INTERNATIONAL NUMISMATIC COUNCIL

SURVEY OF NUMISMATIC RESEARCH 2014–2020

VOLUME I & II

General Editors Michael Alram – Jarosław Bodzek – Aleksander Bursche

Sub–editors Roger Bland, Jarosław Bodzek, Mateusz Bogucki, Arianna D'Ottone Rambach, Jérôme Jambu, Dorota Malarczyk, Tuukka Talvio, Peter van Alfen, Helen Wang



Warsaw–Krakow–Winterthur 2022

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ABBREVIATIONS

CACCAMO CALTAB	IANO (2017) CACCAMO CALTABIANO, M. et al. (eds), XV International Numismatic Congress.
	Taormina 2015. Proceedings, vol. I-II (Rome-Messina, 2017).
S	SELLWOOD, D., An Introduction to the Coinage of Parthia, 2 nd revised edition (London, 1980)
SCBI	Sylloge of Coins of the British Isles
SNP	Sylloge Nummorum Parthicorum series (sylloge.org)
AAAD	Antichità Altoadriatiche
AAC	Acta Archaeologica Carpathica
AAL	Acta Archaeologica Lodziensia
ACM	Acta Classica Mediterranea
ACSS	Ancient Civilizations from Scythia to Syberia
ADSO	Archäologie und Denkmalpflege im Kanton Solothurn
ADSV	Античная древность и средние века / Antiquity and the Middle Age
AEAS	Археология Евразийских степей / Archaeology of the Eurasian Steppes
AMA	Античный мир и археология / Ancient World and Archaeology
AMSMG	Atti e Memorie della Società Magna Grecia
ANJ	Armenian Numismatic Journal
Annales du GNP	Annales du Groupe Numismatique de Provence
Annales GNCP	Annales du Groupe Numismatique du Comtat et de Provence
Annales SBNH	Annales de la Société Bretonne de Numismatique et d'Histoire
ArchVesti	Археологические Вести / Archaeological News
ARG	Археология русского города / Archeology of the Russian City
ARWH	Asian Review of World Histories
AS	Archäologie Schweiz
ASNP	Annali della Scuola Normale Superiore di Pisa
BAI	Bulletin of the Asia Institute
BAMM	Bulletin de l'Association des Amis du Musée monétaire cantonale
BBPN	Beiträge zur Brandenburgisch/Preussischen Numismatik
BCNVDS	Bulletin du Cercle Numismatique Val de Salm
BdN online, Mate	riali Bollettino di Numismatica Online
BHA	Bulletin of the History of Archaeology
BICS	Bulletin of the Institute of Classical Studies
BN	Biuletyn Numizmatyczny
BospIssl	Боспорские Исследования / Bosporan Studies
BSNL	Bulletin de la Société Numismatique du Limousin
BUCEMA	Bulletin du Centre d'Études Médiévales d'Auxerre
BVBl.	Bayerische Vorgeschichtsblätter
CAB	The Australasian Coin & Banknote Magazine
Cahiers des thème	es transversaux ArScAn Cahiers des Thèmes Transversaux, Archéologies et Sciences de
	l'Antiquité
CAJ	Central Asiatic Journal
CAR	Cahiers d'Archéologie Romande
CAUN	Cuadernos de Arqueología de la Universidad de Navarra
CCCHBulg	Coin Collections and Coin Hoards From Bulgaria
CCEC	Cahiers du Centre d'Études Chypriotes
ChersSbor	Херсонесского сборника / Chersonesus Journal
СНМН	Curs d'Història Monetària Hispànica

CMCS	Cambrian Medieval Celtic
CN	Cercetări Numismatice
CNL	The Colonial Newsletter
CNRS Transaction	ns Canadian Numismatic Research Society's Transactions
CPMS	Canadian Paper Money Society Journal
CRMH	Cahiers de Recherches Médiévales et Humanistes
CollAn	Colloquium Anatolicum
CSA	Current Swedish Archaeology
DHA	Dialogues d'Histoire Ancienne
DHNAS Magazin	e Dorset Natural History and Archaeological Society Magazine
DNH	Dresdner Numismatische Hefte
DNum	Dialoghi di Numismatica
EJARS	Egyptian Journal of Archaeological and Restoration Studies
ENH	Études de Numismatique et d'Histoire Monétaire
ETF/II	Espacio, Tiempo y Forma. Serie II. Historia Antigua
FAEM	Filologia Antica e Moderna
FAN-Post	Mitteilungsblatt des Freundeskreises für Archäologie in Niedersachsen e.V.
FN	Folia Numismatica
FOLD&R	Journal of Fasti Online Documents & Research
FrMb	Freiberger Münzblätter
GE	Госуда́рственный Эрмита́ж / State Hermitage Museum
GIM	Государственный исторический музей / State Historical Museum
GN	Geldgeschichtliche Nachrichten
GS	Gandhāran Studies
GZN	Gdańskie Zeszyty Numizmatyczne
IBNS Journal	International Bank Note Society Journal
IHR	Indian Historical Review
IIJ	Indo-Iranian Journal
IJAS	Iranian Journal of Archaeological Studies
IJCP	International Journal of Cultural Property
INeN	International Numismatic e-Newsletter
ITMS	Inventaire des Trouvailles Monétaires Suisses
JAAH	Journal of Archaeology and Ancient History
JAEN	Journal of Early American Numismatics
JAH	Journal of African History
JAHA	Journal of Ancient History and Archaeology
JAN	Journal of Archaeological Numismatics
JARCS	Journal of Archaeological Studies
JBA	Journal of Bengal Art
JbAK	Jahresberichte aus Augst und Kaiseraugst
JbAS	Jahrbuch Archäologie Schweiz
JEGMP	Jaarboek van het Europees Genootschap voor Munt- en Penningkunde
JEMAHS	Journal of Eastern Mediterranean Archaeology and Heritage Studies
JIAA	Journal of Inner Asian Art and Archaeology
JINCE	Journal of Islamic Numismatic Center – Egypt
JLA	Journal of Late Antiquity
JMIS	Journal of Medieval Iberian Studies
JNAA	Journal of the Numismatic Association of Australia
JNR	Journal of Numismatic Research

JPU	Journal of Peking University
JRJ	The John Reich Journal
JRMES	Journal of Roman Military Equipment Studies
JSEAS	Journal of Southeast Asian Studies
JSJ	Journal for the Study of Judaism
JSRS	Judea and Samaria Research Studies
KSIA	Краткие сообщения Института археологии / Brief Communications of the Institute of Archaeology
LAMAS	London and Middlesex Archaeological Society Transactions
MAA	Mediterranean Archaeology and Archaeometry
MAIASK	Материалы по археологии и истории античного и средневекового Причерноморья / Proceedings in Archaeology and History of Ancient and Medieval Black Sea Region
MAIET	Материалы по археологии, истории и этнографии Таврии / Materials in Archaeology, History and Ethnography of Tauria
MCSEE	Monedă și Comerț în Sud-Estul Europei
MFRP	Münzfunde aus Rheinland-Pfalz
MING	Mitteilungsblatt des Instituts für Numismatik und Geldgeschichte der Universität Wien
MitV	Mitalitaiteen Vuosikirja
MNO	Московское нумизматическое общество / Moscow Society of Numismatists
NASG	Neues Archiv für Sächsische Geschichte
NCh GIM	Нумизматические чтения Государственного Исторического музея / Numismatic Readings at the State Historical Museum
NGÖ	Netzwerk Geschichte Österreichs
NI Bulletin	Numismatics International Bulletin
NNB	Numismatisches Nachrichtenblatt
NNF-Nytt	Norsk Numismatisk Tidsskrift NNF-Nytt
NN-ZN	Notae Numismaticae–Zapiski Numizmatyczne
NSb	Numismatický Sborník
NumSfraEpi	Нумизматика, сфрагистика и епиграфика / Numizmatika, Sfragistika i Epigrafika
NE	Нумизматика и эпиграфика / The Numismatics and Epigraphy
NZO	Нумизматика Золотой Орды / Golden Horde Numismatics
OZeAN	Online Zeitschrift zur Antiken Numismatik
PAM	Polish Archaeology in the Mediterranean
PCA	European Journal of Post-Classical Archaeologies
PK	Петербургский Коллекционер / Petersburg Collector
PrIsFiKu	Проблемы истории, филологии, культуры / Journal of Historical, Philological and Cultural Studies
PN	Przegląd Numizmatyczny
PovArkh	Поволжская археология / The Volga River Region Archaeology
RAE	Revue Archéologique de l'Est
RAL	Revue Archéologique du Loiret
RAN	Revue Archéologique de Narbonnaise
RAP	Revista d'Arqueologia de Ponent
RassAPiomb	Rassegna di Archeologia. Associazione Archeologica Piombinese
RCAN	Revista de Cercetări Arheologice Și Numismatice
REArm	Revue des Études Arméniennes
RLO	Русь, Литва, Орда в памятниках нумизматики и сфрагистики / Rus, Lithuania, the Horde in the Monuments of Numismatics and Sphragistics
RNA	Revue de Numismatique Asiatique

RPA	Revista Portuguesa de Arqueologia
RTA	Revue Tunisienne de l'Archéologie
RTSENA	Recherches et Travaux de la Société d'études Numismatiques et Archéologiques
RZN	Radomskie Zapiski Numizmatyczne
SAAC	Studies in Ancient Art and Civilization
SCI	Scripta Classica Israelica
SHN	Studia Historica Nitriensia
SKAS	Suomen Keskiajan Arkeologian Seura
SPAAA	Selected Papers on Ancient Art and Architecture
SN	Slovenská Numizmatika
SSN	Schweizer Studien zur Numismatik
SNT	Svensk Numismatisk Tidskrift
SNVE	Средневековая нумизматика восточной Европы / Medieval Numismatics of Eastern Europe
TCS Bulletin	The Token Corresponding Society Bulletin
ТМ	Trésors Monétaires
TNDB	Türk Nümismatik Derneği, Bülten / Turkish Numismatic Society Bulletin
TSHM	Труды Государственного Эрмитажа / Transactions of the State Hermitage Museum
TÜBA-AR	Türkiye Bilimler Akademisi Arkeoloji Dergisi / Turkish Academy of Sciences Journal of
	Archaeology
TÜBA-KED	Türkiye Bilimler Akademisi Kültür Envanteri Dergisi / Turkish Academy of Sciences Journal of
	Cultural Inventory
VAHD	Vjesnik za arheologiju i historiju dalmatinsku / Bulletin d'Archéologie et d'Histoire Dalmate
VAMZ	Vjesnik Arheološkog Muzeja u Zagrebu / Journal of the Zagreb Archaeological Museum
VEEE	Международная нумизматическая конференцая "Эпоха викингов в Восточной Европе в
	памятниках нумизматики VIII-XI вв." / The Viking Era in Eastern Europe in Numismatic Objects
	of the 8th–11th Centuries
VILI	Вестник истории, литературы, искусства / Bulletin of History, Literature, Art
VIN	Veröffentlichungen des Instituts für Numismatik und Geldgeschichte der Universität Wien
VNJ	Victorian Numismatic Journal
VNK	Всероссийская нумизматическая конференция. Тезисы / All-Russian Numismatic Conference.
	Abstracts
WPN	Warszawski Pamiętnik Numizmatyczny
WZN	Wrocławskie Zapiski Numizmatyczne
ZAAK	Zeitschrift für Archäologie Außereuropäischer Kulturen
ZAM	Zeitschrift für Archäologie des Mittelalters
ZGQB	Zhongguo Qianbi 中国钱币 / China Numismatics
ZHF	Zeitschrift für Historische Forschung

GENERAL INTRODUCTION

Michael Alram, Jarosław Bodzek and Aleksander Bursche

We herewith present to readers a *Survey of Numismatic Research* prepared for the XVI International Numismatic Congress Warsaw 2022.

The Survey was created under very different conditions to earlier volumes owing to two key factors: the SARS pandemic and rapid developments in the use of digital tools.

Taking us all by surprise in the spring of 2020, the pandemic resulted in a prolonged and inconvenient lockdown, restrictions on movement, and - the most important factor from our perspective – the need to postpone by a year the XVI International Numismatic Congress, from September 2021 to September 2022. Most libraries were closed for lengthy periods, and only a few made part of their resources available online. In practice, this made it impossible for the authors of the Survey to include any studies of numismatic literature published since 2014. In this situation the Committee of the International Numismatic Council (INC), with the support of the subeditors, took the only practicable decision, namely to extend work by a year. As a consequence, the time period covered by individual studies was increased to seven years (2014-2020). This alone not only considerably increased the workload of the authors and sub-editors but also substantially expanded the volume of the Survey.

The second factor that significantly influenced the shape of the present Survey was the progressing digital revolution, with the introduction of diverse new IT tools to assist the humanities, including extensive and specialized digital and bibliographic database repositories. An additional element to be taken into consideration was the growing cost of printing and distribution, and not least customs dues when sending books abroad.

Interestingly, a survey conducted among MA and PhD numismatics students in several EU countries revealed that almost none of them had ever held a physical copy of the Survey in their hands. They had, however on many occasions used texts they needed from the Survey available online, on Academia.edu, or other digital repositories. The INC has also taken this trend into account and, with the help of The Newman Numismatic Portal, made all the volumes of the Survey accessible online on its website (INC cin (inc-cin.org).

With this in mind, at a joint meeting of the INC Committee and sub-editors it was decided to prioritize the prompt publication in digital form of all the texts included in the new Survey, at the very latest by the first day of the Congress, 11 September 2022. Participants who will take a part in the congress in person will also find them on pen-drives distributed along with the congress materials. For libraries and scholars interested in the traditional paper format we have provided and will continue to provide the "print on demand" option. This will avoid the necessity of carrying heavy volumes while traveling, thereby incurring excess baggage charges, and also avoid shipping costs and possible customs duties. The publication will have a uniform appearance in every country and will be far cheaper than if ordered in its traditional form.

In this way we hope, as we say in Polish, that "the wolf is full and the sheep is whole" or as the English saying has it, "to have our cake and eat it". As in the case of previous editions, the INC Committee established the group of sub-editors of the Survey, and together with the latter carefully selected the group of authors of individual texts from among the foremost specialists in a given subject. Very few of the scholars approached declined, indicating that the Survey continues to enjoy great prestige and popularity within our numismatic community.

For the first time ever, the Congress is being held in a country which lies outside the region traditionally regarded as Western Europe. For many of those attending the Congress this will also be their first visit to this part of Europe. Because of this, the present Survey accords more space than usual to the numismatics of East-Central Europe and Asia.

The task of covering seven years of numismatic research represents a huge challenge, and we were unable to achieve all that we had originally intended. In total the new Survey comprises 15,713 references. This represents an increase of over 3,300 citations since the last Survey. While the general outline of the new Survey mostly follows the proven model, a number of new chapters have been introduced into Section 1, General Numismatics. "Archaeology and Anthropology" by Fleur Kemmers addresses those studies that aim at combining archaeological and anthropological methods in particular within the context of coin finds. The overview focuses on major research issues including the social embeddedness of coinage, coins as material culture and coinage in cult and ritual. Likewise new is Nathan Elkins's chapter on "Provenance and Legal Issues". Increasing numbers of coins are becoming the focus of the illicit art trade, treasure hunting and looting, and this chapter attempts to bring together a representative variety of perspectives and voices dealing with this sensitive topic. It is an important addition to the series about Law and practice regarding coin finds in the Compte Rendu which was started by the INC in the 1990s. The study of ancient weight systems is inextricably linked to coinage, and it is therefore quite remarkable that as yet a chapter on weights and metrological studies has been missing in the Survey. The chapter on "Ancient and Byzantine Weights" by Charles Doyen closes this gap, and demonstrates the impressive developments in this field in terms of new reference works, new analytical methods and new material from the archaeological context.

The digital world has now fully arrived in numismatics. Digital databases of collections, finds, hoards and archival records have not only become an indispensable tool for numismatic research but have also helped to define and answer new research questions. Moreover, it is an important tool for bringing numismatic research to a wider audience. Existing digital projects have been continued and expanded, and numerous new ones added. One of the most important achievements was the inception of Nomisma.org, strongly supported by the INC, which aims at enabling the interoperability of numismatic databases. One very positive trend over the past few years has been the increasing amount of national and international collaboration in the digital field. The chapter on "Numismatics, Computers, and the Internet" summarizes the latest developments.

In order to put the latest developments in numismatic research into perspective it is also necessary to be aware of the history of research in the field. The international FINA project (*Fontes Inediti Numismaticae Antiquae*) studying the history of numismatic research before 1800 has made good progress, and the history of research in the 20^{th} century is also the focus of increasing interest.

Within the framework of Section 2, The Greek World, it is generally observed that coins from excavations are increasingly becoming the focus of scholarly research. Contextualized numismatic information is essential for answering questions about circulation patterns, trade flows, volumes of production and the monetization of ancient economies, and recent research has increasingly addressed these issues. Nonetheless, it should be noted that the vast majority of coin finds lack an archaeological context, a painful demonstration of how much knowledge is lost as a result. Another trend that has become more prominent in recent years are die studies, which provide insight into production processes and are complemented by technological and metallurgical analyses. There is also increased discussion about the role of bronze coins in the local economies, an area that has sometimes received too little attention in the past. A further remarkable development is the increased electronic availability of museum collections and thematic online databases which have meanwhile become indispensable research tools. In addition, the traditional printed museum catalog is still alive and remains an important documentation tool, especially for smaller collections or local museums.

Among the fifteen chapters of the Greek section "Balkanraum und nördliches Schwarzmeergebiet" stands out simply because of the large body of literature collected (850); compared to the last Survey the citations here have almost tripled. In this context reference should be made to the research project *Corpus Nummorum Online* (https://www.corpus-nummorum.eu/) which has had a noticeably stimulating effect. This is an open access numismatic web portal that aims to collect and present Greek and Roman provincial coinage from Moesia inferior, Thrace, Mysia and Troas.

The chapter on Asia Minor is second in place with 398 entries. The manifold research on electrum coinage deserves special mention here. It has changed our knowledge significantly, and has shown, among other things, that electrum coinage continued to flourish even in the early Classical period. Research on Seleucid coinage has also been particularly active. The references have more than doubled and cover a wide range of issues such as excavation coins, hoards, die studies, economic and monetary policies, the role and purpose of coinage and numerous other aspects. The focus of the investigations lies in the west of the Seleucid empire, while the east is less well documented. This is also reflected in the state of research on the coinage of the Graeco-Bactrian and Indo-Greek kings, which, with only 32 entries, still has great research potential that has hitherto been insufficiently exploited.

Section 3 is devoted to Celtic and Roman Coinages. The major research trends are summarized by Roger Bland in his introduction. Celtic numismatics has produced numerous new findings over the past seven years. These result primarily from new coin finds that have brought new types and variants to light and show how limited our knowledge remains. Questions relating to money production, metrology, chronology, the identification of mints and the ethnic attribution of imitation series were also the focus of research interest. In addition, the monetization and Romanization of northern Gaul, the role of money in rural settings and the function of market places within the Celtic economies were examined. The emergence of money among the Gauls and its development over the centuries is a fascinating topic that has been made accessible for a broader audience. Here the new digital research tool Iron Age Coins in Britain (https:// iacb.arch.ox.ac.uk/) deserves special mention.

A particular focus of research in recent years has been the coinage of the Roman Republic, resulting in new handbooks and articles in handbooks, as well as in specialized studies dealing with the technical aspects of monetary activities. Recent coin finds and hoards shed new light on chronological questions and give an insight into the supply of Roman coins to provincial territories. The new findings make it clear that the RRC, the previous standard citation work, is in need of fundamental revision.

There has been an enormous increase in research into the coinage of the early Principate, with citations nearly tripling to a total of 480. In general, the breadth of research topics published from the time of Augustus to Late Antiquity is impressive, and digital resources have assumed great importance. Period studies, studies of specific coin types and their target audiences, mints and their organization, the role of metal resources and monetary policy, the role of imitations produced outside the Empire, as well as die studies and metallurgical analyses have refined our image of Roman Imperial coin production in many respects. Likewise, intensified research into individual coin finds, hoards, coin supply, hoarding patterns, and coins in rural and funerary contexts has provided new insights into coin circulation and coin use inside and outside the Roman Empire. A further positive aspect is that in addition to the numerous catalogs and detailed studies, the numismatic results are also placed in a broader historical, economic and social context. This is all the more important since there are frequent instances of single coins being detached from their numismatic context and thereby misappropriated by other disciplines.

The international RPC project (*Roman Provincial Coinage*) also made great progress during the reporting period: new volumes and supplementary volumes were published, and the material has also been made available online (RPC — Home (ox.ac.uk)).

Section 4, *Medieval and Modern Coinages*, also shows a notable increase in citations compared to the last Survey volume (up from 4,385 to 6,121). In line with research traditions, activities are usually concentrated in the individual countries and regions. This results not least in some articles being published in less well-known and less easily accessible journals. Their inclusion in the Survey is therefore of particular importance.

The general research tendencies already identified in relation to the numismatics of antiquity can also be observed in medieval and modern numismatics. In this section, too, numerous authors have pointed out the sharp rise in the number of coin finds and hoards, which they attribute to the increased prevalence of people using metal detectors. On the one hand, these new finds show us how incomplete our knowledge of the material still is. They give us the opportunity to close typological gaps, to recognize new connections and thus to rewrite individual chapters of our monetary history. On the other hand, they sometimes present us with legal problems, since searching with metal detectors is prohibited in many countries. However, the re-publication of old hoards based on current methods has also led to considerable new insights. One direction of focus has been on the documentation and evaluation of coin finds in European churches, which has shed light on religious practices and the devotional use of coins. In addition to the publications on coin corpora of individual mints, research is increasingly concentrating on contiguous currency areas that extend far beyond territorial borders. In regard to the coinages of medieval Europe (c. 400-1500), the MEC project (Medieval European Coinage) deserves special mention. Two volumes were published in the reporting period (12. Italy. I: Northern Italy; 8: Britain and Ireland) with the result that five of the 20 volumes planned have been published so far. The project brings together highly renowned scholars from various countries to create up-to-date handbooks which are indispensable for any further research. In putting together the most recent results and findings and

placing them in a broad historical and economic context MEC is creating a new picture of the monetary development in the different regions of Europe.

The growth in written sources in the Middle Ages and modern times has also made this type of source the subject of increasing research. Contemporary written sources on coin production, mint organization, legal issues, prices and wages, payment methods, tax issues and other topics related to economic and administrative history give a vivid picture of the world of money. In combination with the systematic analysis of the numismatic sources, this results in exciting new insights and interpretations of economic developments and decisionmaking processes.

It should also be noted that paranumismatica such as tokens, tickets, stamps, counters, seals and devotional objects are no longer disregarded by research.

Numerous numismatic exhibitions were also held during the reporting period which shed light on a wide variety of aspects of monetary history and thus brought numismatics to the attention of a wider audience.

The number of publications collected for *Asian* and *Islamic Coinages* has remained almost the same as in the last Survey (1,657 as compared to 1,612). This section also summarizes the contributions to research on the Sasanians, Kushans, Guptas and "Iranian" Huns, the study of which has made considerable progress.

With 713 citations, the clear focus in this section is, unsurprisingly, on the field of Islamic numismatics, although a decrease in citations compared to the last Survey volume can be noticed (down from 1,149 to 713). Despite the undisputed importance of this field of research today, it should be noted that curatorial posts for Islamic numismatics in many museums and coin cabinets are either completely absent or not filled again when they fall vacant. In general, the focus here is also on the recording and mapping of coin finds, as well as on mint and area studies. The research on the Caucasus region, the circulation of Islamic coins in Eastern Europe during the Viking period, and the study of Golden Horde coinage deserves special mention. Two volumes of the main reference work SNAT (Sylloge Nummorum Arabicorum Tübingen) were published during the reporting period.

Overviews of China, Japan, Cambodia, as well as Malaysia with the Indonesian islands and the Philippines complete the picture (*East and South East Asia*).

Section 5 is dedicated to *Medals* and summarizes research from 15 European countries as well as the USA and Canada (the citations declined from 2,153 to 1,625).

As Tuukka Talvio pointed out in his Introduction it can be observed that curatorial positions at museums are no longer being filled. This is all the more regrettable since the medal, as an important cultural-historical phenomenon, opens up a wide field of research, as underscored by the numerous studies on medal production in certain regions, landscapes and cities, its historical context and use as propaganda, and its clients and recipients published in this reporting period. Another focus is on monographic studies on the life and work of individual artists, mint masters and engravers. In addition, medals always constitute an important element in cultural and art-historical exhibitions. In 2018 medals played a major role in numerous exhibitions commemorating the centenary of the First World War.

The art of the medal is still very much alive. The catalogs accompanying the biennials of the international medal society FIDEM in Sofia in 2014, Ghent and Namur in 2016, and Ottawa in 2018 provide an insight into contemporary medal art.

Finally, we would like to thank everyone who made the publication of the new Survey possible. First and foremost, thanks are due to the authors, who summarized and commented on seven years of numismatic research under the most difficult of conditions. We also owe a great deal of thanks to the sub-editors, who were in constant contact with their authors, wrote the appropriate introductions and edited the individual sections. We also thank our colleagues on the INC Board, who made language corrections where necessary. Last but not least we warmly thank our Polish colleagues who carried out the final editing and prepared the manuscript for publication, first of all Barbara Zając and Dariusz F. Jasek.

GUPTAS AND (IRANIAN) HUNS

Pankaj Tandon

The last seven years have been highly fruitful for research on the Guptas and Iranian Huns. New advances have been made in identifying new coin types and varieties, much progress has been made in properly attributing coins, and new interpretations of both the coins and the history have been put forth. In addition, there has been new information on hoard finds. In what follows we will first consider the Guptas and then the Huns. The first few pages will provide an overall summary of the most important research findings, to be followed by detailed accounts and reviews of individual publications.

Research on the Guptas

Perhaps the most widely followed and discussed event in Gupta numismatics in this period was the publication of the first new catalogue of Gupta coins since 1957 (KUMAR (34)). This book brought to notice many new varieties of Gupta coins. Some of its suggestions have been challenged and remain controversial (TANDON (60)); nevertheless, this was an important addition to the literature. It gathered together data on a very large number of Gupta coins, surveyed the literature, and performed XRF analysis on a reasonably large sample of gold coins. TANDON (50, 60) identified new types of gold dinars of the king who has come to be called Candragupta III. A remarkable new coin type published within the last seven years was the silver drachm of the madhyadeśa type of the Gupta prince Ghatotkaca (SINGH (49)).

In terms of proper reattributions of coins, undoubtedly the most important was the discovery that the king known as Prakāśāditya and almost uniformly thought to be a Gupta king was in fact the Hun king Toramāṇa (TANDON (55)). This conclusion had been speculated by Göbl but had never been proven and had not gained wide acceptance. The question, however, can now be laid to rest. The discovery allows for the reattribution of a number of other coins to Toramāṇa (TANDON (59)) and his Hun successors. We now know that the Huns issued far more Gupta style coins than we had previously thought.

BAKKER (13) made the case that the repoussé coins in the name of Mahendraditya were not issues of the Gupta king Kumāragupta I, as has become a popular belief recently (KUMAR (34)) but of a Sarabhapuriya king. He also provided a fresh interpretation of the Apratigha type coin of Kumāragupta, arguing that it was issued early in his reign and depicts him with his parents as a sort of "pedigree" type. Bakker argues that Kumāragupta displaced the "rightful" heir Govindagupta and therefore needed to proclaim that he had his parents' blessing. RAVEN (40) also argues that this type was issued early in the king's reign.

KUMAR (34) also made some bold re attributions of coins previously thought to be issued by Candragupta II to Candragupta I. However, many scholars believe that Candragupta I never issued any gold coins, and this view was taken up strongly by TANDON (60). Indeed, this latter paper made a case to reattribute some more coins of Candragupta II to Candragupta III, making that king far more important than previously realized. In a series of papers, TANDON (50, 53, 56) fleshed out the coinage of this king and argued that his true identity is Purugupta, the only known legitimate son of Kumāragupta I.

Of course, these reattributions involve reinterpretation of the coins. In the vein of reinterpretation, KUMAR (33) argued that the so-called "standard" or "sceptre" type of Samudragupta has been labeled incorrectly. Instead, most of these coins should be called the javelin type although this conclusion can be challenged (see review below). RAVEN (40, 41, 42) published a series of papers providing further details of her "mint idiomatic" approach to the organization of Gupta coins. This approach remains difficult for most non- art historians to implement but nevertheless is the most promising idea for understanding the structure of the coinage.

SINGH (48) and BANIK (19, 20) report on a new hoard of Gupta gold coins found in Murshidabad. MAJUMDAR (35) published a remarkable piece of detective work: an attempted reconstitution of the first known hoard of Gupta

coins, the Kalighat hoard, originally found in 1783 and dispersed shortly thereafter.

Finally, important new work on the details of Gupta history, particularly in their interaction with the Huns, appeared during this period. BAKKER (10, 16) brought together inscriptional and archaeological evidence to provide a detailed account of the various wars fought by the Guptas and Huns. TANDON (52, 59) attempted to incorporate numismatic evidence into this new historical account.

Research on the Huns

Perhaps the most important piece of work produced on the Huns in the last seven years is the source book edited by BALOGH (18). This remarkable book, an output of the Beyond Borders research project funded by the European Research Council, has gathered together all the primary sources in all languages available to study the Huns. While the classical sources and even the Chinese sources have been relatively well known and well studied, the bringing in of material in other languages such as Armenian, Bactrian, Sogdian, and others is a game changer in this research area. Scholars will be able to draw from this remarkable source for years to come.

Several important new catalogues of Hun coins were also published during these past seven years. The catalogue by JONGEWARD AND CRIBB (30) of the Kushan coins in the collection of the American Numismatic Society also included the coins of the Kidarite Huns, thereby becoming the first major catalogue of the coins of the Iranian Huns since the seminal work of Göbl. The works of PFISTERER (38) and VONDROVEC (62) were also published during this time. These catalogues not only record examples of new and newly discovered coin types but also push forward our understanding of the Hun coinages. TANDON (51) proposed a different approach to the reorganization of Hunnic coins based on the Schøyen inscription, but so far this approach has not been brought to fruition.

It is worth mentioning also the catalogue by FISHMAN AND TODD (27) of the small silver coins of western India called *dammas*. Many of these coins have been thought to be Hunnic, but Fishman and Todd argue against this attribution. They think that the coins thought to be Hunnic were in fact issues of the Rai dynasty and the rulers of Chach.

The new catalogues naturally also present new surveys of Hun coins and history. Several other such surveys have been published in addition, the most notable one being the exhibition catalogue ALRAM (6). This catalogue, which is also available online in English, accompanied an important exhibition of Hun coins held in Vienna from late 2012 to early 2014. Other surveys include ALRAM (2, 3), ALRAM ET AL. (9) and REZAKHANI (45).

Coming to more detailed studies attributing coins and publishing new types, perhaps the most significant piece of research was the discovery, already mentioned in the context of the Guptas, that the supposedly Gupta king known as Prakāśāditya was in fact the Hun king Toramāņa (TANDON (55)). This discovery opened up the reattribution of other coins to Toramāņa, such as the Archer type coin in the name of Prakāśa in the Lucknow Museum, which directly led to the reattribution of the so called Nameless coins of the Archer type to the Huns (TANDON (57)). A review of some of these discoveries is in TANDON (59).

Another very significant piece of research was that of DEYELL (25, 26), who argued convincingly that the coins in the name of *Pratāpa* and thought to be Kidarite coins, were in fact issued by the well known Indian king Harṣavardhana and his father Prabhākarvardhana. The reorganization and renewed understanding of the so called Kidarite coins of Kashmir, highlighted by Deyell's work, was also pushed forward by CRIBB (22) and CRIBB AND SINGH (23). One of the potential consequences of this research is the possibility that the Kidarites and Alchon may have been the same people.

A few new hoards of Hun Coins were published. These include a hoard of Kidarite style coins found in northern India published by CRIBB (22), a hoard of 145 copper coins, mostly of Khingila, found in Pushkalavati and published by TANDON (58), a hoard of 17 coins of Mihirakula found in the salt range region and published by ALRAM (7), and a hoard of Hephthalite coins studied by HEIDEMANN (29). These coins were all versions of Göbl type 287 and Heidemann argues that they are all from the mint of Balkh.

Perhaps the most important research concerning the Iranian Huns from the past few years is not directly about the coins but about their history, for which coins provide some material evidence. Of these, the most compelling work is that of BAKKER (10, 16), who combines new readings and interpretations of inscriptions with coins and other material evidence to argue that the Huns waged a succession of wars in India during the late 5th and early 6th centuries. One series of wars was probably associated with the invasion of India by Toramāṇa sometime in the last decade of the 5th century. A remarkable suggestion made by BAKKER (16), which this author finds very convincing, is that the capital

from where he launched his invasion was in the area of the modern town of Akhnur, on the banks of the River Chenab. Starting from here, Toramāņa moved through northern India, through Haryana and Kauśāmbī, to take possession of Mālwa and probably parts of modern Gujarat. These wars ended with a Hun defeat at the hands of Prakāśadharman in the early 6th century. The second set of wars are associated with Toramāņa's son Mihirakula, who presumably had re-conquered parts of his father's lost kingdom but then suffered defeat at the hands of Yaśodharman. TANDON (52, 59) has elaborated on this reconstructed history, arguing on the basis of Indian sources that Toramāņa left Mālwa to invade the Gupta heartland in eastern Uttar Pradesh, defeated the Guptas, and subsequently died there, most likely of natural causes.

BAKKER (11) also further buttresses an argument made earlier by de la Vaissière that the place called Tālagān in the Schøyen inscription as the place where the scroll was created was not Tālaqān near Kunduz, as Melzer had suggested, but Tālagang in the Salt Range. Bakker does so by identifying other places that pertain to the inscription and that are in the vicinity of the Salt Range. Given that de la Vaissière's argument was already persuasive, Bakker's evidence renders the suggestion virtually certain.

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