type issues in the description of Bulgarian hoards. This of course does not exclude the possibility of their existence but they must not be the dominant types there.

I used these style differences to divide the Apollonian coins, cow standing to left (= L) into two subgroups: L-2 contains 11 emissions with A-alpha and no symbols, as the last ones; coins with V-alpha, the majority of whom have symbols, belong to L-1, as the preceding subgroup, the coins of which are less frequently found in general. This sequence and metrological data are shown in table 1, in comparison to those given by Conovici. Mean weights of the emissions in my sequence show a decline within the last period and therefore statistical data are not given for L-2 as a group.

Ceka 8 (Aibatios/Chairenos, with an unusual fire/pedum reverse) is put towards the end of Subgroup L-2 for its style (V-alpha, symbol in the exergue), weight, and provenance in hoards, all which separate this coin from Ceka 91 (Xenokles/Chairenos) as well as from the other emissions of Subgroup L-2 [10].

Dyrrhachium

Suggested sequence is shown in table 2, parallel to Conovici's data. The comparison of hoard contents alone was not enough to find a satisfactory sequence. The follow-up of multiple obverse/reverse name combinations gave me nearly the same order of emissions at the end of Group 4 as found by Conovici (he must have used the same approach).

Group 5 begins with an unbroken series of Xenon on the obverse, starting already from the last emission of Group 4, Xenon/Damenos, and is followed by the Meniskos series, overlapping at Agathion. Here again, Conovici's sequence show unexplained weight fluctuation from emission to emission. I arranged the coins of Group 5 in a declining order of weight which still corresponds well with hoard contents. Interestingly, there are several pairs of emissions of almost identical weight characteristics, as emphasized in table 2.

Table 1

Metrological data, Apollonia

Ceka No.	Group	Number of coins	Mean weight (g)	95% confidential limits	Mode (MCS)	Conovici's No.	Group	Number of coins	Mean weight (g)	Mode
	L–1("A" series)	207	3.24	3.22–3.27	3.30		B–1 (symbols)			
	...									
	...									
50	Eudoridas/Archibiou	1	3.43			102	(B–2)			
	...									
66	Kallen/Pellios	5	3.19			104	(B–2)			
	...									
117	Falakros/Zopyrou	11	3.25	3.21–3.29		93				
67	Kalistratos/Nikia	7	3.30			81				
61	Theodotos/Archenos	8	3.22			73				
65	Kallen/Agenos	6	3.21	3.10–3.23		103	(B–2)			
89	Nikon/Aristippou	14	3.28	3.15–3.42		75				
22	Aristen/Psyllou	24	3.21	3.14–3.28		100				
111	Soteles/Xenophantou	24	3.22	3.16–3.28		101				
20	Aristen/Koloiou	10	3.29	3.19–3.38		98				
80	Moschilos/Parmenos	17	3.31	3.21–3.41		97				
							B–2 (Monogr. or nil)			
8	Aibatios/Chairenos	29	3.21	3.16–3.26						
31	Asklapiadas/Philist.	33	3.20	3.14–3.27	3.20	105				
	L-2("A" series)									
	1. Drumstick-type									
98	Simias/Autoboulou	96	3.30	3.28–3.33	3.36	107		94	3.28	3.35
75	Maarkos/Lysania	56	3.26	3.21–3.31	3.34	108		72	3.20	3.35
83	Nikandros/Andriskou	179	3.13	3.11–3.15	3.17	112		231	3.11	3.05
27	Ariston/Lysenos	86	3.14	3.09–3.18	3.11	109		109	3.09	3.15
91	Xenokles/Chairenos	114	3.06	3.03–3.10	3.09	113*		135	2.99	3.05
	2. Petal –type									
3	Agias/Epikadou	121	3.06	3.03–3.10	3.14	110		175	3.01	2.95
88	Niken/Autoboulou	153	3.02	2.98–3.06	3.12	111		177	2.99	3.05
115	Timen/Damophontos	119	2.96	2.92–3.00	3.03	115		164	2.92	3.05
24	Ariston/Ainea	99	3.01	2.97–3.05	3.09	114		132	3.01	2.95
104	Sosikrates/Nikonos	421	292	2.90–2.94	2.98	106		449	2.89	2.95
21	Aristen/Mnasia	66	2.99	2.94–3.04	3.08	99	(B–1)			?

* = Together with Aibatios/Chairenos.

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Table 2

Metrological data, Dyrrhachium

Group	Number of coins	Mean weight (g)	95% confidential limits	Mode (MCS)	Conovici's No. Group	Number of coins	Mean weight (g)	Mode
4	939	3.29	3.28–3.30					
...								
...								
Exakestou	19	3.24	3.11–3.36		129			
Lykou	15	3.30	3.25–3.35		130			
Asklapou	59	3.28	3.24–3.31	3.31	131			
Diodorou	19	3.32	3.27–3.38		132			
Antilochou	5	3.35	3.19–3.52		133			
Chairyllou	25	3.24	3.18–3.29		134			
Zopyrou	43	3.29	3.24–3.34	3.39	135			
Kleanoros	9	3.29	3.19–3.39		136			
Kallenos	7	3.27	3.32–3.38		137			
Aristenos	11	3.37	3.26–3.47		140			
Nikyllou	39	3.26	3.21–3.31	3.32	139			
Theogeneos	11	3.23	3.06–3.41		138			
Boikenos	9	3.22	3.15–3.28		141			
Damageos	20	3.32	3.26–3.38		144			
Menekka	29	3.30	3.25–3.34		145			
Amynta	70	3.29	3.25–3.33	3.34	146			
Phaniskou	115	3.29	3.26–3.32	3.37	147			
Kleitoriou	102	3.31	3.29–3.33	3.32	148			
Damenos	326	3.30	3.28–3.31	3.31	149			
5								
Pyrba	201	3.31	3.30–3.33	3.36	154	210	3.28	3.35
Charopinou	81	3.28	3.26–3.30	3.31	153	87	3.26	3,25
Philodamou	310	3.23	3.22–3.25	3.26	156	400	3.22	3.25
Phillia	137	3.23	3.20–3.26	3.33	152	183	3.20	3.25
Agathionos	145	3.19	3.16–3.21	3.30	155	196	3.16	3.25
Archippou	175	3.19	3.17–3.21	3.19	159	283	3.18	3.15
Philota	163	3.16	3.14–3.19	3.24	157	266	3.13	3.25
Kallonos	110	3.14	3.11–3.17	3.14	158	219	3.14	3.15
Dionysiou	273	3.14	3.11–3.16	3.20	161	621	3.11	3.15
Lykiskou	204	3.13	3.11–3.16	3.11	160	418	3.12	3.15
Meniskou	73	3.05	3.00–3.09	3.12	162	229	3.09	3.05
Aristenos	11	2.91	2.74–3.08		163	50	3.05	3.05
Philonos	3	3.07			164			2.95

In table 3 the contents of 14 mixed Apollonian-Dyrrhachian hoards [11] are put alongside. We can see almost unbroken chains of emissions. There are two obvious „outliers" in the Dieci-2 hoards: Apollonia, Ceka 83 (Nikandros/Andriskou) and Dyrrhachium, Ceka 170 (Meniskos/Archippou). Until a better explanation I regard these coins later additions to the hoard.

Despite having no evidence what soever that coin production ended the same time in Apollonia and Dyrrhachium and that the emissions now sharing the same line were synchronous products however, closures of the two parts within the same hoard are in the same line or of only one emission apart in 11 of 14 hoards.

The Michailovgrad district hoard is different. As mentioned above, the last six Apollonian emissions (petal-type series) are not present in the Bulgarian hoards but from Dyrrhachium, only the last two emissions are not represented. This controversy shows in the Michailovgrad district hoard. I have got no clue so far and a different time relationship (different from that is given in table 3) should also be considered between these very last Apollonian and Dyrrhachian emissions.

Conovici's opinion is that Apollonian coins were generally of lower weight than those from Dyrrhachium. The mean weight of Apollonia, Subgroup L-1: 3.24 g and Dyrrhachium Group 4: 3.29 g. The difference is 1.5 %, statistically significant ($p < 0.001$). A similar calculation for the whole available material except the very last emissions: Apollonia (without Subgroup L-2), 479 coins, mean weight 3.246 g: Dyrrhachium (without Group 5), 1234 coins, mean weight 3.283 g; the difference is 0.038 g, 1.1%. I doubt that these data reflect a difference in the original output or weight standard.

Weight reduction is observable indeed during the last period of coin production in both towns, reaching a maximum of 12 % in Apollonia. Whether this went faster or the production lasted longer, I do not know, but many hoards which contain the last emissions of Apollonia have very few of the earlier, heavier Apollonian issues: they might has already been withdrawn from circulation. In Dyrrhachium where the weight reduction was less dramatic, earlier coins remained in circulation in higher proportion and this makes the hoard comparisons more difficult. The Tirana 1, Tirana 2 and Gjonmë hoards testify that coins of both cities must have been accepted without discrimination in the vicinity of the town even at this stage.

Some uncertainty at the end of my lists may come from either the small number of coins or the source can have some bias like Sosikrates/Nikonos and Aristen/Mnasia issues which are mainly known from a single hoard (Čelopek). The scatter of weights within the emissions are growing towards the end of the list (data not shown in the table) which may suggest a more relaxed quality control of an increased production and/or dilution by deceiving imitations. On the other hand, in lack of metallurgic analysis of Illyrian coins, it is only an assumption that the same alloy was used throughout.

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Table 3

The distribution of the last 20 emissions in 14 mixed Apollonian-Dyrrhachian coin hoards

	D	D	B	N	M	V	Z	B	D	D	T	V	T	G
Rela-	i	i	o	W	i	a	a	a	e	r	i	u	i	j
tive	e	e	b		c	l	k	s	v	ă	r	k	r	o
posi-	c	c	a	B	h	c	l	a	a	g	a	o	a	n
tion	i	i	i	u	a	i	o	r		e	n	v	n	m
from			a	l	i	T	p	a		ş	a	a	a	ë
the	1	2		g	l	r	a	b		t		r		
end						a	c	i		i	1		2	
						n	a							

	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D
20	2	1	3	1	1		1						2	1		1										
19	4	2	3	4			2	5		1			3		1											
18	3	3	5	1	1	1	4	11		3			4		1					1						
17	1	6	10	4		9	4	12	1	6		1	1	31		1	2									
16	7	4	8	1	2	12		23	1	7		3	3	61	1	5	3									
15		1			3	7	5	26		12		1	5	72		1	1									
14		3				33	6	68	1	39	1	6	6	189		8	6	1	1	1		3				
13					5	17	(5)	83	3	30	1	5	3	133	1	6	4									
12				6	5	10	30		9	1	5	18	47		3		4									
11				7	4	35	16	7	52	1	6	71	158	3	17		8	1	1		1		2		2		2
10					9	4	39	6	17	1	7	41	101	4	10	2	4				1				1		
9			1			5	1	23	20	1	3	122	79	13	11	6	8	6			1	10	2		1		
8				1		4	1		19	1	2	42	87	4	20	6	9	6	1	1		3	7	1	2		
7						(5)		3	2	1		53	63	6	20	3	7	9		1		4	2	1	3	1	
6									3			22	18	9	29	10	5	19	1			18	4	3	1	2	
5									3		1	56	25	1	69	7	18	12	2		5	15	10	4	9	1	5
4									6			3	3	5	60	4	12	33	1	1	1	18	4	4	4	2	3
3									1					1	30	4	2	28	2	3	5	17	13	2	10	1	13
2															11		2	2		1		1	3	13	1	10	2
1																								2		8	

A = Apollonia, D = Dyrrhachium
(5) = total number of Xenokles/Chairenos + Aibatios/Chairenos coins

The disappearance of multiple obverse names in Dyrrhachium could reflect a re-arrangement of the coin production or supervision, in relation to the increasing demand and counterfeiting. There were no multiple names in Apollonia but a similar action could take place and either the disappearance of obverse symbols or the change in the character alpha may be attributed to the event. The difference in the approach regards only one coin, Ceka 31 (Asklapiadas/Philistionos), which is the last of the V-alpha series but the same time it is the first which has no symbol and as the whole A-alpha series.

Coming to the end of my comments I hope that further critical remarke based on hoard data will help to correct mistakes and to solve discrepancies. Future finds will certainly prove or disprove the reliability of the sequence suggested here. I expect the most powerful evidence from Albanian hoards.

Acknowledgement

I am deeply indebted to Mr. Niculae Conovici, Institute of Archaeology Bucharest with whom I have been in correspondence for many years. In a continuous exchange of views and information he provided me with many useful hints and data on this type of coinage and offered me the possibility to present my arguments here for debate.

NOTES

[1] H. Ceka, *Questions de numismatique illyrienne,* Tirana, 1972.

[2] N. Conovici, *Cultură şi civilizaţie la Dunărea de Jos*, 1, Călăraşi, 1985, p. 35-43; idem, Thraco-Dacica, 6, 1985, p. 59-74; idem, BSNR, 77-79, 1983-1985, p. 69-88.

[3] N. Conovici, BSNR, 80-85, 1986-1991, p. 49-67.

[4] A more detailed work is forthcoming in NK.

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