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NUMISMATICA ANTICA E MEDIEVALE. STUDI

11

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**Too Big to Study?**  
*Troppo grandi da studiare?*

Seminario internazionale di studio  
Trieste, 17-19 maggio 2018

**Edited by**  
**Bruno Callegher**



UNIVERSITÀ  
DEGLI STUDI DI TRIESTE  
Dipartimento di Studi Umanistici



Conseil International de Numismatique CIN  
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## PREFACE

Enormous coin hoards have always been discovered, and very large quantities of coins are also found in archaeological excavations carried out in urban areas. All these great amounts of coins can be dated either to a restricted period or distributed along many centuries. However, these findings put the researchers in front of complicated issues mainly concerning the methodology of their study, which necessarily conditions the results of the numismatic research. We should refer, for example, to a series of important large coin discoveries such as the Misurata's hoard, the Tomares's hoard, the Roman hoard of Frome in Somerset, the Celtic hoard buried near Seaton Down, as well as the well-known Čentur hoard. The modern coin finding of The Big Sky Hoard in Montana, Eisenhower \$ is also very interesting. In all these cases it is/was not really easy to examine such large monetary findings. How to deal with them? How many time can we dedicate to this kind of studies? In fact, we have several options: a full study or a partial research, or also a statistical survey and archeometric or georeferenced analysis.

Several colleagues who agreed to discuss this topic met in Trieste between 17<sup>th</sup>-19<sup>th</sup> May, 2018 at the Department of Humanistic Studies of the University of Trieste (see the *Appendix* with abstracts of communications). It should be remembered that the conference program was realized under the kind patronage of the International Numismatic Council and the Friuli Venezia Giulia Museum Centre, which we would like to sincerely thank.

The speakers of the first session of the meeting dedicated their studies to the complexity of the argument and the abundance of the material to be analyzed, but also to the potential of large numismatic collections of some museums, such as, for instance, the National Archaeological Museum of Aquileia or the Red Castle of Tripoli (Libya), the historical-numismatic collection of the Kunsthistorisches Museum of Vienna and even a (only) apparently marginal collection of the Museo Histórico Nacional of Parque Lazama in Buenons Aires. Among the biggest archaeological finds of coin hoards, including many thousands of specimens, were examined and discussed especially the case-studies of the treasures of Le

Catillon II (Jersey Museum), The Frome (British Museum), Porte Chaioullet à Troyes (France) (Tetricus I and Tetricus II), Saint Germain-lès-Arpajon (France), Juillac-l'Isle-Jourdain Gers (France), El-Zaudín-Tomares Sevilla (Spain), Misurata (Libya), Saint-Germain-de Varreville (France), Čentur-Maresego (Slovenia), Al-Djem (Tunisia), Reka Devnia (Bulgaria), Dzierżnica (Poland), Haza del Carmen/Cruz Conde y Jaén (Spain), finally concluding with the Medieval hoard called “Aiello” now preserved at the American Numismatic Society. Such a significant exemplification has allowed to develop and put in evidence different methodologies of research, from the 3rd century B.C. up to Middle Ages, with interesting cases concerning also Islamic coinage at the fringes of the Mediterranean area (Spain) and along the European eastern border, in Poland.

During the third session, the projects still in progress were clearly illustrated by gathering a large amount of numismatic data, in particular, the Coin Hoards of the Roman Empire of the Ashmolean Museum and the Oxford Roman Economy Project of Oxford University, the Database of Roman Coins in the “Barbaricum” and also the great relevance of the Cyrenaica Database for the protection and study of ancient coins that unfortunately have undergone a process of dispersion as consequence of war events.

There are, of course, some statistical and mathematic contributions, essential tools for the study of ancient dies applied, in a specific case-study, to the Roman “victoriatus”, but also in more general terms through the implementation of mathematical-statistical methods used in presence of large quantities of coins.

Great coin numbers, different methods, exemplary projects, therefore, have merged in the final debate: “Big is beautiful?”, with the consequent question: “Faut-il VRAIMENT étudier les ‘mégadépôts’ monétaires?”.

This is exactly the crucial question that marked the three days of discussion, and this is reflected in the Proceedings, where almost all the contributions made by those who had given their adhesion are collected, some of them in fact were unable to personally intervene during the conference due to sudden difficulties in flight connections.

The present writer has had the opportunity to appreciate the frankness of the discussion, the deep common interest in the projects still underway and believes that the publication of the various reports will contribute to the common research in the study of ancient and medieval currency as a primary source of history and economy.

Finally, I would like to state that a confident serenity always characterized our days in Trieste; for this reason, too, I deeply express my thanks to everyone, with a friendly remembrance.

*Bruno Callegher*  
*University of Trieste*





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UNIVERSITÀ  
DEGLI STUDI DI TRIESTE  
Dipartimento di Studi Umanistici



Ministero dei beni e delle  
attività culturali e del  
turismo  
Direzione Generale Musei  
Polo museale  
del Friuli Venezia Giulia

**MUSEIFVG**

POLO MUSEALE DEL FRIULI VENEZIA GIULIA



*Associazione Nazionale per Aquileia*



Società Istriana di Archeologia e Storia Patria  
Trieste

# Troppo grandi da studiare? Too big to study?

Seminario internazionale di studio  
International workshop-seminar

**Trieste, 17-19 maggio 2018**

**Trieste, 17-19 May 2018**

Dipartimento di Studi Umanistici

Università di Trieste

via Lazzaretto Vecchio 8, aula 6 - III piano/floor



## Giovedì 17 maggio/Thursday 17<sup>th</sup> May

15.30-16.00

**Academic Authorities**

**Lucio Cristante**

Dean of Department of Humanistic Studies

**Michele Pipan**

Delegate of Research of the University Trieste

**Luca Caburlotto**

Polo Museale Friuli Venezia Giulia

*Welcome / Saluti*

16.00-16.30

**Chiara Cecalupo & Axel Alt**

(ISMA-CNR, Roma & Museo Histórico Nacional, Buenos Aires Argentina)

*Le monete antiche del magazzino del Museo Histórico Nacional di Parque Larzama, Buenos Aires Argentina*

16.30-17.00

**Andrea Stella**

(Post Doc Researcher, Università di Trieste)

*Too Big to Study? The numismatic collection in the National Museum of Aquileia*

17.00 -17.30

**Michele Asolati**

(Università di Padova)

*Tracce della tesaurizzazione monetaria d'età antica nell'esposizione archeologica al Castello Rosso di Tripoli (Libia)*

*Coffee break*

18.00-18.30

**Klaus Vondrovec**

(Münzkabinett, Kunsthistorisches Museum, Wien)

*Cleaning up 500 years of collecting (The coin cabinet of the Kunsthistorisches Museum in Vienna)*

18.30-19.00

**Ermanno Arslan**

(Accademia dei Lincei, Roma)

*Subject to be defined*

20.30 *Welcome dinner: da Pino - riva Ottaviano Augusto, 2B - Trieste*

## Venerdì 18 maggio/Friday 18<sup>th</sup> May

9.00-9.30

**Neil Maher & Georgia Kelly & Le Quelenec Victoria**

(Jersey Museum, Jersey Heritage, Great Britain)

*Le Catillon II: conserving the world's largest Iron Age hoard*

9.30-10.00

**Gaëlle Thévenin**

(Laboratoire Orient et Méditerranée – UMR 8167)

*A lost Alexander Hoard from Gaza Strip/ Palestine*

10.00-10.30

**Sam Moorhead**

(The British Museum, London)

*The Frome hoard - how massive hoard changes everything*

*Coffee break*

11.00-11.30

**Marie-Laure Le Brazidec**

(Chercheur-numismate associé à l'UMR 5140 du CNRS, Montpellier)

*Le trésor de la Porte Chaillouet à Troyes (France), plus important dépôt d'imitations de Tétricus I et II: de la fouille à l'étude préliminaire*

11.30-12.00

**Vincent Drost**

Independent researcher

*The Saint-Germain-lès-Arpaion hoard and other "big" radiate hoards from France*

12.00-12.30

**Francis Dieulafait**

(HADES - Bureau d'investigations archéologiques, Toulouse)

*Le trésor de nummi découvert à Juillac (L'Isle-Jourdain, Gers - France) – Une méthodologie d'inventaire*

*Free Lunch*

15.00-15.30

**Navarro Anna & Francisca Chaves Tristán**

(Museo Arqueológico-Universidad de Sevilla & Universidad Sevilla, Facultad de Geografía e Historia. Dpt. de Arqueología)

*Proyecto y realidad en el tesoro de "El Zaudín" (Tomares, Sevilla). I: Protección y Conservación. II: Estudio*

15.30-16.00

**Salvatore Garraffo**

(CNR, Catania)

*Il tesoro di Misurata (Libia): un banco di prova per lo studio e la pubblicazione dei rinvenimenti di grandi dimensioni*

16.00-16.30

**Pierre-Marie Guihard & Guillaume Blanchet**

Centre Michel de Boüard-CRAHAM UMR 6273, Université de Caen Normandie, France

*«Pour une approche globale?» Le dépôt de 14528 nummi du IV<sup>ème</sup> siècle de Saint-Germain-de-Varreville (Normandie, France)*

16.30-17.00

**Antony Hostein**

(EPHE – Ecole Pratique des Hautes Etudes – Université PSL Paris)

*Les "gros" dépôts monétaires en contexte. L'exemple de la Gaule du Centre-Est (Ier-Ve s. ap. J.-C.)*

*Coffee break*

17.30-18.00

**Bruno Callegher & Manuela Montagnari & Andrea Favretto**

(Dipartimento di Studi Umanistici - Università di Trieste)

*Centur (Maresgo) Hoard. Thousands of folles of Tetrarchy around the World: for a potential reconstitution*

18.00-18.30

**Zakia Loum**

(Bardo Museum and Faculty of Humanities, University of Tunis)

*Le trésor de Al-Djem*

18.30-19.00

**Cristian Gazdac**

(Ashmolean Museum - University of Oxford)

*Small board, large hoard? The categories of boards by size on the Middle and Lower Danube in the light of the "Coin Hoards of the Roman Empire" Project*

20.30 *Dinner: Ristorante Ai Fiori, piazza Attilio Hortis, 7 - Trieste*

## Sabato 19 maggio/Saturday 19<sup>th</sup> May

9.00-9.30

**Luca Gianazza**

(Engineer, Independent Researcher)

*Applying Statistics and Computer Science to the study of big coin finds: an engineering approach*

**9.30-10.00**

**Aleksander Bursche & Kyrlo Myzgin**

(University of Warsaw, Institute of Archaeology)

*Big Hoards of Roman coins from Barbaricum and data-bases*

**10.00-10.30**

**Alessandro Cattaneo**

(Università di Padova)

*From reality to virtuality. A Database for the Cyrenaican specimens from numismatic trade*

*Coffee break*

**11.00-11.30**

**Pierluigi Debernardi**

(Independent Researcher)

*Studio dei conii di grandi emissioni: applicazione ai vittoriati*

**11.30-12.00**

**Marguerite Spoerri Butcher**

(Ashmolean Museum, University of Oxford)

*Reka Dervia (Bulgaria): the challenges of creating a digital dataset of 80,000 coins published in 1934.*

*And: how representative is this hoard?*

**12.00-12.30**

**Robert Kool**

(Israel Antiquity Authority, Jerusalem)

*Too Large to Handle? The Forgotten early Ottoman-period shipwreck hoard of Megadim on the Carmel Coast.*

*Free Lunch*

**15.00-15.30**

**Dorota Malarczyk**

(Numismatic Cabinet, National Museum in Krakow, Poland)

*Islamic coins in the early medieval hoard-silver board Dzierżnica II from Greater Poland*

**15.30-16.00**

**Alberto Canto Garcia**

(Dpt. Prehistoria y Arqueología - Campus Cantoblanco, Madrid)

*Hallazgos de moneda islámica en al-Andalus: los casos de Haza del Carmen, Cruz Conde y Jaén (Córdoba, España)*

**16.00-16.30**

**Andrea Saccocci**

(Università di Udine)

*Il ripostiglio 'Aiello' di c. 5400 'intrattabili' denari veronesi (secc. XII-XIII)*

**16.30-17.00**

**Jean-Marc Doyen**

(Laboratoire de recherche Halma – Histoire, Archéologie et Littérature des Mondes Anciens – UMR 8164. CNRS, Université de Lille [SHS], MCC)

*«Big is beautiful?» Faut-il VRAIMENT étudier les «mégadépôts» monétaires?*

**17.00-19.00**

**Discussion & Conclusion**

*20.30 Farewell dinner: Il Posto delle Fragole, close to the "rose garden" on the hillside, via Guglielmo De Dadrovich, 4 - Trieste*

*Bus n. 17/ piazza Tommaso  
Terminal bus: S. Cilino*

I ripostigli monetali di grandi dimensioni (decine di migliaia di esemplari) pongono lo studioso di fronte a quesiti spesso di non facile risposta. Come affrontarli? Si oscilla, infatti, tra la scelta di uno studio completo, le ricerche per sezioni o una campionatura statistica senza trascurare altri tipi di indagini (archeometria e georeferenziazione).

The study of extremely large coin hoards (that is, hoards including dozens of thousands of items) faces researchers with significant methodological challenges. Besides being studied in their entirety, such large hoards may be analyzed through a variety of methods, including statistical sampling, the study of specific item selections and other approaches such as archaeometry and georeferencing.

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ANDREA STELLA

University of Trieste, Department of Umanistic Studies

## TOO BIG TO STUDY? THE NUMISMATIC COLLECTION IN THE NATIONAL MUSEUM OF AQUILEIA

### *Abstract*

*This contribution try to provide for the first time an extensive historical survey of the coin cabinet of the National Museum in Aquileia. Details are given about how and when this collection was formed and the features of its different sections are examined as well. Thanks to the inventory lists, is possible to know that by the end of the First World War more than 60,000 coins were already part of the collection. Since the entire assemblage of the 20th century still needs a detailed survey, the real amount remains undetermined but a total number of 80,000 specimens, or more, is to be expected. For this reason, after Rome itself, Aquileia features the greatest archaeological numismatic collection in Italy and one of the more prominent in the entire Mediterranean area. Since the collection is up to day largely uninvestigated, a methodological approach is proposed as well to deal with such a large amount of data to be recorded. This work has to be undertaken in the future in order to provide a unique set of data concerning coin finds and to convey to the large public, in the best way, one the most important collections held in the National Museum of Aquileia.*

### *Keywords*

*Aquileia, numismatic collection, coin finds*

Aquileia, the 9th among the most important Roman cities of the Roman Empire according to Ausonius<sup>1</sup>, is well renowned since the beginning of the Modern age as a gold mine of archaeological artefacts, especially ancient coins. Ercole Partenopeo, an 18th century erudite once stated that “ad Aquileia si trovano tante monete come fossero state seminate”<sup>2</sup> and Giandomenico Bertoli, founder of the archaeological science in Aquileia, once declared that he used to collect 1,500 coins every year<sup>3</sup>. Such words well highlight the potential of this site as regards coin finds and reflect the importance of the numismatic collection kept in the local National Museum. In fact, after Rome itself this assemblage is the greatest in Italy and one of the most important in the entire Mediterranean area, formed of finds coming almost exclusively from the area of the ancient city, with a very few exceptions. Nevertheless, it still remains largely uninvestigated.

## A BRIEF HISTORY

Since the 18th century large private archaeological collections had been formed in Aquileia, featuring a large amount of ancient coins. So far, we have no evidence that pieces coming from these very first gatherings are today hosted in the National Museum. In fact, among the most important ones, the Bertoli numismatic collection was entirely sold by 1759<sup>4</sup>, the Zannini collection of coins and gem stones found its way to Wien in 1826<sup>5</sup> and the Zandonati archaeological collection, including 9,000 coins, moved to Trieste in 1870 after the death of its owner<sup>6</sup>. Indeed, the Austrian Government, in that time Aquileia was still part of the Habsburg Empire, made great efforts to secure every local find of coins to the royal cabinet, thanks to a special legislation, from the end of the 18th to the middle of 19th century<sup>7</sup>.

The birth of public exhibitions in the second half of the 19th century, after a first attempt at the beginning of the same century<sup>8</sup>, marks the very turning point in the de-

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<sup>1</sup> Auson. 9, 64-72.

<sup>2</sup> Gorini 1984, p. 286.

<sup>3</sup> Buora 1993, p. 154.

<sup>4</sup> Giovannini, Maselli Scotti 2009, pp. 37-40 with further bibliography. On the numismatic collection see Devilla 1992; Buora 1993, pp. 153-159; Devilla 1994.

<sup>5</sup> Giovannini 2007, pp. 261-263.

<sup>6</sup> On this collection and its owner see Bravar 1993; Casari 2015.

<sup>7</sup> Giovannini 2007, pp. 234-235. See Noll 1983 on the antiquities from Aquileia kept nowadays in Wien.

<sup>8</sup> For the Museum Eugenio, the first public museum in Aquileia, founded in 1806 by Leopoldo Zuccolo see Giovannini 2004, cc. 464-466.

Recapitulation		
Münzen aus	Gold	Stück 7
dtto	" Silber	" 291
dtto	" Billon	" 92
dtto	" Bronze	" 744
dtto	" Blei	" 2

Aguileja um 15 September 1886

**Picture 1 – Summary of the numismatic collection belonging to the “Museo Patrio”, merged into the Royal Imperial Museum in 1883**

velopment of the present Museum collection, including the numismatic one. After its establishment in 1882, the National Museum, at that time Royal Imperial Museum, became for the first time an institutional gathering point for many archaeological finds which were deliberately collected by local land owners and otherwise sold on the antiquarian market<sup>9</sup>. Beside the foundation of a public exhibition, the institution of a control committee over private archaeological investigations, the Zentral Kommission<sup>10</sup>, prevented as well, to some extent, the dispersion of ancient artifacts of local provenance. Before the establishment of the national Museum, a civic exhibition was opened in 1873; this included a numismatic collection of 1,168 pieces<sup>11</sup> afterwards merged into the main institution in 1883 (pic. 1)<sup>12</sup>.

<sup>9</sup> Giovannini 2007, p. 233.

<sup>10</sup> Buora, Pollak 2010; Giovannini, Maselli Scotti 2009, p. 42.

<sup>11</sup> The so called “Museo Patrio”; Giovannini 2016. See also Giovannini 2007, pp. 284-302; p. 284 and p. 295 for the numismatic collection.

<sup>12</sup> Giovannini 2004, cc. 467-472; Giovannini 2007, pp. 303-307.

16277/79	"	"	"	143	m. 30	PB 8
16280	"	"	"	144	m. 40	"
16281/85	"	"	"	129	m. 23	PB
16286/87	"	"	"	130	m. 29, 30, 31	"
16288/89	"	"	"	181	m. 24	"
45.745 - 16290/92	"	"	"	211	m. 15	PB 6

n. 5746  
 57809  
 Oggetti della Rassegna di  
 n. 2164

Picture 2 – A section of the new inventory of the 19th century collection issued in 1919/1920.  
On the left the total amount of 16,292 coins is visible

So, the official birth of the coin cabinet took place under the direction of Enrico Maionica, head of the Museum between 1882 and 1913<sup>13</sup>. Through archaeological excavations and especially acquisitions from private owners he managed to put together 16,292 coins of local provenance, still today part of the coin cabinet (pic. 2)<sup>14</sup>.

The first World War constitutes another key moment in the history of the collection for two main reasons<sup>15</sup>. Firstly, a selection of precious small finds, including 1,617 stone gems and coins, was sent to Wien soon after the war declaration in April 1915<sup>16</sup>. The envisaged final destination was the Austrian Archaeological

<sup>13</sup> Giovannini, Maselli Scotti 2009, pp. 42-45.

<sup>14</sup> From 1884 the State Museum had the right of preemption over archaeological artifacts privately excavated; Giovannini 2007, pp. 516-517. In his guide on the Royal Imperial Museum, in which a survey on the numismatic exhibition is present, Maionica doesn't give informations about the collection by that time; Maionica 1911, pp. 95-96.

<sup>15</sup> Giovannini, Maselli Scotti 2009, p. 46; Giovannini 2015a.

<sup>16</sup> Giovannini 2015b, pp. 332-341.



Institute but after the end of the war, Italian authorities managed to find the missing collection in the University of Czernowitz in Romania. In 1920 these materials returned to Aquileia in its entirety as proved by the survey carried out by Celso Costantini, head of the museum from 1919 to 1920, in cooperation with Giovanni Brusin, future director from 1922<sup>17</sup>. The second and most affecting consequence of the first World War on the numismatic collection of Aquileia was the activity of the Italian authorities once they took over the modern town and the archaeological site in 1915. Between June and October 1915 one of the first efforts of Ugo Ojetti, appointed by the Italian government to supervise the antiquities of Aquileia, was an entire new inventory of the museum collection<sup>18</sup>. In this occasion the old numeration related to the so called *Accesionjournal*, the inventory book drawn up by Enrico Maionica during his direction, was completely deleted and replaced by a new one. In this way all data concerning the findspot of all the archaeological artifacts which were part of the Museum collection by that date, including coins, got almost irremediably lost.

The 20th century saw a remarkable increase of the collection thanks to new acquisitions and archaeological investigations<sup>19</sup>. Giovanni Brusin, head of the Museum between 1922 and 1953, undertook large excavations in several sectors of the ancient city such as the Roman forum and the harbour on the river Natissa, today among the most famous archaeological attractions in Aquileia<sup>20</sup>. In his report *Gli Scavi di Aquileia* some sections are devoted to the small finds, including coins, recovered in the different areas investigated<sup>21</sup>. Nevertheless, for the numismatic collection the most prolific time of the 20<sup>th</sup> century came under the direction of Luisa Bertacchi (1959-1989)<sup>22</sup>. On the one hand, she managed to purchase a significant number of coins in a period in which the introduction of new agricultural techniques (deep ploughing) led to an outstanding abundance of archaeological finds<sup>23</sup>. On the other hand, for the first time ancient artifacts recovered in excavations were systematically collected, as opposed to the past when only precious finds were considered<sup>24</sup>. This new approach, combined with the extensive archaeological investigations carried

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<sup>17</sup> An inventory list resulted from this survey whit a section devoted to gold coins is preserved in the archive of the National Museum; Giovannini 2015a, p. 338.

<sup>18</sup> Ojetti 1964, 64, 150; Buora 1999, 46-47, 49-50; Giovannini 2007, p. 537, note 93.

<sup>19</sup> On the coin cabinet in this time see Brusin 1929, 185-189.

<sup>20</sup> On the work of Giovanni Brusin in Aquileia see Burtulo, Fogolari 1977; Argenton 1989; Scrinari 1993.

<sup>21</sup> Brusin 1934.

<sup>22</sup> Gorini 2015.

<sup>23</sup> Bertacchi 1993, 238; Giovannini 2015b, 166-168; Gorini 2015, 201.

<sup>24</sup> Bertacchi 1993, 237.

out between the '60s and '80s<sup>25</sup>, led to a significant further growth of the numismatic collection of the National Museum. Eventually Luisa Bertacchi arranged for the first time a scientific numismatic exhibition featuring more than 5,000 specimens<sup>26</sup>.

In the 21<sup>st</sup> century ancient coins are still found in Aquileia in great quantity, mostly thanks to archaeological investigations, both rescue or planned excavations meaning the discovery of several, sometimes hundreds of, coins every year. These new materials are of the greatest importance since they are retrieved according to a scientific methodology, helping us to analyze the monetary circulation and the function of coins in Roman Aquileia under a new light. Nonetheless, the real challenge is still the recording of the great collection kept in the National Museum, a terrific assemblage of coin finds which is still largely unknown to us.

## STRUCTURE AND FEATURES

To the best of our knowledge, the numismatic collection in Aquileia can be divided into three main sections, each one formed in different times and with different features.

The first one represents the historical collection, the oldest, which was gathered, as seen before, between the second half of the 19<sup>th</sup> century and 1915. Thanks to the inventory manuscript cited above we know that coins belonging to this section are more than 16,000, including ancient and medieval issues. Many numismatic rarities are featured in here, but the way in which coins have been collected affects the potential of this assemblage in terms of scientific relevance. In fact, many of the specimens surely come from hoards found in Aquileia, but possibly disassembled after the discovery in order to arrange a chronological collection, a habit in many European numismatic collections in the second half of the 19<sup>th</sup> century<sup>27</sup>. With regards to this last aspect, the issue of the aforementioned new inventory prevents us from knowing the inclusion of these hoards. In general, a thorough analysis of the *Accessionjournal* would be desirable as it would possibly allow us to reconnect some of the most peculiar elements of the collection to the original findspot<sup>28</sup>. In this time coins were also explicitly selected according to the state of preservation. Issues made of poor alloy,

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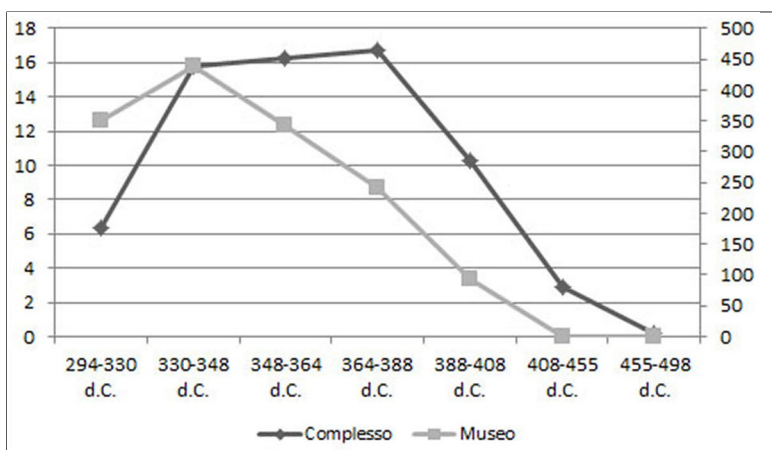
<sup>25</sup> See for instance the excavations on the Roman forum between 1980 and 1989; Bertacchi 1989; Bertacchi 1995.

<sup>26</sup> For the first time coins have been displayed separately from other metallic objects; Bertacchi 1962; see also Giovannini 2015b, p. 163.

<sup>27</sup> See for instance the numismatic cabinet in the Yorkshire Museum, one of the greatest regional collections of coins in England; Drost 2018.

<sup>28</sup> See Giovannini 2009 for the same approach applied to gem finds.

more often subjected to corrosion and so hardly legible, were carefully excluded. In this way the coins belonging to the late Roman period, especially the bronze coins, are clearly underrepresented as demonstrated by the comparison with an alternative sample of the collection (pic. 3)<sup>29</sup>.



**Picture 3**  
Chronological distribution of late Roman coins in the 19th century collection (grey) and in a sample from excavations of the second half of the 20th century (black) in comparison. After Stella 2017, 22, pic. 9

The second group contains coins acquired or retrieved during excavations carried out during or after 1915. This constitutes the most important part of the collection since the findspot is known for most of the specimens. Nevertheless, the total amount is up today undetermined.

A first segment was gathered during the direction of Giovanni Brusin. Coins acquired through purchasing were provided with an inventory number<sup>30</sup>, quite the opposite for coin finds from excavations. In this last case, the only link to the findspot is represented by the date of discovery which redirects to the excavation journal drawn by Giuseppe Runcio, field assistant of Giovanni Brusin, where a list of coins found every day is given. Only a small part was listed in the aforementioned work of Brusin “*Gli Scavi di Aquileia*”, often lacking important information such as the mint in the case of late Roman coins.

The second and most important part of the 20<sup>th</sup> century collection is the one formed under the direction of Luisa Bertacchi. As said before, she put together a large assemblage of coins, systematically collecting finds from excavations and thoroughly

<sup>29</sup> Stella 2017, 22-25.

<sup>30</sup> About 1,500 inventory numbers are related to coins acquired by Giovanni Brusin, including the republican and imperial silver *denarii* belonging to a hoard found in 1922; Brusin 1928.

N.º progr.	OGGETTO: monete		
	Deposito monete (Anno 1911)		
	Monete d'argento		
1390	1 sacchetto di monete d'argento della repubblica romana, di ottanta, due- na e media coniazioni .....		
1398	pezzi 532		
1399	pezzi 10		
	2 argento, imperatore fino e laquila,		
		505	
		500	
		498	
		498	
		495	495
		<u>42441</u>	



Picture 4a-c – The account list of 42,441 “second choice” silver and bronze coins and their current placement (referred to to bronze only , c20,000 specimens) in one of the National Museum’s storehouses

recording the findspot. At the same time, she acquired many stray finds consigned to the Museum by finders. Moreover this section remains still unrecorded in detail and its total amount is so far unknown<sup>31</sup>. Furthermore Luisa Bertacchi mentioned only occasionally and briefly coin finds in her published archaeological reports.

<sup>31</sup> An approximate amount of 9/10,000 coins is inferred from the inventory numbers after a recent systematic survey.

A third segment is represented by a very peculiar assemblage of coins formed by 1959, the first year of Luisa Bertacchi as head of the National Museum. As mentioned before, only starting from this date archaeological artifacts have been thoroughly collected during archaeological investigations. As regards coins, in the past those showing high degree of corrosion, mainly bronze, were simply discarded in favour of the well-preserved specimens, the sole to become part of the collection. Nevertheless, dumped coins have been collected in a large wooden box kept in the Museum's store houses. Later its content has been moved to a plastic case including at least seven large plastic bags filled with coins. The conservation process of a sample of 600 specimens carried out between the '80s and '90s has revealed that many of them needed only an accurate cleaning and are actually in a very good state of preservation. Sometimes also silver coins were recorded after removing corrosion layers. A documentation attesting the existence of a numismatic deposit alongside the official collection arranged during the direction of Enrico Maionica was recently discovered in the Museum's archive. According to the manuscript account this gathering included more than 2,700 silver Roman and Medieval coins alongside 40,000 bronze coins mostly belonging to the Roman age (pic. 4a-c). There are no doubts in connecting it with the massive assemblage mentioned before. Except for the silver issues possibly belonging to hoards, finds included here come surely from archaeological investigations in the ancient urban area and necropolis carried out from the second half of the 19<sup>th</sup> century and early 20<sup>th</sup> century up to the First World War<sup>32</sup>. Because of the state of preservation, they were regarded as second choice materials and kept apart from the official collection. As to bronze coins, actually in some cases silver or billon ones, what strikes most is the variety of monetary series featured in this assemblage, seldom represented among finds from the most recent excavations in Aquileia. At first sight, apart from the massive number of Roman imperial bronze coins, several Greek, Celtic and Roman provincial issues as well as early Medieval and Byzantine ones have been detected and much more are expected to be identified after completing the analysis. Even though the provenance is only generically related to the ancient city and finds cannot be divided precisely according to a specific archaeological context (graves, votive deposits, hoards), this sector of the collection is of great importance for the study of the monetary circulation. Given its incredible size and nature this assemblage need surely to be explored in depth in order to fully enhance its potential.

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<sup>32</sup> Cfr. "1000 piccoli bronzi frusti" from the excavations of the Roman harbour on the river Natissa; Brusin 1934, 149.

## METHODOLOGY

An exhaustive work of recording of the collection is under many aspects a pivotal task to undertake. To do so, a master plan is needed as well as a standard working methodology.

First of all, the massive size of the assemblage corresponds to a massive work. To deal with this, the major groups forming the collection could correspond to the simultaneous effort of three different teams or, in alternative, to three different stages of a common schedule. In the same perspective priority could be assigned to the recording of those coins bearing information about the findspot, i.e. coins from excavations and located purchasings, in order to make available at first the most valuable data to be processed for the study of monetary circulation.

The recording process can lean on the already existing SIGEC WEB database and the standard digital NU (numismatic) data sheet developed by the National Cultural Heritage Office and in use since 2004<sup>33</sup>. Nevertheless, given the importance of the assemblage, both in terms of size and features, the implementation of a new database specifically devoted to the numismatic collection in Aquileia would be desirable and this should be developed according to the standard international numismatic vocabulary provided by the NOMISMA project through the linked open data system<sup>34</sup>. The same framework could be further applied to other important gatherings, one above all gem stones, a very distinctive production in the Roman Aquileia. The development of a devoted database could cope both for scientific and management needs. On the one hand the collection in Aquileia could be more accessible to scholars for special research tasks, on the other one the management for the Museum personnel could be easier.

Besides digital representations, data concerning the collection have to be published also in a traditional way through an editorial project. From 2010 a new series named *Ritrovamenti monetali di età romana nel Friuli Venezia Giulia* (Coin finds of the Roman age in the region of Friuli Venezia Giulia), a side project of the well renowned *Ritrovamenti monetali di età romana del Veneto* (Coin finds of the Roman age in the region of Veneto), has been conceived for the publishing of the ancient coin finds recovered in the territory of the region Friuli Venezia Giulia<sup>35</sup>. Obviously, several volumes will be devoted to the numismatic collection in Aquileia, at least four are needed to cover the first half according to a brief account.

In one case a massive restoration process has to be addressed as well. As seen before, a very large portion of the collection still need conservation work, but the me-

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<sup>33</sup> *Scheda NU*.

<sup>34</sup> <http://nomisma.org/>

<sup>35</sup> *RMRFVG III-IV*.

chanical cleaning of every single specimen is to be ruled out, in particular for reasons of time. A possible approach would imply the use of controlled chemical cleaning in order to make legible, at a reasonable degree, as much coins as possible in the shortest time. Nevertheless, great care must be paid given the very heterogeneous nature of the assemblage made of coins with different size and alloy which request different degrees of cleaning. The advice of a professional conservator is anyway requested.

A last, very crucial issue to discuss is the need of a new arrangement for the coin cabinet. In such a large collection, every single coin should occupy a given position in order to enable its immediate recovery in case of necessity (pictures, conservation or exhibition issues, metal analysis, ecc.). Furthermore, the management would be more simple and intuitive for the Museum personnel with no specific numismatic knowledge. “Topographic data” have to be associated in the future to every single coin recorded, a system already in use in other archaeological collection of coins such as that of the Museum Carnuntinum<sup>36</sup>. A similar approach could be further applied to other important categories of small find, for instance gems, amber artefacts and so on.

In conclusion, what comes to light is that, on the one hand, the numismatic collection of the National Museum in Aquileia amounts to much more than 40,000 coins, as it is usually presumed. Instead, by the First World War more than 60,000 specimens were already part of the coin cabinet. On the other hand, since a large sector still need to be quantified, an actual amount ranging from 80,000 to 100,000 pieces is to be expected. Recording in detail and rearranging such a large and peculiar collection of coins is an undeniable opportunity. The outcomes of undertaking such a work are undisputable, for scientific purposes (study of the monetary circulation and production, output of the local mint, history and economy of the city) and for enhancing communication to the public through new permanent or temporary exhibitions.

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<sup>36</sup> “*The Numismatic Project Carnuntum*” presentation held by Cristian Gazdac at the 2<sup>nd</sup> joint meeting of ECFN and Nomisma.org, 19<sup>th</sup>-20<sup>th</sup> April 2013, Petronell-Carnuntum, Austria.

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