# Ancient numismatics in former Yugoslavia A survey for the period 1981 - 1991

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#### Izvleček

Bibliografski prispevek podaja kritičen pregled in deloma komentar monografij in člankov, ki se dotikajo oziroma podrobneje obravnavajo posamezne probleme antične numizmatike in so izšle na prostoru nekdanje Jugoslavije med leti 1981 in 1991.

Since numismatic research in the region of former Yugoslavia (as reflected in articles published in the former Yugoslavia) was (and still is) ignored and neglected to a great extent in specialized periodicals (such as, for instance, Numismatic Literature, New York)1 and since I have previously published two surveys spanning the pre-1975 period (P. Kos, Forschungsstand der antiken Numismatik in Jugoslawien, Studien zu Fundmünzen der Antike 1, 1979, 103-119) and the period between 1975 and 1980 (P. Kos, Antike Numismatik in Jugoslawien, Bibliographische Übersicht für die Jahre 1975-1980, Arh. vest. 32, 1981, 619-624), respectively, I would like to finish off the presentation of numismatic research in the territory of former Yugoslavia to its dissolution in 1991. In the parenthesis the titles of abstracts are given.

The aim of this survey is to draw attention to monographs and articles published by various authors on the territory of the former Yugoslavia. These were usually written in one of the languages used in the region, and the journals and so forth in which they were printed are often more or less inaccessible. The present survey does not include contributions by former Yugoslav authors in foreign publications, nor the publications of foreign authors in publications printed in former Yugoslavia.

#### Abstract

A bibliographical contribution presents a critical survey of monographs and articles published in the former Yugoslavia by domestic authors, dealing with various topics of ancient numismatics.

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- I. Greek, Illyrian, Greek-Illyrian, Etruscan and Celtic Numismatics
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# I. GREEK, ILLYRIAN, GREEK-ILLYRIAN, ETRUSCAN AND CELTIC NUMISMATICS

# **Greek Numismatics**

D. Ujes, Uticaj helenske kulture kao faktor razvoja na teritorijima Tribala i Dardanaca u vremenu od VI do IV veka pre nove ere sa osvrtom na pojavu i upotrebu novca (Hellenic Impact as a Developing Factor in the Triballian and Dardanian Territories from the 6th to 4th centuries BC with a Reflection on the Appearance of Coin Finds), in: Grčko-rimska antika vo Jugoslavija i na Balkanot. Živa ant. Pos. izd. 9, 1991, 216-221, examined the coin finds on the territory of the Triballi and Dardani which indicate that the Triballi didn't use coins as money whereas money was in everyday use among the Dardanians. Ujes assumed that the pottery and coin finds were crucial factors reflecting development. V. Bitrakova Grozdanova, Spomenici od helenističkiot period vo SR Makedonija (Monuments de l'epoque hellenistique dans

<sup>&</sup>lt;sup>1</sup> See also a study on numismatic activities in the world during the last thirty years by F. de Callatay, L'activité numismatique dans le monde vue à travers les index des 5 derniers Surveys, Annotazioni Numismatiche 7, 1992, 133-141, who unjustly presents a rather unfavourable picture of numismatic research in the former Yugoslavia. Using a suspect methodology (pages per author cited more than ten times in each Survey of Numismatic Research) he argued that Yugoslav numismatists (2 and 3 authors respectively were taken into account) contributed only 1.5-2% of written material in the

la Republique Socialiste de Macedoine), Skopje 1987, 81-101 and 224 ff., analysed the coins of the Hellenistic period from the territory of the Republic of Macedonia. Z. Dukat and I. Mirnik, Skupni nalaz makedonskog brončanog novca iz Dojrana (The Hoard of Macedonian Bronze Coins from Dojran), Num. vij. 40, 1986, 44-49, published 37 bronze coins from the hoard, which was found in 1932 in Dojran (Macedonia) and originally contained ca. 100 specimens. The published coins of the 2nd and 1st centuries BC are kept in the Archaeological Museum in Zagreb.

I. Mirnik, Skupni nalazi novca iz Hrvatske III. Skupni nalaz afričkog brončanog novca i aes rude iz Štikade (Coin Hoards from Croatia III. The Hoard of African Bronze Coins and Aes Rude from Štikada), Vies. Arh. muz. Zag. 15, 1982, 149-167, published a hoard (found in 1976) of 3 Egyptian, 1 Baetican, 1 Macedonian, 51 Carthaginian, 106 Numidian, 2 Roman and 6 unidentifiable coins as well as 27 fragments of aes rude. The most recent specimen in the hoard is a Hispanian coin from 125 - 100 BC. I. Mirnik, Skupni nalazi novca iz Hrvatske V. Ostava iz Gračaca iz godine 1926 (Coin Hoards from Croatia V. The 1926 Gračac Hoard), Vjes. Arh. muz. Zag. 20, 1987, 49-64, also presented a hoard of 221 specimens of aes rude, aes signatum and aes formatum, 137 coins of Carthage, 222 Numidian coins, 3 coins of Castulo Tarraconensis and 9 Egyptian Ptolemaic bronze coins found in Gračac (Croatia). The hoard must have been buried at the end of the 2nd cent. BC. The same author also presented a study about the circulation of north African coins in Illyricum (I. Mirnik, Circulation of North African etc. Currency in Illyricum, Arh. vest. 38, 1987, 369-392). A list and analysis of hoards of the Mazin type from Illyricum were offered. I. Mirnik, Ostava iz Baške (The Baška "Hoard"), in: Arheološka istraživanja na otocima Krku, Rabu i Pagu i u Hrvatskom primorju. Znanstveni skup - Krk, 24-27. IX. 1985. Izd. Hrv. arh. dr. 13, 1988 (1989), 89-96, also studied a hoard of aes grave and aes rude which had reportedly been found in Baška on the island of Krk in 1936. However, the author came to the conclusion that all the specimens are modern counterfeits.

E. Petrova, Grčko-makedonski moneti od arheološkite iskopavanja na lokalitetot Isar - Marvinci (1977-79) (Greek-Macedonian Coins from the Archaeological Site of Isar - Marvinci (1977-79)), Zbor. Arh. muz. Mak. 10-11, 1983, 73-76, catalogued 57 Greek - Macedonian coins found during archaeological excavations at Isar - Marvinci (Macedonia). Greek coins are only rarely found in the westernmost part of Illyricum, mostly in Istria (Croatia) where a bronze coin of Elis and a coin of Epirus (undetermined mint) have been found at Medulin (B. Zuccon, Nalaz grčkih brončanih novčića na obali Medulinskog zaljeva (The Finds of Greek Bronze Coins on the Shores of Medulin Bay (Istria)), Num. vij. 44, 1991, 5-9).

D. Janković-Mihaldžić, Zbirka grčkog novca u Narodnom muzeju u Nišu (The Collection of Greek Coins in the National Museum of Niš), Zbor. Nar. muz. Niš 1, 1985, 33-44, catalogued 15 Greek coins mostly found on the territory of Moesia Superior and 10 counterfeit coins of Macedonia.

# Illyrian numismatics

E. Petrova, Pajonija i Damastion (Paeonia and Damastion), in: *Grčko-rimska antika vo Jugoslavija i na Balkanot*. Živa ant. Pos. izd. 9, 1991, 188-193, studied the circulation of coins of the mint of Damastion and suggested that the mint of Damastion must have been located in the area northwest of Paeonia towards the territory of the Dardanians.

A. Jovanović, Značaj jedne "falsifikovane" peonske monete za ubikaciju antičkog Sarnunta (The Importance of a "Counterfeit" Paeonian Coin in Determining the Position of the Classical Sarnus), Glas. Srp. arh. dr. 5, 1988, 41-44, studied a tetradrachma with the legend Teutiou from the Archaeological Museum in Sophia which in the past has always been regarded as a modern counterfeit coin. Jovanović, however, argues that the coin is an original specimen which must have been minted under the influence of the Paeonian coins for the Illyrian dynast Teutias in the mint of Sarnus which he located in Graešnica in Macedonia. He emphasized his argumentation with the fact that the same name is inscribed on a bronze situla found in Graešnica near Bitola (Macedonia).

T. Dimitrijević, Drahme Apolonije i Drača (The Drachmas of Apollonia and Dyrrhachium), Numizmatičar 5, 1982, 41-44, inconsistently presented the names occurring on 187 drachmas of both mints found in the region between Dubravica and Golubac (Serbia). E. Petrova, Ilirski drahmi vo zbirkata na Arheološkiot muzei (Illyrian Drachmas in the Archaeological Museum), Mac. acta arch. 6, 1980 (1983), 55-62, listed 9 drachmas of Apollonia and Dyrrhachium kept by the Archaeological Museum in Skopje (Macedonia). P. Popović, Ostava iz Kostolca i osvrt na jedan predlog hronologije drahmi Apolonije i Dirahija (A Hoard from Kostolac and Views on a Proposal Regarding the Chronology of Apollonia and Dyrrhachium Drachmas), Numizmatičar 13, 1990, 5-16, published a hoard of 109 drachmas of Apollonia and Dyrrhachium which was found in 1982 in Kostolac (Serbia). An exact catalogue was compiled and on its basis the chronology of issues from both mints was studied.

D. Rendić-Miočević, O tipologiji novca "kralja Monunija" i pitanja njegova identiteta (Sur la typologie de la monnaie du "roi Monounios" et sur le probleme de son identite), God. Cen. balk. isp. 19, 1981, 97-123, offered a learned study on the coins of the Illyrian king Monounois. The same author (Note à propos d'une thèse sur Monounois Illyrien et son activité monétaire, Starinar 40-41, 1989-1990 (1991), 185-187, comments on the recent theses of Picard and Cabanes about the political role of this Illyrian king and his monetary activities.

## Greek-Illyrian numismatics

D. Rendić-Miočević, O grčko-ilirskim emisijama jadranskih kovnica i o pitanju "ilirskog" novca (epilogomena "ilirskoj" numografiji) (Graeco-Illyrian Emissions and the Question of "Illyrian" Coinage), Numizmatika 7, 1988, 9-15, argued that the term "Graeco-Illyrian coinage" should be assigned to a certain mone-

tary union in the Adriatic basin and stressed the elements that unify this group.

M. Nikolanci, O Liburnu Joniju (About the Liburnian Ionios), Vjes. arh. hist. dalm. 82, 1989, 13-34, offered a new interpretation of the legend IONIO on the issues of the mint of Issa in the 4th cent. BC. A. Rant, AI prekovi in poskus njihove geografske opredelitve (AI Überprägungen und der Versuch diese geographisch zu bestimmen), Num. vest. 18, 1990, 367-370, examined coins which had originally been minted by Heraclea, Pharos and Issa and were later overstruck with the Greek legend AIM, and attributed them to Dyskelados (island of Brač). He interpreted the last letter of the legend (M) as  $\Sigma$ . Both problems as well as the coinage of Genthios in Lissos were dealt with by D. Rendić-Miočević, Prilog nekim neriješenim pitanjima ilirske numografije (A Contribution to Some Unsettled Ouestions of Illyrian Numismatics), Num. vij. 37, 1983, 6-13.

 D. Rendić-Miočević, Novi prilozi pitanju legende Rhedon lješke kovnice (De nouveaux apports concernant les emissions à la legende Rhedon de l'atelier de Lissos), Vjes. Arh. muz. Zag. 18, 1985, 45-56, analysed the issue of the mint of Lissos bearing the inscription Rhedonos (or Rhedo), which has been previously interpreted as the name of an unknown deity. He argued that the legend represents the name of the town's magistrate in the genitive case. The same author (Uz jedan prijedlog za novu kronologiju Balejevih emisija (Some Remarks on a Proposal for a new Chronology of Ballaios), Num. vij. 39, 1985, 3-11) rejected Gorini's historical interpretation and pre 168 BC chronology (195-175 BC) of the Illyrian king Ballaios. G. Gorini, Bilješke o novcu kralja Baleja (Ilirija) (Notes about the Coinage of King Ballaios (Illyris)), Numizmatika 7, 1988, 16-21, on the contrary, further stressed his earlier dating of Ballaios' rule and differentiated 5 subsequent issues of his coinage. I. Marović, Novac ilirskog dinasta Baleja u Arheološkom muzeju u Splitu (The coinage of Ballaios in the Archaeological Museum in Split), Vjes. arh. hist. dalm. 81, 1988, 81-145, published 416 coins of this Illyrian king which are kept in the Archaeological museum in Split (Croatia) and presented a study of its circulation and minting on the ground of stylistic differences. D. Rendić-Miočević, Jedan nepoznati nalaz ilirskog i grčkog novca iz Risna (Rhizon) (An Unknown Find of Illyrian and Greek Coins from Rhizon), Num. vij. 41, 1987, 5-14, published 5 coins from an unknown hoard found in Risan (Montenegro) before World War II. Two specimens are of the Illyrian king Ballaios, the others from Greece and Sicily.

M. Bonačić-Mandinić, Novac Herakleje u Arheološkom muzeju u Splitu (The Coinage of Heracleia in the Archaeological Museum in Split), Vjes. arh. hist. dalm. 81, 1988, 65-80, catalogued 89 coins of the mint of Heraclea in the numismatic collection of the Archaeological Museum in Split as well as 227 coins of the Greek colony of Pharos kept by the same museum (M. Bonačić-Mandinić, Novac Farosa iz zbirke Machiedo u Arheološkom muzeju u Splitu (The Coins of Pharos from the Machiedo Collection in the Archaeological Museum of Split), Arh. vest. 38, 1987, 393-405).

M. Zaninović, Nalazi sa Tora kod Jelse kao prilog njegovoj kronologiji (The Finds from Tor near the Town of Jelsa, Island of Hvar and its Chronology), Opusc. arch. 7, 1982 (1983) 61-76, presented the excavations of the 3rd century BC fortification, where 2 coins of Pharos and 1 of Issa were also brought to light. M. Jurišić, Prilog poznavanju ilirskog brodovlja na Jadranu do 2. st. pr. n. e. (On Illyrian Shipbuilding in the Adriatic up to the 2nd Century), Prin. Odj. arh. 1, 1983, 5-16, studied in detail the Illyrian ships depicted on Illyrian coins. M. Kozličić, Prikazi brodova na novcu plemena Daorsa (Surveys of Ships on Coins of the Daors Tribe), Glas. Zem. muz. 35-36, 1980-1981 (1982), 163-180, concentrated his study on the reconstruction of ships depicted on the coins of Daorsoi.

## **Etruscan numismatics**

D. Ujes, Istraživanja u oblasti etrurske numizmatike (Research in the Field of Etrurian Numismatics), Num. vij. 43, 1990, 6-12, presented a short history of the development of the Etruscan monetary system. Z. Dukat and I. Mirnik, Etruščanski i umbrijski novac u Arheološkom muzeju u Zagrebu (Etruscan and Umbrian Coins from the Archaeological Museum in Zagreb), Vjes. Arh. muz. Zag. 19, 1986, 179-186, published 30 Etruscan and Umbrian coins in the numismatic collection of the Archaeological Museum in Zagreb, of which only one specimen originates from a local site (the Kupa River near Sisak in Croatia).

#### Celtic Numismatics

The most important study within the period under survey was submitted by P. Popović, Novac Skordiska (Le monnayage des Scordisques. Les monnaies et la circulation monétaire dans le centre des Balkans IVe-ler s. av. n. è), Beograd-Novi Sad 1987, 221 pp., 29 pl. The author also presented a study on general circulation during the last three centuries BC in the Balkans in the broader sense. Some notes about the beginning of Celtic coinage in the Balkans were presented by the same author (P. Popović, Les débuts du monnayage barbare dans les régions centrales des Balkans. Arch. Iug. 19, 1978 (1981) 26-30).

N. Crnobrnja, Keltski novac iz Kabineta za novac i medalje Muzeja grada Beograda (Celtic Coins in the Cabinet for Coins and Medals of the City Museum of Belgrade), God. grada Beog. 29, 1982, 5-12, published 102 coins of the Danubian Celts (Scordisci). 47 of these were found in Srem along the right bank of the Danube river. The same author (N. Crnobrnja, O zlatnicima-minimima Skordiska iz kolekcije Velimira Čekeletića (On aurei - minimi of Scordisci from the Collection of Velimir Čeleketić), Glas. Srp. arh. dr. 5, 1988, 151-154) published two gold minimi coins, struck with dies for the minting of silver minimi of the Scordisci. Both specimens are the first gold coins attributed to the Scordisci and were found in Zemun (Serbia). A typology of the silver minimi of Scordisci was offered by N. Crnobrnja, Types of Scordiscan Minimi in the Collection of the Museum of the City 298 Peter Kos

of Belgrade, Arch. Iug. 20-21, 1980-1981 (1983) 89-90. P. Popović, Nalazi novca iz latenskog naselja na Gomolavi (Coin Finds from the La Tène Settlement of Gomolava), in: B. Jovanović, M. Jovanović, Gomolava, naselje mlađeg gvozdenog doba (Gomolava. Late La Tène Settlement), Novi Sad-Beograd 1988, 101-104, published 4 Celtic coins, 3 drachmas of Apollonia and 7 Roman Republican coins which have been found during the archaeological excavations.

P. Popović, Ostava iz "Južne Srbije" - Jabukovac (The Hoard from "Southern Serbia" - Jabukovac), Numizmatičar 5, 1982, 9-39, published a reconstruction of two thirds of a hoard of silver coins of Athens, Alexander the Great and his successors, and barbarous imitations of drachmas and tetradrachmas of Alexander, Philip II, Larissa and Amphipolis. The hoard must have been buried at the beginning of the 2nd century BC. V. Dautova-Ruševljanin and P. Popović, Le trésor de monnaies barbares de Krčedin, Numizmatičar 4, 1981, 15-59, presented an exhaustive publication of a hoard of 883 silver Celtic coins found in Krčedin (Serbia). P. Popović, Ostava srebrnog novca iz Krčedina (A Hoard of Silver Coins from Krčedin), Numizmatičar 6, 1983, 11-20, analysed a mixed hoard of 73 Greek, Macedonian and Celtic silver coins also found at Krčedin in Serbia. P. Popović, Ostava varvarskog novca iz Barande (Trésor de monnaies barbares de Baranda), Starinar 31, 1980 (1981) 171-176, published a hoard of 14 Celtic tetradrachmas from the 2nd century BC. V. Dautova-Ruševljanin, Ostave barbarskog, rimskog i vizantijskog novca iz Vojvodine (Barbarous, Roman and Byzantine coin hoards from Vojvodina), Numizmatičar 4, 1981, 60-72, listed 14 hoards of Celtic and Roman Republican coins which have been found on the territory of Vojvodina.

P. Kos, Der Schatzfund norischer Großsilbermünzen aus Bevke, Arh. vest. 34, 1983, 411-417, catalogued and studied a hoard of 38 Norican tetradrachmas found in 1981 in Bevke near Ljubljana (Slovenia) which had been deposited during the 1st cent. BC. A part of the same hoard, which was purchased by private collectors, was analysed by A. Rant, Zakladna najdba Bevke in njen pomen v proučevanju keltskega novčarstva na ozemlju Slovenije (The Bevke Hoard and its Significance for the Study of Celtic Coinage in the Territory of Slovenia), Num. vest. 15, 1987, 207-222, (A Slovene version of the article which had been published in Proceedings of the 10th International Congress of Numismatics. London 1986, 1989, 113-116). A. Rant, Dvajsetiški denarno-utežni sistem zahodnopanonskih Keltov (The Vigesimal monetary system of Norican Celts), Num. vest. 16, 1988, 255-261, argued (like many authors before him) that the ratio of Norican silver tetradrachmas and the small silver coins must have been 1: 20. D. Košutnik, "Individualni tipi" med malimi noriškimi srebrniki ("Individuälle" Typen bei norischen Kleinsilbermünzen), Num. vest. 17, 1989, 311-314, published some unknown types of Norican small silver coins. The typology of Norican small silver coins from the area of Celje in Slovenia was also the topic of the contribution of D. Košutnik, Mali noriški novci iz Celja (Norische Kleinsilbermünzen aus Celje), Num. vest. 14, 1986,

156-164. D. Košutnik and A. Pogačnik, Numizmatične najdbe v Savinji (Coin Finds from the River Savinja in Celje), Num. vest. 15, 1987, 223-227, was a brief catalogue of coins (1 Greek, 530 Celtic and 283 Roman) which were found in Celje (Slovenia) during the period 1982 - 1985. B. Zuccon, Nalaz noričkog malog srebrnjaka kod Medulina u Istri (The Find of a Small Norican Silver Coin near Medulin in Istria), Num. vij. 43, 1990, 13-16, published a small Celtic coin of the tribe of Norici which had been found on Vižula peninsula near Medulin in Istria (Croatia).

The pre-Roman coins in circulation in the area of Zadar (Croatia) were briefly mentioned in the exhibition catalogue by Z. Brusić, Upotreba novca u predrimsko doba na zadarskom području (The Use of Money in the Pre-Roman Period in the Area of Zadar), in: Dvadeset stoljeća upotreba novca na zadarskom području (Twenty Centuries of the Use and Circulation of Money in the Area of Zadar), Zadar 1987, 9-12. P. Kos, Novčništvo na področju Jugoslavije od 4. do 1. stoletja pr. n. št. (Der Münzumlauf im Gebiet Jugoslawiens vom 4. bis zum 1. Jahrhundert v. Chr.), in: KEATOI. Kelti in njihovi sodobniki na ozemlju Jugoslavije, Ljubljana 1983, 92-95, presented the coinage and currency in the area of Yugoslavia for the period from the 4th to the 1st century BC.

## II. CHANCE COIN FINDS

V. Sokolovska, Isar Marvinci i Povardarjeto vo antičko vreme (Isar Marvinci and the Vardar Valley in Ancient Times), Skopje 1986, 189 pp., published among other material coins from Isar Marvinci in Macedonia. Three 4th century siliquae from Strumica, Demir Kapija and Kanatlarci near Prilep (Macedonia) were presented by M. Vasić, Tri nalaza silikvi IV veka u Narodnom muzeju u Beogradu (Three finds of 4th Century Siliquae in the National Museum in Belgrade), Numizmatičar 14, 1991, 33-41. Coins from Gamzigrad (Serbia) were published by A. Lalović, Novac (Coins), in: Gamzigrad. Kasnoantički carski dvorac (An Imperial Palace of the Late Classical Period) (catalogue of the exhibition), Beograd 1983, 171-177.

N. Crnobrnja, Novac sa područja Zemuna do 1521. godine (Coins from the Area of Zemun up to 1521), Zbir. i leg. Mur. grada Beog. Kat. 16, 1984, 144 pp., published a catalogue of Greek, Celtic, Roman and Byzantine coins which have been found in the area of Zemun in Serbia (Taurunum in the province of Moesia Superior). The catalogue is part of a major catalogue of stray coin finds from the territory of Serbia, but it has been inconsistently prepared and was criticised by P. Kos in Arh. vest. 36, 1985, 423-426. N. Crnobrnja, Antički novac iz Ušća kod Obrenovca (The Classical Coins Found at Ušće near Obrenovac), God. grada Beog. 32, 1985, 51-77, also published 276 Roman coins from Vespasian to Gratian. N. Crnobrnja, Antički novac sa područja rimskog puta Singidunum - Castra Tricornia - Ad Sextum miliarem iz numizmatičke zbirke Muzeja grada Beograda (Classical coins from the area of the Roman road Singidunum - Castra Tricornia - Ad Sextum miliarem from the Numismatic Collection of the Museum of the City of Beograd),

God. grada Beog. 34, 1987, 29-64, further presented a catalogue of 410 mostly Roman coins from this part of the province of Moesia Superior. Also from the Moesia Superior province are 63 bronze coins of the mint of Viminacium found near Kostolac in Serbia (V. Ivanišević, Katalog novca sa lokaliteta Svetinja u Kostolcu (Le catalogue des monnaies provenant du site Svetinja à Kostolac), Starinar 38, 1987, 59-63). V. Dautova-Ruševljan, Novac sa iskopavanja rimskog naselja na lokalitetu Gomolava (1953-1978) (Money from Excavations of a Roman Settlement at the Gomolava Site (1953-1978), Rad vojv. muz. 28, 1982-1983, 47-79, presented 160 mostly Roman coins from Gomolava (Serbia) in the province of Pannonia. A catalogue of 3 Celtic and 34 Roman Coins from the Križevci area (Croatia) was contributed by Ž. Demo, Prilog topografiji križevačke regije u antičko doba s osvrtom na numizmatičke nalaze (A Contribution to the Topography of the Region of Križevci in the Classical Period on the Basis of the Numismatic Finds), Križ. zbor. 2, 1982, 75-92.

Many coins from various areas of the Republic of Bosnia and Herzegowina were published: 20 Roman coins from the area of Banja Luka (G. Kraljević, Rimski novci iz okolice Banja Luke (La monnaie romaine de Banja Luka et de ses environs), Glas. Zem. muz. 38, 1983, 127-131), 46 coins from the 2nd to the 4th century from the same area (D. Periša, Nalazi rimskog novca iz Banjaluke (The Finds of Roman Coins from Banjaluka), Glas. Zem. muz. 42-43, 1987-1988 (1989), 129-142), 20 Roman coins from Trajan to Valens excavated at Castrum near Doboj (G. Kraljević, Rimski novci iz castruma kod Doboja (Römische Münzen vom Castrum bei Doboj), Glas. Zem. muz. 39, 1984, 85-87), 40 Roman coins found in the region of Mostar (G. Kraljević, Rimski novci iz Mostara i okoline (Römische Münzen von Mostar), Hercegovina 3, 1983, 15-26), 119 Roman coins from the area of Livno (G. Kraljević, Antički novci s livanjskog područja (Les monnaies antiques de la région de Livno), in: Arheološka problematika zapadne Bosne (Les problèmes archéologiques de la Bosnie du nord-ouest). Zbor. Arh. dr. Bosne i Herc. 1, 1983, 145-165), 45 Roman coins from the area of Glamoč (G. Kraljević, Rimski novci nađeni u okolici Glamoča (Römische Münzen aus dem Areal von Glamoč in Bosnien), Živa ant. 31, 1981, 277-280), 113 Illyrian and Roman coins from the area of Capljina (G. Kraljević, Antički novci iz okolice Čapljine (Antique Coins from Čapljina), Glas. Zem. Muz. 34, 1979 (1980) 127-133) and 11 Roman coins from Bosansko Grahovo (G. Kraljević, Rimski novci iz Bosanskog Grahova (Roman Coins from Bosansko Grahovo), Glas. Zem. muz. 35-36, 1980-1981 (1982) 189-191). G. Kraljević, Numizmatička zbirka na Humcu (Die Münzensammlung auf dem Humac), in: 100 godina Muzeja u Humcu (1884-1984). Zbornik radova, Ljubuški 1985, 133-139, offered a list of Roman and Byzantine coins from the area of Ljubuški.

G. Kraljević, Antički novci nabavljeni u Janjevu za zbirku Zemaljskog muzeja u Sarajevu (Antique Coins Obtained in Janjevo for the Collection of the National Museum in Sarajevo), Glas. muz. Kos. 13-14, 1984,

67-76, listed (without proper classification) 53 Greek, 55 Roman Republican, 579 Roman, 36 Greek Imperial and 18 Byzantine coins which came from the area of Janjevo (Kosovo, Serbia). 9 bronze coins of the 4th cent. found on the bank of the Danube near Batajnica in Serbia were published by N. Crnobrnja, Nalaz bronzanog rimskog novca iz Batajnice (The Find of Roman Coins from Batajnica), Numizmatičar 11, 1988, 55-57. A list of Greek, Celtic and Roman coins from the Karlovac area (Croatia) was presented by I. Mirnik, Nalazi starog novca s karlovačkog područja (Finds of Coins from the Karlovac Region), in: Arheološka istraživanja na karlovačkom i sisačkom području. Znanstveni skup, Karlovac, 12-14. X. 1983, Izd. Hrv. arh. dr. 10, 1986, 103-118. Eleven Roman coins from the 2nd - 5th cent, were excavated at Caričin Grad in Serbia (V. Popović, Novi nalazi rimskog novca iz Carićinog grada (Nouvelles monnaies romaines de Tsaritchin Grad), Numizmatičar 8, 1985, 45-48). H. Lukić, Nalazi rimskog novca s donjogradskog pristaništa u Osijeku (Roman Coins found in 1961 at the Wharf in Osijek), Osj. zbor. 18-19, 1987, 77-87, presented a catalogue of 53 Roman coins found in Osijek (Croatia). From the area of Roman Mursa (Osijek, Croatia) also come 127 Roman coins excavated during the last few years which were presented by H. Lukić, Nalazi rimskog novca u Donjem gradu u Osijeku (Zaštitna arheološka istraživanja 1982-1986) (Fund römischer Münzen in Unterstadt Osijek (Archäologische Schutzuntersuchungen 1982-1986)), Osi. zbor. 20, 1989, 53-82. During the excavations at Drenje (Croatia) 18 Roman coins were found (Ž. Škoberne, Novac (Coins), in: Drenje. Rezultati istraživanja 1980-1985 (Drenje. Research Results 1980-1985), Publ. Muz. Brd. 1, 1987, 55-57). The Roman coins from the area of Zadar (Croatia) have been only briefly sketched in an exhibition catalogue by B. Nedved, Rimski novci na zadarskom području (Roman Coinage in the Area of Zadar), in: Dvadeset stoljeća upotrebe novca na zadarskom području (Twenty Centuries of the Use and Circulation of Money in the Area of Zadar), Zadar 1987, 13-64. Z. Dukat, Nalazi antičkog novca na području grada Zagreba (Finds of Ancient Coins in Zagreb), Num. vij. 44, 1991, 27-34, mentioned Roman coins from the area of Zagreb, but no proper catalogue was given. V. Dautova-Ruševljan, Numizmatički nalazi i trgovački promet (Numismatic Finds and Trade), in: Počeci romanizacije u istočnom delu provincije Panonije (The Beginnings of Romanization in the Southeastern Part of the Province of Pannonia), Novi Sad 1987, 45-64, 84-101, presented a catalogue of finds of Roman coins from the area. She also published Roman coins from the Pannonian limes area (V. Dautova-Ruševljan, Rimski novac sa limesa u Vojvođanskom muzeju (Römisches Münzgeld aus dem Gebiet des Limes im Museum der Wojwodine), Rad vojv. muz. 31, 1988-1989, 75-106) and ca. 160 coins from the area of Srem (province of Pannonia) (V. Dautova-Ruševljan, Rimski novac iz Srema (Roman Coins from Syrmium), Rad vojv. muz. 26, 1980, 69-87). I. Mirnik, Rimski novac iz pečina (Roman Coins from Caves in Croatia), Arh. vest. 41, 1990, 733-749, discussed numismatic material from four caves in Croatia: the Kukuruzović Cave at Gornji Vaganac near Ličko Petrovo Selo (a hoard of Republican coins), Medvedica near Ogulin (4th cent.), Veternica near Zagreb (4th cent.) and Vindija near Ivanec (139 coins of the 4th cent.).

P. Kos, Rimski novci (Die römischen Fundmünzen), in: L. Plesničar-Gec, *Starokrščanski center v Emoni*, Kat. in monogr. 21, Ljubljana 1983, 75-103, published a catalogue of 343 Roman coins from Ljubljana (Slovenia). He presented also an analysis of the coin finds.

V. Delonga, Kasnoantički i bizantinski novac iz Trogira i okolice (Late Roman and Byzantine Coins from Trogir and its Surroundings), *Vjes. arh. hist. dalm.* 78, 1985, 95-116, published 29 coins from the area of Trogir (Croatia). Z. Brusić, Resnik kod Kaštel Novog. Helenističko pristanište (Resnik near Kaštel Novi. Hellenistic Harbour), *Arh. preg.* 29, 1988 (1990) 117-119, presented only a short list of coins which have been found at Resnik near Split (Croatia).

M. Popović and V. Ivanišević, Grad Braničevo u srednjem veku (Braničevo, cité médiévale), Starinar 39, 1988, 120-179, presented a catalogue of 80 Roman and Byzantine coins found at the site of Rudina during the excavation of Roman strata of the medieval town of Braničevo (Serbia).

V. Ivanišević, Vizantijski novac sa beogradske tvrđave (Byzantine Coins from the Belgrade Fortress), Numizmatičar 10, 1987, 88-110, presented an exhaustive catalogue of 67 Byzantine coins from the 6th and 10 - 13th cent. which were excavated at the fortress of Belgrade.

It should be noted that the catalogues of chance coin finds are presented in rather unsystematic form and usually take into account only coins from single museum collections and do not include all numismatic material from individual areas. Sometimes the proper mint identification is not given and the standard literature (RIC) is not always used.

## III. HOARDS

#### Roman

An unknown hoard of 23 denarii of the period 211 200 BC from Dalmatia in the Archaeological Museum in Split (Croatia) has been published by M. Bonačić-Mandinić, Jedan skupni nalaz rimskih republikanskih denara iz zbirke Arheološkog muzeja u Splitu (A Hoard of Roman Republican Denarii in the Collection of the Archaeological Museum in Split), Num. vij. 41, 1987, 15-19. M. Bonačić-Mandinić, Revizija ostave iz Zasioka (A Revision of the Hoard from Zasiok (Dalmatia)), Num. vij. 42, 1989, 6-27, published a hoard of 183 Roman Republican denarii and 3 victoriati from Zasiok (Croatia), purchased in 1903-1905 by the Archaeological Museum in Split. It was deposited in ca. 119 BC. Z. Dukat and I. Mirnik, Skupni nalaz rimskog republikanskog novca iz Osora (The hoard of Roman republican denarii from Osor), in: Arheološka istraživanja na otocima Cresu i Lošinju, Znanstveni skup -Mali Lošinj, 11.-13.X.1979, Izd. Hrv. arh. dr. 7, 1982, 141-150, published 212 Roman republican coins from the hoard of Osor (Hrvatska), which originally contained ca. 500 coins and was deposited in 73 BC. The Cesarica hoard (Croatia) of 164 Republican denarii and denarii of Augustus and Tiberius was presented by Z. Dukat and I. Mirnik, Ostava rimskih denara iz Cesarice - I. i II. dio (A Hoard of Roman Denarii from Cesarica, Part I and Part II), Num. vij. 38, 1984, 7-25, and 39, 1985, 30-44. The same hoard was also published by Z. Dukat, I. Mirnik, J. Neralić, Numizmatičke vijesti iz Senja i okolice (Numismatic Data from Senj and its Surroundings), Senj. zbor. 10-11, 1983-84, 41-57.

P. Popović, Ostava republikanskih denara iz okoline Kragujevca (A Hoard of Republican Denarii from the Vicinity of Kragujevac), *Numizmatičar* 14, 1991, 5-9, published 7 Republican denarii which were found in the village Borci near Kragujevac (Serbia). The author also published some other coins (Republican, Apollonia, Dyrrhachium) found in the vicinity.

D. Jacanović, Ostava republikanskih rimskih denara iz Viminacijuma (A Stock of Republican Roman Denarii from Viminacium), Viminacium 2, 1988, 25-39, published a hoard of 78 Republican denarii and three specimens of Augustus which had been found in Viminacium (Serbia). Its burial date must be sought during the 1st half of the 1st century AD. P. Popović, Ostava rimskih denara iz Boljetina (A Hoard of Roman Denarii from Boljetin), Numizmatičar 10, 1987, 5-16, also published part of a hoard of 102 Roman Republican denarii and denarii from the period from Augustus to Domitian which had been found in Boljetin (Serbia). The hoard must have been concealed around 80 AD by a member of an auxiliary unit.

S. Flego and M. Župančič, Najdba rimskih novcev v Boljuncu pri Trstu (Un ritrovamento di assi romani a Bagnoli della Rosandra presso Trieste), *Arh. vest.* 38, 1987, 407-412, published a hoard of 30 asses which had been buried after 128 and was found in Bagnoli near Trieste in Italy.

A small part (351 specimens) of a hoard from Strmica (Croatia), originally consisting of ca. 2500 sestertii, was published by E. Pegan, Nalaz rimskih sestercija iz Strmice kod Knina (A Find of Roman Sestertii from Strmica near Knin), Num. vij. 40, 1986, 4-32. Ž. Tomičić, Osvrt na jedan skupni nalaz antičkog novca iz Međimurja (Rückblick auf einen Gruppenfund antiken Geldes aus Međimurje), God. Grad. muz. Var. 7, 1985, 87-96, published five denarii of the 2nd cent. AD from the area of Marija na Muri (Croatia) as a part of a possible coin hoard.

A hoard of 178 denarii from Vespasian to Maximinus I was discovered at the site of Ravna in Serbia. It was buried in the period 235 - 237 AD (V. Kondić, Nalaz denara iz utvrđenja Ravna (A Finding of Denarii at the Fortress of Ravna), *Numizmatičar* 6, 1983, 51-72). The hoard from Grljan near Zaječar in Serbia must also have been deposited in the middle of the 3rd century of which only a part (66 denarii and antoniniani) has been published by A. Lalović, Deo ostave rimskih denara i antoninijana iz Grljana (A Part of the Hoard of Roman Denarii and Antoniniani from the Village Grljan), *Zbor. rad. Muz. rud. met. Bor* 3-4, 1984-86, 113-135.

A hoard of 73 Roman provincial coins of the mint of Viminacium and 6 of the mint of Dacia was found at Ćuprija (Serbia). It must have been concealed in the period 252/253 (B. Borić-Brešković, Nalaz bakarnog rimskog novca iz okoline Ćuprije (A Find of Roman Copper Coins in the Vicinity of Cuprija), Zbor. Nar. muz. Beog. 11, 1983, 69-84). B. Borić-Brešković, Dve ostave bakarnog rimskog novca Viminacijuma i Dakije (Deux trésors de monnaies romaines en cuivre de Viminacium et de Dacie), Zbor. Nar. muz. Beog. 13, 1988, 89-101, also published two small hoards of provincial bronze coins of Viminacium and Dacia. A hoard of 22 coins (19 of the mint of Viminacium and 3 of Dacia) was found in the area of Vranje (Serbia) and a hoard of 64 coins (61 specimens of the mint of Viminacium and 3 of Dacia) was found near Bošnjane (Serbia).

Ž. Demo, Münzfunde aus der Zeit Gallienus im Gebiet zwischen den Flüssen Sava und Drava (Ein Beitrag zur militärischen, ökonomischen und wirtschaftlich-monetären Geschichte des südlichen Pannoniens um die Mitte des 3. Jh. n. Chr.), Arh. vest. 33, 1982, 258-498, reconstructed, catalogued and analysed in detail 13 coin hoards of the middle of the 3rd cent. from the territory of southern Pannonia. Ž. Demo, Skupni nalaz novca i nakita 3. stoljeća iz Bušetine kraj Virovitice (Gesamt Münz- und Schmuckfund des 3. Jahrhunderts aus Bušetina bei Virovitica), Podr. Zbor. 1981, 214-226, re-examined a hoard of antoniniani and jewellery from Bušetina (Hrvatska), which was deposited in 258-260.

N. Crnobrnja, Ostava rimskog novca iz Svetozareva (The Hoard of Roman Coins from Svetozarevo (Valerian - Diocletian)), Svetozarevo 1987, 74 pp., 9 pl., presented a complete catalogue of an important hoard of 1973 antoniniani of the 3rd cent. which was found at Svetozarevo (Serbia). D. Janković-Mihaldžić, Nalaz antoninijana iz Kremenice (A Hoard of Antoniniani from Kremenica), Zbor. Nar. muz. Niš 3-4, 1987, 89-105, catalogued a hoard of 39 antoniniani of the middle of the 3rd cent. which had been found in 1957 in the village Kremenica (Serbia). The Ig hoard of 3511 coins near Ljubljana (Slovenia), deposited in 273, was published by P. Kos, Ig. Zakladna najdba antoninijanov tretjega stoletja (Ig. A Hoard of Third Century Antoniniani), Situla 29, 1991, 99 pp. N. Crnobrnja, Ostava antoninijana iz Svileuve - vreme i uzrok pokopavanja (The Hoard of Svileuva - the Reason and Time of its Deposition), Glas. Srp. arh. dr. 2, 1985, 141-144, presented a report on a hoard of 10566 antoniniani, which had been found in 1916 near Sabac (Serbia). He dated the burial of the hoard to the spring of 283.

Ž. Demo, Trier - ostava antoninijana druge polovice 3. stoljeća (Trier - A Hoard of Antoniniani from the Late Third Century), *Num. vij.* 38, 1984, 30-51, published a catalogue of a hoard of 186 antoniniani from Valerian to Tetricus I, which had been found in Trier and was purchased in 1898 by the Archaeological Museum in Zagreb.

The third hoard of Čentur (Slovenia) of folles of the Tetrarchies which had been buried in 309 was published by A. Jeločnik and P. Kos, Zakladna najdba Čentur - C. Folisi Maksencija in tetrarhije (Čentur - C Hoard. Folles of Maxentius and of the Tetrarchies), Situla 23, 1983, 93 pp. (see review by Ž. Demo in Arh. vest. 36, 1985, 427-429). B. Josifovska-Dragojević, Depo folesa iz sela Petralice (Makedonija) (Dépôt de folles de Petralica), Živa ant. 40, 1990, 125-144, published a hoard of 377 folles which was excavated in 1950 in Petralica near Skopje (Macedonia). It had been deposited in 310.

D. Janković-Mihaldžić, Skupni nalaz rimskog brončanog novca iz Niša (A Find of Roman Bronze Coins from Niš), Zbor. Nar. muz. Niš 2, 1986, 25-48, published an exact catalogue of the hoard of 181 folles of the Tetrarchies which had been found in 1936 in Niš (Serbia).

A hoard of ca. 15 kg. of folles was found in the spring of 1962 in the village of Bačinci in Vojvodina (Serbia). The Museum of Vojvodina in Novi Sad purchased 1093 specimens, the catalogue of which was presented by V. Dautova-Ruševljan, Ostava folisa iz Bačinaca u Sremu (A Hoard of Folles from Bačinci in Srem), Rad vojv. muz. 29, 1984-1985, 85-120. It seems that the hoard must have been deposited in ca. 323.

In 1978 a hoard of 117 folles was excavated in a Roman house in Celeia (Celje, Slovenia). Its deposition was dated to ca. 347 (P. Kos, Ein Schatzfund konstantinischer Folles aus Celje, *Arh. vest.* 35, 1984, 325-336).

N. Šipuš, Skupni nalaz rimskih brončanih novaca iz sredine IV. stoljeća nađen u Sisku godine 1985 (A Hoard of Roman Bronze Coins from the Mid-4th Century Found in Sisak in 1985), *Vjes. Arh. muz. Zag.* 20, 1987, 93-106, presented a hoard (purse?) of 94 late Roman bronze coins which had been found in Sisak. It was lost in ca. 358 AD.

N. Crnobrnja, Ostava rimskog novca iz Beograda primerci novih emisija Konstancija II, Konstancija Gala i Julijana Cezara (Lé depôt de la monnaie romaine de Brlgrade - exemplaires de nouvelles emissions de Constance II, Constance Gallus et Jules Cesar), God. grada Beog. 27, 1980, 23-30, published a hoard of 63 maiorinae and centenionales from Belgrade. A hoard of 42 folles and centenionales was found in Novi Pazar (Serbia) of which a catalogue was presented by V. Ivanišević, Ostava rimskog bronzanog novca IV veka iz Novog Pazara (A Hoard of Fourth Century Copper Coins from Novi Pazar), Novopaz. zbor. 7, 1983, 53-58. V. Ivanišević, Dva nalaza rimskog bronzanog novca IV veka sa beogradske tvrđave (Two Findings of 4th Century Bronze Coins from the Belgrade Fortress), Numizmatičar 6, 1983, 77-95, also published a hoard of 13 folles of the first and second Tetrarchies as well as a hoard of 177 folles which must have been buried during the fifth decade of the 4th century in Beograd (Serbia). A hoard of 227 coins was also found in the Belgrade fortress which must have been deposited during the Gothic invasion in 378 (V. Ivanišević, Skupni nalaz rimskog bronzanog novca iz 375/8 godine sa beogradske tvrđave (The Find of Roman Bronze Coins from the Years 375-378 from the Belgrade Fortress), Numizmatičar 9, 1986, 44-58).

O. Brukner and P. Popović, Sremska Mitrovica/Livade. Kasnolatensko naselje, rimska nekropola i mauzolej (Sremska Mitrovica/Livade. Roman Cemetery and Mausoleum), Arh. preg. 28, 1987 (1989), 113-118, presented a hoard of 6 siliquae of Constantius II which had been found in grave 16 at the late Roman cemetery in Sirmium (Sremska Mitrovica, Serbia). The same hoard was properly published by P. Popović, Nalaz silikvi na trasi auto-puta kod Sremske Mitrovice (Findings of Siliquae near Sremska Mitrovica), Numizmatičar 13, 1990, 47-54. A hoard of 316 aes nummi of the second half of the 4th century found in 1947 in Vukovar (Croatia) was published. Its deposition was dated to 358 AD (H. Lukić, Skupni nalaz rimskog novca IV. stoljeća iz Vukovara (Ein Hortfund römischer Münzen des IV Jahrhunderts aus Vukovar)), in: Arheološka istraživanja u istočnoj Slavoniji i Baranji. Znanstveni skup, Vukovar 6-9. X. 1981, Izd. Hrv. arh. dr. 9, 1984, 201-209.

N. Crnobrnja, Tri ostave rimskog bronzanog novca (IV vek) sa podrućja opštine Obrenovac (Three Hoards of Roman Bronze Coins (IV Century) from the Area of the Municipality of Obrenovac), Numizmatičar 14, 1991, 41-49, published three late Roman hoards of bronze coins which have been discovered in the vicinity of Obrenovac (Zvečka and Veliko Polje) in Serbia. The author catalogued 104 bronze coins of the Zvečka hoard, but only some specimens could be recovered from both hoards from Veliko Polje. He also published two finds of 60 and 200 Roman coins from the 2nd to the 4th cent. AD, respectively, which had been found in 1924 in a mineral well at Vrnjačka banja (report of B. Saria in Starinar 3, 1925, p. 163). The present author (N. A. Crnobrnja, O nalazu rimskog novca otkrivenog u Vrnjačkoj banji 1924. godine (The Find of Roman Coins Discovered in Vrnjačka Banja in 1924), Naša prošlost 2, 1987, 67-76) gave a catalogue of the preserved 31 coins from both hoards that are still kept in the National museum in Kraljevo.

A hoard of tools together with 8 bronze coins of the second half of the 4th century has been found at Rudna (Slovenia) and was published by S. Ciglenečki, Poznorimski depo z Rudne pri Rudnici (Der spätrömische Hortfund aus Rudna bei Rudnica), Arh. vest. 42, 1991, 225-232. P. Kos, A. Pogačnik, Zakladna najdba kasnorimskih novcev z Jereke pri Bohinju (Der Schatzfund der spätrömischen Münzen aus Jereka), Num. Vest. 11, 1983, 9-12, published a small hoard of 35 AE III and AE IV coins from Jereka (Slovenia), which had been deposited in the autumn of 401. A hoard of 34 nummi, AE III and AE IV coins had probably been deposited in Emona (Ljubljana, Slovenia) at the same time (P. Kos, Rimski novci (Römische Fundmünzen), in: L. Plesničar-Gec, Starokrščanski center v Emoni, Kat. in monogr. 21 (1983) 75-103).

M. Vasić, Ostava rimskog bronzanog novca IV i V veka iz Viminacijuma (Trésor de monnaies romaines de bronze des IV<sup>e</sup> et V<sup>e</sup> siècles de Viminacium), *Starinar* 31, 1980 (1981) 123-160, republished 11.090 bronze coins, a fifth of the hoard from Viminacium (Kostolac, Serbia), which originally comprised ca. 100,000 coins and had been published by E. Gren, *Der Münzfund von Viminacium* (Uppsala 1934). M.

Vasić, Nalaz II rimskog bronzanog novca IV i V veka iz municipijuma Horreum Margi (Ćuprija) (Find II of Bronze Coins dating from the IV and V Centuries from the Municipality of Horreum Margi (Cuprija)). Numizmatičar 11, 1988, 63-82, presented a catalogue of 659 late Roman bronze coins from Horreum Margi (Cuprija, Serbia) which had probably been buried in ca. 442/443 in connection with the wars of the Huns. These coins represent a good example of 4th and 5th cent. monetary circulation patterns in the province of Moesia. The second hoard of 6330 bronze coins, originating from the same site, was studied by M. Vasić, Horreum Margi (Ćuprija). Nalazi rimskog bronzanog novca IV i V veka iz municipijuma (Horreum Margi (Cuprija). Trouvaille des monnaies de bronze de IVéme et Véme siecle en municipe), Beograd 1990, 121 pp., 4 pls. This hoard had also been deposited in 442/443.

41 small bronze coins of the 5th century had been found in the late Roman royal palace at Gamzigrad (Serbia) and they must have been deposited at the beginning of the 6th century (D. Janković, La trésor de minimi de Gamzigrad, Numizmatičar 7, 1984, 7-11).

V. Dautova-Ruševljanin, Ostave barbarskog, rimskog i vizantijskog novca iz Vojvodine (Barbarous, Roman and Byzantine coin hoards from Vojvodina), Numizmatičar 4, 1981, 60-72, presented a list of 57 hoards of Roman coins of the period from the 1st to the 5th centuries and 15 Byzantine coin hoards of the period from the 5th to 12th centuries from the territory of Vojvodina.

# Byzantine

20 Byzantine folles were found near the village of Dobra (Serbia). The latest coin in the hoard had been minted in 544/545 (D. Minić, Le trésor de monnaies de bronze protobyzantin de Dobra, *Numizmatičar* 7, 1984, 12-17). A hoard of 89 folles and 1 tremissis, found in Grnčar near Gnjilane (Serbia), had also been buried in 544. V. Radić, Ostava ranobizantinskog novca iz sela Grnčar kod Gnjilana (A Hoard of Early Byzantine Coins from the Village of Grnčar near Gnjilane), *Numizmatičar* 14, 1991, 49-56, offered an exact catalogue.

I. Marović, Depot bizantinskog novca iz Slatine (o. Čiovo) i novci solinske kovnice u Arheološkom muzeju u Splitu (The Hoard of Byzantine Coins from Slatine (Island of Čiovo) and Coins from the Salonitan Mint in the Archaeological Museum of Split), *Vjes. arh. hist. dalm.* 79, 1986, 285-308, published a hoard which had been found in Slatine (Croatia) in 1911. The author dated the deposition of the hoard to 563/564 or 588/589. I. Mirnik, Ostava bizantinskog novca s Majsana (The Byzantine Coin Hoard from Majsan), *Numizmatičar* 5, 1982, 141-146, published a hoard of 13 folles of Justinian I and Justin II which has been excavated on the island of Majsan in Dalmatia (Croatia). It was deposited in ca. 574/575.

A hoard of 14 tremisses of Justin and Justinian was found in 1955 together with two gold earrings near Čitluk in Bosnia and Herzegovina. Poor photos and an unrealiable description of the hoard was presented by T. Andelić, Ostava vizantijskog zlatnog novca iz Blatnice kod Čitluka u Hercegovini (A Hoard of Byzantine Tremisses from Blatnica near Čitluk), Hercegovina 5, 1986, 19-22. A. Jovanović, Un petit trésor de monnaies de bronze de la forteresse protobyzantine près de Slatinska reka, Numizmatičar 7, 1984, 31-38, published a hoard of 22 folles the latest of which had been minted in 575/576 AD. B. Aleksova, Episkopijata na Bregalnica (Episkopi on Bregalnica. The first Slavic religious and cultural centre in Macedonia), Prilep 1989, 316 pp. (with figs.) also published a hoard of 3 gold and 270 bronze Byzantine coins which had been found in the area of Bargala in Macedonia (pp. 65-67) and must have been deposited after 585. A small hoard of 17 folles with the latest specimen minted in 595/596 was found near Donji Milanovac in Serbia (V. Kondić, Le trésor de monnaies de bronze de la forteresse protobyzantine de Bosman, Numizmatičar 7, 1984, 51-56. The same hoard was also published by V. Kondić in Starinar 33-34, 1984, 137-145). The latest coins in a hoard of 107 folles excavated at Veliki Gradac (Serbia) were also minted in 594/595 (D. Minić. Le trésor de monnaies de bronze de la forteresse protobyzantine de Veliki Gradac, Numizmatičar 7, 1984, 39-50).

I. Marović, Reflections about the Year of the Destruction of Salona, *Vjes. arh. hist. dalm.* 77, 1984, 293-314, studied a hoard of 51 Byzantine bronze coins found in 1979 in Salona and dated its burial to the period 630/631.

D. Gaj-Popović, Trois trésors de monnaies de bronze protobyzantines du Musée National de Belgrade, *Numizmatičar* 7, 1984, 18-30, published a hoard of 40 folles from Suva Reka, a hoard of 23 folles from Klinovac and a hoard of 34 folles from Veliko Orašje, all found in Serbia and deposited during the 6th century. I. Popović, Index nummorum, *Numizmatičar* 7, 1984, 91-99, presented an index of coins from hoards of Byzantine bronze coins from the area of Serbia classified according to MIB.

V. Popović, Petits trésors et trésors démembrés de monnaie de bronze protobyzantines de Serbie, *Numizmatičar* 7, 1984, 57-90, listed 14 hoards of the 6th century (Prahovo, Malo Golubinje, Niš, Caričin Grad A - G, Pirot, Boljetin, Tekija and Veliko Gradište) from the territory of Serbia.

I. Marović, A Hoard of Byzantine Gold Coins from Narona, in: Studia Numismatica Labacensia Alexandro Jeločnik Oblata. Situla 26, 1988, 295-316, published a hoard of 61 solidi and tremisses which was found in 1901 at Narona in Dalmatia (Croatia). The hoard had been buried at the end of the 6th or beginning of the 7th century. V. Popović, Une invasion slave sous Justin II inconnue des sources écrites, Numizmatičar 4, 1981, 111-126, studied coin hoards of the second half of the 6th century from Serbia, Macedonia and Greece and argued that many of them had been buried ca. 571 as a result of an incursion of Slavs which is not mentioned in the written sources. I. Mirnik, Skupni nalazi novca iz Hrvatske IX. Skupni nalaz Heraklijevih zlatnika iz Zrmanje (Coin Hoards from Croatia IX. The Hoard of Heraclius Solidi from Zrmanja), Vjes. Arh. muz. Zag. 23, 1990, 163-171, published a part of a hoard of imitations of solidi of Heraclius, found in 1931 in the river Zrmanja (Hrvatska). The coins were probably brought from Pannonia where they were imitated by the Avars during the second half of the 7th cent.

In 1972 a hoard of ca. 200 Byzantine silver coins was found in a clay pot near Skopje (Macedonia). A preliminary report on the hoard showing some rare specimens of the period 1071 - 1118 from it was published (Z. Habuš, Ostava kod Skoplja vrlo rijetkog srebrnog bizantinskog novca iz 1091. godine (Very Rare Byzantine Silver Coins from a Hoard near Skopje), Num. vij. 38, 1984, 57-67).

I. Mirnik, O skupnom nalazu bizantinskog novca 10.-11. stoljeća iz Mataka kod Nina (On the Hoard of Byzantine Coins of the 10th - 11th Centuries from Matak near Nin), Num. vij. 35, 1981, 29-35, catalogued the remainder of an almost entirely lost hoard of gold coins of the 11th century and listed further coin hoards of the 10th and 11th centuries from the area of Dalmatia. He also published a hoard of scyphate bronze coins of the 12th century from Dalmatia (I. Mirnik, Skupni nalaz novca iz 12. stoljeća u Dalmaciji (A Hoard of Byzantine Coins of the 12th Century from Dalmatia), Vjes. Arh. muz. Zag. 14, 1981, 97-102).

A hoard of 109 coins from the beginning of the 12th century, probably deposited in 1189, from Podgorac in Serbia, was published by N. Crnobrnja, Ostava vizantijskog novca iz Podgorca, SR Srbija (Le depot de monnaies concaves byzantines de Podgorac, Serbie), Numizmatičar 9, 1986, 60-64.

## IV. COLLECTIONS

Etruscan and Umbrian coins in the numismatic collection of the Archaeological Museum in Zagreb were published by Z. Dukat and I. Mirnik, Etruščanski i umbrijski novci u Arheološkom muzeju u Zagrebu (Etruscan and Umbrian Coins from the Archaeological Museum in Zagreb), Vjes. Arh. muz. Zag. 19, 1986, 179-186.

It is planned to publish systematically the collection of the Coin Cabinet in the National Museum in Ljubljana (Slovenia). The first volume, comprising the collection of Republican coins, was presented by P. Kos and A. Šemrov, Zbirka Numizmatičnega kabineta Narodnega muzeja I. Rimski republikanski novci (Sammlung des Münzkabinetts des Nationalmuseums in Ljubljana I. Münzen der römischen Republik), Situla 28, 1990, 42 pp., 39 plates.

The collection of the National Museum in Beograd is also being systematically presented: B. Borić-Brešković, Katalog sistematske zbirke rimskog carskog novca u Narodnom muzeju u Beogradu. IV. Traianus (Catalogue of the Numismatic Collection in the National Museum in Beograd. IV. Traianus), Numizmatičar 4, 1981, 95-110; V. Hadrianus, Numizmatičar 5, 1982, 79-124, VI. Hadrianus, Numizmatičar 6, 1983, 29-44; VII. Antoninus Pius, Numizmatičar 7, 1984, 101-132; VIII. Antoninus Pius - Faustina I, Numizmatičar 8, 1985, 7-28; IX. Antoninus Pius, Numizmatičar 9, 1986, 29-40; X. Marcus Aurelius, Numizmatičar 10, 1987,

34-84. She further published coins of Faustina II, Lucius Verus, Lucilla, Commodus and Crispina (B. Borić-Brešković, Katalog sistematske zbirke rimskog carskog novca u Narodnom muzeju u Beogradu (A Catalogue of Roman Coins in the Collection of the National Museum in Belgrade), Numizmatičar 11, 1988, 5-53), coins of Pertinax, Didius Iulianus, Clodius Albinus, Septimius Severus and Iulia Domna (Katalog sistematske zbirke rimskog carskog novca u Narodnom muzeju u Beogradu (A Catalogue of Roman Coins in the Collection of the National Museum in Belgrade), Numizmatičar 13, 1990, 17-46) as well as of Septimius Severus (Katalog sistematske zbirke rimskog carskog novca u Narodnom muzeju u Beogradu. XIII. Izdanja pod Severom (Julija Domna, Karakala, Plautila) (A Catalogue of Roman Coins in the Collection of the National Museum in Belgrade, XIII: Septimius Severus), Numizmatičar 14, 1991, 9-32). Three collections (Weifert, Kovačević and Ferary) donated to the University of Beograd have also been presented and some important specimens published by M. Vasić, D. Gaj-Popović, P. Popović, B. Borić-Brešković and V. Popović, Tri numizmatička legata Univerziteta u Beogradu. Zbirka Vajfert/Zbirka Ljubomira Kovačevića/Zbirka Filipa Ferarija. Odabrani primerci (Trois legs numismatiques à l'Université de Belgrade. Choix d'exemplaires), Beograd 1991, 91 pp. N. Crnobrnja, Novac grada Nikeje u numizmatičkoj zbirci grada Beograda (Coins of the Town of Nicaea in the Numismatic Collection of the Museum of the City of Belgrade), God. grada Beog. 28, 1982, 5-23, published 159 Greek imperial coins of the mint of Nicaea from the collection.

N. Proeva, Niz bitolskite kolekcii. I - Antička gema - pečat (A travers de collections privées de Bitola. I La gemme - sceau), *Zbor. trud.* 4-5, 1983-1984, 64-70, examined coins of the 2nd cent. AD from some

private collections in Bitola (Macedonia).

Ž. Demo, Iz numizmatičke zbirke Arheološkog muzeja u Zagrebu. Serije DIVI Trajana Decija i neki problemi vezani uz njih (From the Numismatic Collection of the Zagreb Archaeological Museum. Some Questions Relating Series of 'Divus' Traianus Decius), Num. vij. 37, 1983, 30-38, studied 21 coins of Traianus Decius from the mint of Viminacium. Ž. Demo, Iz numizmatičke zbirke Arheološkog muzeja u Zagrebu. Postum (260-268. g.) (From the Collection of the Archaeological Museum in Zagreb - Postumus (260-268)), Num. vij. 35, 1981, 11-28, catalogued 158 coins of Postumus kept in the Archaeological Museum in Zagreb.

V. Bitrakova Grozdanova, Monetite od antičkiot period vo zbirkata na Narodniot muzej - Ohrid (Les monnaies de la periode antique dans la collection du Musée national d'Ochrid), *Lihnid* 5, 1983, 71-82, published a catalogue of 46 coins from the collection of the Ohrid Museum. The majority of the coins had been excavated at various sites in the Ohrid area.

E. Hošovski, Numizmatika (Numismatic Collection), in: Četrdeset godina rada Muzeja (1946-1986). Izložba "Iz zbirki Narodnog muzeja Titovo Užice" (40th Anniversary of the National Museum in Titovo Užice (1946-1986). Collections of the Museum) (Exhibition Catalogue), Titovo Užice 1986, 93-98, presented

31 Greek, Roman and Byzantine coins from the collection of the museum at Titovo Užice (Serbia). A good catalogue of 224 Roman and Byzantine coins from the collection of the museum in Novi Pazar (Serbia) with a provenance from Bulgaria was published by V. Ivanišević, Rimski i vizantijski novac iz zbirke Muzeja Ras iz Novog Pazara (Les monnaies romaines et byzantines du Musée de Ras a Novi Pazar), Novopaz. zbor. 15, 1991, 49-65.

Roman and Byzantine coins from the museum at Humac in Bosna and Hercegovina were published unsystematically (G. Kraljević, Numizmatička zbirka na Humcu (Die Münzensammlung auf dem Humac), in: 100 godina Muzeja u Humcu (1884-1984). Zbornik

radova, Ljubuški 1985, 133-139).

R. Matijašić, Zbirka bizantinskog novca u Arheološkom muzeju Istre u Puli (The Collection of Byzantine Coins in the Archaeological Museum in Pula), Starohrv. pros. 13, 1983, 217-233, catalogued 122 Byzantine and 5 Ostrogothic coins in the Archaeological Museum in Pula (Croatia). 63 Byzantine coins from Theodosius II to Johannes II from the Museum of the Croatian Archaeological Monuments in Split were catalogued by V. Delonga, Zbirka bizantinskog novca u Muzeju starohrvatskih spomenika u Splitu (Collection of Byzantine Coins in the Museum of the Croatian Archaeological Monuments in Split), Starohrv. pros. 11, 1981, 201-228. Ž. Demo, Novac germanskih vladara druge pol. 5. do u drugu pol. 6. st. u Numizmatičkoj zbirci Arheološkog muzeja u Zagrebu (Münzen germanischer Herrscher von der zweiten Hälfte des 5. bis zur zweiten Hälfte des 6. Jahrhunderts aus der numismatischen Sammlung des Archaeologischen Museums in Zagreb), Arh. vest. 32, 1981, 454-480, systematically published a catalogue and analysis of Ostrogothic coins in the Archaeological Museum in Zagreb. V. Ivanišević, Vizantijski novac (491-1092) iz zbirke Narodnog muzeja u Požarevcu (Byzantine Coins from the National Museum Collection in Požarevac). Numizmatičar 11, 1988, 87-104, published a good catalogue of 96 Byzantine coins from the collection in Požarevac in Serbia. He also published a catalogue of 136 coins from the same collection (Vizantijski novac (1092-1261) iz zbirke Narodnog muzeja u Požarevcu (Byzantine Coins (1092-1261) from the National Museum Collection in Požarevac), Numizmatičar 14, 1991, 57-72). In this article he further published the remains of 4 hoards from the vicinity of Požarevac. D. Razmoska, Pregled na vizantiskite moneti od V do XIII vek od numizmatičkate zbirka (Vue d'ensemble sur les monnaies du Ve au XIIIe siècle se trouvant dans la collection numismatique d'Ohrid), Lihnid 5, 1983, 83-108, published 42 Byzantine coins out of more than 3000 specimens in the collection of the Ohrid Museum. D. Razmovska Bačeva, Docnovizantiskite moneti od numizmatičkata zbirka vo Zavodot i muzej - Ohrid (Late Byzantine Coins from the Numismatic Collection of the Institute for the Protection of the Cultural and Historic Monuments and the Museum of Ohrid), Lihnid 6, 1988, 117-132, mentioned 28 Byzantine coins of 12th - 13th cent. AD which have been found in the area of Ohrid.

N. Crnobrnja, Novac na području Beograda do 1521

(Coins in the Territory of Belgrade until 1521), in: Arheološko naslede Beograda (The Archaeological Heritage of Belgrade). Kat. izl. Muz. grada Beog. 27, 1985, 151-170, presented the history and development of the Coin Cabinet of the City Museum in Beograd. The history of the Machiedo collection was presented by F. Buškariol, Zbirka Machiedo u Arheološkom muzeju u Splitu (The Machiedo Collection in the Archaeological Museum at Split), Pril. pov. Hvar 9, 1988, 31-41. For the history of the Coin Cabinet in the museum of Osijek see H. Lukić, Kronologija razvoja Numizmatičkog odjela Muzeja Slavonije 1877-1914 (Chronologie der Entwicklung der numismatischen Abteilung des Museums Slawoniens 1877-1914), Osj. zbor. 18-19, 1987, 89-114.

## V. HISTORIOGRAPHICAL STUDIES

P. Kos, Numizmatika na Slovenskem. Zgodovinski oris (Numismatik in Slowenien. Geschichtlicher Abriss), *Arh. vest.* 33, 1982, 235-257, presented a historiographic survey of numismatics in Slovenia (Parts of the article were reprinted in *Num. vest.* 13, 1985, 87-94).

## VI. STUDIES AND ANALYSES

Contributions discussing only a specific coin or a single find of a coin were most commonly published: N. Crnobrnja, Antoninijan Filipa II iz vremena njegove samostalne vladavine 249. godine (An Antoninianus of Philip II as Sole Emperor), Numizmatičar 7, 1984, 137-141; D. Kovač, Neobjavljeni antoninijan rimskog cara Aurelijana kovnice Serdica (An Unpublished Antoninian of the Roman Emperor Aurelian from the Mint of Serdica, Num. vij. 40, 1986, 33-35; A. Pogačnik, Viktorija na viminacijskih kovancih (Die Siegesgöttin Victoria auf den Bronzemünzen aus Viminacium), Num. vest. 12, 1984, 43-45. Ž. Demo, Glicerijeva tremisa u Zemaljskom muzeju u Sarajevu i Luigi Cigoi kao njezin autor (A Tremissis of Glycerius in the Zemaljski Muzej in Sarajevo and Luigi Cigoi as its Creator), Num. vij. 41, 1987, 43-55; Z. Dukat - I. Mirnik, Aureus Kvinta Kornuficija (The Aureus of Quintus Cornuficius), Vjes. Arh. Muz. Zag. 16-17, 1983-1984, 91-93; J. Strmečki, Prilog proučavanju novca rimske kovnice Stobi (A Contribution to the Study of Coins from the Roman Mint of Stobi), Num. vij. 42, 1989, 28-30, examined an unpublished bronze coin of Iulia Domna of the mint of Stobi; P. Popović, Jedan redak solid Konstancija II iz Sirmijuma (A rare solidus from Sirmium dating from Constantius II), Numizmatičar 11, 1988, 59-62 (a solidus of Constantius II from the mint of Antioch (RIC 18) had been found in Sremska Mitrovica in Serbia); B. Zuccon, Nalaz Teodorikove četvrtsilikve na lokalitetu Vižula kod Medulina (Istra) (The Find of a Quarter Siliqua of Theoderic at the Site of Vizula near Medulin (Istra)), Num. vij. 41, 1987, 34-42. V. Popović, Un nouveau demi-follis de Justin Ier, Numizmatičar 10, 1987, 85-87, examined a new type of half follis of Justin I (found in Karataš in Serbia) from the mint of Cyzicus. A. Jovanović, Nalaz barbarizovanog tremisisa iz Dobre

vode kod Svetozareva (Der Fund des barbarisierten Tremissis von Dobra voda bei Svetozarevo), *Numizmatičar* 11, 1988, 83-86, published an Ostrogothic tremissis minted in the name of Anastasius.

O. Manzini, "Follis" bizantina rinvenuta a Capodistria in localita "Portisolana", *Atti Cen. Ric. St. Rov.* 13, 1982-1983, 63-64, published a follis of Constantine VII found in Koper (Slovenia). V. Popović, Nouvelles variantes et monnaies rares protobyzantines dans les musées de Serbie, *Numizmatičar* 5, 1982, 125-139, published 17 bronze coins of the 6th century which are all variants to the existing standard literature.

On the basis of the discovery of five solidi of Theodosius II in a house destroyed by fire in Roman fort of Pontes (Kladovo, Srbija) M. Vasić, Nalaz solida Teodozija II u kastrumu Pontes (A Finding of Theodosius II Solids in the Fort Pontes), *Numizmatičar* 6, 1983, 99-112, argued that the border troops were still paid in gold during the first half of the 5th century.

D. Rendić-Miočević, "Illyrico-Pannonice" kao tema legendi u rimskoj numografiji ("Illyrico-Pannonica" in Inscriptions on Roman Coins), *Vjes. Arh. muz. Zag.* 23, 1990, 75-96, devoted his study to the content of the reverse legends on the coins.

Only seldomly was an analysis of a group of coins offered, such as a study which presented a detailed iconographic analysis of the reverse types of the Roman provincial coins of the mint of Viminacium (B. Borić-Brešković, Reversne predstave na novcu kolonije Viminacijum (The Reverse Types of the Colonial Coinage of Viminacium), *Zbor. Nar. muz. Beog.* 12, 1986, 123-197). N. Šipuš, Velika kriza u rimskom carstvu 270. godine (The Great Crisis in the Roman Empire in AD 270), *Num. vij.* 44, 1991, 35-42, discussed DIVO CLAVDIO coins and suggested that the substandard examples are poor copies of Roman legal coinage.

V. Ivanišević, Tumačenje i datiranje fola Vasilija II i Konstantina VIII - vrste A2 (The Interpretation and Dating of the Folles of Basil II and Constantine VIII - Class A2), Zbor. rad. Viz. inst. 27-28, 1989, 19-42, argued that the minting of the second issue of folles of Basil II (dated by Grierson to 976 - 1030/5) should chronologically be placed in the period 1002 - 1010/5. N. Jakšić, Solidus romanatus na istočnoj Jadranskoj obali (Solidus romanatus on the East - Adriatic Littoral), Starohrv. pros. 12, 1982, 173-184, studied the gold coins of Roman III Argyrus (1028 - 1034) which were the main means of payment in Dalmatia, where more than 400 specimens have been found.

More complex studies dealing with manifold aspects of monetary circulation and with the operation of various mints were also published. Ž. Demo, Münzfunde aus der Zeit Gallienus im Gebiet zwischen den Flüssen Sava und Drava (Ein Beitrag zur militärpolitischen, ökonomischen und wirtschaftlich-monetären Geschichte des südlichen Pannoniens um die Mitte des 3. Jh. n. Chr.), Arh. vest. 33, 1982, 258-498, devoted his important contribution not only to the reconstruction of hoards but also to the monetary history of mid-3rd cent. Pannonia. He also studied in detail the operation of the imperial mints of Viminacium and

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province of Pannonia in the mid 3rd century.

M. Vasić, The Circulation of Bronze Coinage at the End of the 4th and Beginning of the 5th Centuries in Moesia Prima and Pannonia Secunda, in: Studia Numismatica Labacensia Alexandro Jeločnik Oblata. Situla 26, 1988, 165-184, examined the monetary circulation in Roman provinces Moesia and Pannonia. Most of the monograph of M. Vasić, Horreum Margi (Ćuprija). Nalazi rimskog bronzanog novca IV i V veka iz municipijuma (Horreum Margi (Ćuprija). Trouvaille des monnaies de bronze de IVéme et Véme siecle en municipe, Beograd 1990, 121 pp., was devoted to the same subject in which some special phenomena, such as imitations and halved pieces, were also considered.

A complex study of all aspects of monetary circulation in the area of the southeastern Alps from prehistory to around 1000 AD was offered by P. Kos, *The Monetary Circulation in the Southeastern Alpine Region (ca. 300 BC - AD 1000)*, Situla 24, 1986, 263 pp.

Some studies were devoted to the operation of various mints. B. Borić-Brešković, Kovanje Filipa II u Viminacijumu i problem VI godine viminacijumske ere (The Coinage of Philip II in Viminacium and the Problem of the VI Year of the Viminacium Era), Numizmatičar 10, 1987, 24-33, has dealt with the problem of the chronology of the local era denoted on coins of the mint of Viminacium. N. Šipuš, "Nepoznata kovnica" rimskog cara Aurelijana (The "Unknown Mint" of the Roman Emperor Aurelian), Num. vii. 41, 1987, 20-30, studied Aurelian's antoniniani with a dolphin as the mint-mark and argued that such coins had been minted in the mint of Thessalonica in five issues. The coins with the same mint-mark were, on the contrary, attributed to the mint of Sirmium, birthplace of Aurelian, by A. Jovanović, Pokušaj lokalizovanja Aurelijanove "neopredeljene" kovnice ili o problemu svoćenja simbola na znak (An attempt of location of Aurelian's "unattributed mint" - or towards the problem of reducing the symbol to the sign), Glas. Srp. arh. dr. 4, 1987, 29-31. N. Šipuš, Brončani novci rimskog cara Aurelijana iskovani u kovnici Sisciji (Bronze Coins of the Roman Emperor Aurelian Minted in the Mint of Siscia), Numizmatika 7, 1988, 46-53, attempted to determine the issues of antoniniani of the mint of Siscia during the reign of Aurelian. N. Šipuš, Antoninijani cara Dioklecijana i njegovih suvladara iskovani u kovnici Sisciji (Antoniniani of the Emperor Diocletian and his Co-Rulers Minted in Siscia), Num. vij. 42, 1989, 31-36, attempted to classify chronologically the antoniniani of the emperor Diocletian and his co-rulers from the Siscian mint.

V. Nenadić, Prilog proučavanju antičke Sisciae (A contribution to the study of Roman Siscia), *Pril. Odj. arh.* 3-4, 1986-1987, 71-102, offered a short uninnovative survey of the operation of the mint of Siscia during the Tetrarchies and of the topography of Siscia.

N. Šipuš, Brončani novci rimskog cara Honorija s kovničkom oznakom "SM" (Bronze Coins of the Roman Emperor Honorius with the Mint-mark SM), Vjes. Arh. muz. Zag. 18, 1985, 77-86, argued that the bronze coins of Honorius of the issue Gloria Romanorum (type 24) with the mint-mark SM were minted in the mint of Siscia. He also showed the stylistic diffe-

rences between the coins of this issue minted in Rome and Siscia. He further described consecrational bronzes of the 'semi-follis' type struck under Constantine in 317/318 (N. Šipuš, Konsekracijski polufolisi kovnice Siscija (Siscian Consecrational Bronze Coins), Num. vij. 38, 1984, 52-56). N. Šipuš, Rimski brončani novci s reversom Spes Reipvblice i njihov opticaj u Posavlju (Roman Bronze Coins with the Reverse Spes Reipublice and Their Circulation in the Sava River Basin), Num. vij. 40, 1986, 36-43, also analysed 169 coins of this type minted in the period 358 - 361 and found in the basin of the Sava River as well as bronze coins minted in Siscia in the period 364 - 378 and found in the same area (N. Šipuš, Brončani novci kovnice Siscija u razdoblju od 364. do 378. godine i njihov opticaj u Posavlju (Bronze Coins from the Mint in Siscia from the Years 364 to 378 and their Circulation in the Sava Valley Region), Numizmatičar 8, 1985, 49-60). P. Kos, The Carthage aes nummi of the first Tetrarchy, in: Studia Numismatica Labacensia Alexandro Jeločnik Oblata. Situla 26, 1988, 99-108, offered a new sequence of the first Tetrarchy issues in the mint of Carthage.

I. Mirnik and Z. Dukat, Nekoliko značajnih kovova prve tetrarhije u Arheološkom muzeju u Zagrebu (Some Notable Strikes of the Diocletianic Tetrarchy in the Zagreb Archaeological Museum), *Vjes. Arh. muz. Zag.* 22, 1989, 77-90, published nine outstandingly rare specimens (8 aurei, one medallion and a quadrans - which, however, they incorrectly attributed to the mint of Siscia) of the first Tetrarchy.

M. R. Vasić, Organizacija kovnice Tesalonike u periodu između 364-378. godine (The Organization of the Mint in Thessalonika in the Period between the Years 364-378), *Numizmatičar* 5, 1982, 45-59, devoted a study to the operation of the mint of Thessalonika in the late 4th century.

Ž. Demo offered two important studies of the operation of the mint of Salona in the late 5th century. In his contribution Nov Nepotov solid salonitanske kovnice (A New Solidus of Nepos from the Mint in Salona), Num. vij. 42, 1989, 41-44, he attributed a solidi of Nepos with a specific obverse legend and lettering with sound arguments to the mint of Salona. More important, still, is his contribution (The Mint in Salona: Nepos and Ovida (474-481/2), in: Studia Numismatica Labacensia Alexandro Jeločnik Oblata, Situla 26, 1988, 247-270), also devoted to the mint of Salona.

Ž. Demo, Einige Beispiele für die Nachahmung antiker Münzen auf der Grundlage von Münzfunden im slawonisch-syrmischen Raum, Vjes. Arh. muz. Zag. 15, 1982, 211-242, presented a study of late Roman imitations which are kept in the Archaeological Museum at Zagreb (The same article was published in Croatian in Arheološka istraživanja u istočnoj Slavoniji i Baranji. Znanstveni skup, Vukovar 6-9. X. 1981., Izd. Hrv. arh. dr. 9, 1984, 175-199). P. Kos, Markomanske vojne - numizmatika in zgodovina (The Marcomanni Wars - Numismatics and History), Zgod. čas. 39, 1985, 277-281, sketched the monetary circulation during the second century in the area of the southeastern Alps and studied the possible impact of the Marcomanni incursion on the coin finds.

# VII. METALLOGRAPHIC ANALYSES

V. Simić and M. Vasić, Composition chimique de la monnaie des mines, *Numizmatičar* 8, 1985, 36-44, presented the results of chemical analysis of the composition of coins of the mines (metalla) of the Balkan area.

V. Simić, O bronzanom novcu kovanom u Sisciji. Analiza hemijskog sastava legura (On Bronze Coins Struck in Siscia), *Numizmatičar* 4, 1981, 73-93, examined the chemical composition of the alloys in bronze coins struck in the mint of Siscia after Diocletian's monetary reform. The X-ray fluorescent method was used for the examination of more than 300 specimens. V. M. Simić, A Chemical Analysis of Copper and Bronze Coins from the Roman Imperial Mint at Sirmium, *Numizmatičar* 5, 1982, 61-78, further analysed with the same method 144 specimens of the mint of Sirmium.

# VIII. GENERAL

- Ž. Demo, Kroz historijat proučavanja istočnogotskog novca (A Look at the History of East-Gothic Coinages), *Num. vij.* 36, 1982, 4-10, presented to the general public a short history of Ostrogothic numismatics.
- P. Kos, Celjski muzej III Numizmatična razstava (Landesmuseum Celje III Numismatische Ausstellung). Kult. in nar. spom. Slov. 112, Ljubljana 1982, 30 pp., presented a survey of coinage in the area of Celje (Roman Celeia) in Slovenia. P. Kos, Denarništvo v antiki na Slovenskem (Coinage in the Classical Period

Dr. Peter Kos Numizmatični kabinet Narodnega muzeja Prešernova 20 SI-61000 Ljubljana in Slovenia), Ljubljana 1990, 32 pp., offered to the general public a short survey of ancient numismatics in a booklet accompanying an exhibition devoted to the same topic.<sup>2</sup>

Analytical table presents the number of authors (column 1) and the number of pages (column 2) published by them during the last eleven years in five republics of the former Yugoslavia. No numismatic contributions were offered from the republic of Montenegro. It should be noted that only articles in periodicals and monographs published in former Yugoslavia were considered.

	Slovenia		Croatia		Serbia			Bosnia and		Macedonia	
1981	4	6	3	85	6	114	Herzeg	owina			
1982	1	23	3	335	7	137					
1983	2	100	4	31	7	127	1	38	3	50	
1984	2	15	6	133	9	283	1	13		20	
1985	1	10	5	78	7	132	1	14			
1986	3	301	5	73	6	159	1	4			
1987	3	27	10	207	8	503			1	21	
1988	2	17	7	161	7	213			1	16	
1989	1	4	6	79	4	62	1	14	1	3	
1990	2	37	3	15	5	178			1	20	
1991	3	149	4	24	7	185			1	6	

It can be stated in summary that during the period under consideration in Slovenia 32.9 pages were published per author/year, in Croatia 21.8 pages per author/year, in Serbia 28.8 pages per author/year, in Bosnia and Herzegowina 7.5 pages per author/year and in Macedonia 8.1 pages per author/year. However, the type of contribution (for instance, analytical study or descriptive catalogue) or the quality was not differentiated.