The medieval *carlino* silver currency in Calabria and Basilicata in the light of three Hoards in the Museo Nazionale della Magna Grecia

Julian Baker University of Oxford ORCID: 0000-0002-0841-2179

Daniele Castrizio Università di Messina ORCID: 0000-0001-6435-4922

DOI: 10.54103/milanoup.193.c292

Abstract

In this paper the authors present three hoards, a total of 147 coins, which are preserved in the Museo Nazionale in Reggio Calabria. They were all found fortuitously in the first half of the twentieth century, and have been known for some time thanks to the writings, amongst others, of Giuseppe Procopio, Lucia Travaini, and Daniele Castrizio. In this contribution, the coins themselves are analysed in unprecedented detail according to the most recent typological bibliography. In this way, the formation processes and the final depositions and abandonments of the hoards can be formulated with greater accuracy. A picture of high-level political decision making, and of perpetual conflict affecting these areas of the Regno, during a century from the last years of the thirteenth century, emerges. The three hoards are important in terms of coin issuance, especially that in the name of Robert of Anjou at the Naples mint, the usage and circulation of these issues, and contribution they can make to the convoluted (military) history of this most southerly area of the Italian mainland.

The new silver *carlino* of King Charles I of Anjou was launched at Naples in 1278/79¹. The currency survived the events of the Sicilian Vespers but was subjected to significant iconographical and metrological modifications in the course of the later thirteenth century, and then throughout the fourteenth. After a period of transition around the turn of the fourteenth century, the main issues from the Messina and Naples mints went their separate ways and ceased to co-exist according the existing numismatic documentation.

The ongoing study of the various *carlino* currencies in the Aragonese and Angevin kingdoms is as important as ever, because many of the chronologies

¹ On this and what follows, see MEC 14: 205-239 and 260 ss.

are still very unclear, and because this currency formed the backbone of southern Italian monetization. Indigenous and imported gold played a subordinated role and smaller silver-based penny coinages became, if anything, rarer during the duration of the later medieval period and were eventually substituted with pure copper coinages. This said, base silver *deniers tournois* – of central Greek and Peloponnesian origin – were certainly of importance in the different parts of the Regno, although their precise positions, as fractions of the *carlino* or as a free-standing currency, remains to be established.

The *carlino* currency in the specific Campanian and Pugliese context has been written about in the last couple of decades. Not so for Calabria and Basilicata. The significance of the three hoards discussed here, kept in the Medagliere of the Museo Nazionale della Magna Grecia in Reggio di Calabria, is twofold.

First, they contribute to our understanding of the monetization of these areas. Other elements will in the future need to be considered in this mix of information, for example the *denier tournois* hoard of Paracopio di Bova². Second, being chronologically spaced out over about 100 years, from the 1290s to the 1390s, they show the evolution of this currency in terms of issues and types. In fact, in describing the typologies and suggested chronologies we follow and develop further recent discussions, while at the time using chronological fixpoints in line with contemporary events.

All the coins described in this article were known by contemporaries as *carlini*. The alternative names used here – *saluti*, *pierreali*, *gigliati* – which denote different metrologies and iconographies, are mostly deployed for the convenience of modern numismatists, as is the term *robertino* (i.e. a *gigliato* in the name of Robert). Different die checks were made within the presented material, though no comprehensive die study was undertaken. In so far as they could be found at all, there were very few die identities indeed, all on the obverse, and with no significance as yet with respect to sequence or quantities of type. For example, Maranise 1928 has no link at all. It is obvious that much larger samples will be required in the future, with targeted checks especially on reverses in line with ever more precise typologies, which are in themselves often defined by obverse features.

² CARROCCIO, CASTRIZIO 1995; CASTRIZIO 2002; BAKER 2021: 1065-1068, no. 395. The hoard will be published shortly by the two current authors.

Catalogue

MARINESE 1928

Find-spot and find-context: The area in which this find was made is in the province of Catanzaro in Calabria, located some 17 km due north of the provincial capital, and at a short distance due south of Taverna. Maranise is a 'frazione' of Fossato Serralto. The precise find-spot, as provided by the information contained in the Reggio museum, is near the main road, in the 'contrada' Rupa. The coins were found in a terracotta vase during road works.

Composition and disposition: Perhaps as many as 27 coins were originally contained in the hoard, of which 20 (13 *carlini* and 7 *pierreali*) are reported to have entered the Reggio museum, though one of these *pierreali* is now no longer present there. The inventory numbers are 15118-15136.

Bibliography: Procopio 1955: 170; Carroccio, Castrizio 1995: 607 ss.; *MEC* 14: 418, no. 37; Castrizio 2002: 237.

Proposed date of concealed: A numismatic *terminus post quem* of 1291 can be established. Nonetheless, a historical date of concealment of 1296 is proposed here below.

Coins:

KINGDOM OF SICILY (HOUSE OF ANJOU AT NAPLES) - 13 SPECIMENS

001-013

Charles I of Anjou 1266-85, Naples mint *Carlini (saluti)* minted in the period 1278-85, or posthumously until 1290 CAGIATI 1911: 26, nos 1-3; *CNI* XIX: 14, nos 9-12; *MEC* 14: 206. Obv. Shield of Jerusalem/Anjou; +K'AROL'·IGRL'·GT·SIGIL'·RGX Rev. Annunciation; +HUG·GRA·PLGN'A·DNS·TGGUM

001 15118 – 3.25 g – 23x24 mm



002	15119 – 3.26 g – 24 mm	
003	15120 – 3.03 g – 23x24 mm	
004	15121 – 3.23 g – 23x24 mm	
005	15122 – 3.26 g – 23 mm	
006	15123 – 3.25 g – 23 mm	
007	15124 – 3.32 g – 24x25 mm	THE REPORT OF THE PARTY OF THE
008	15125 – 3.28 g – 24 mm	



KINGDOM OF SICILY (HOUSE OF ARAGON) - 6 SPECIMENS

014

Constance and Peter of Aragon 1282-85, Messina mint *Carlino (pierreale*) minted perhaps before April 1283 *MEC* 14: 262, Class A, no. 1.

Obv. Uncrowned eagle; +: COSTA:DAI:GRA:ARAGON:SIAIL:RAGIN Rev. Shield, no segno; +: P:DEI:GRA:ARAGON:SICIL:REX

014 15136 – 3.24 g – 24 mm



015

Constance and Peter of Aragon 1282-85, Messina mint *Carlino (pierreale)* minted perhaps before April 1283 *MEC* 14: 262, Class A, nos 3 or 4.

Obv. Uncrowned eagle; +COSTA:DCI:GRA:ARAG:SICIL:RCGIA
Rev. Shield, rosette or annulet above; +:P:DCI:GRA:ARAGON:SICIL:RCX:

015 15135 – 3.34 g – 23x25 mm



016

Constance and Peter of Aragon 1282-85, Messina mint *Carlino (pierreale)* minted perhaps before April 1283 *MEC* 14: 262, Class A, no. 4, no. 759.

Obv. Uncrowned eagle; +COSTADCI:GRA:ARAG:SICIL:RCGIH Rev. Shield, rosette above; +:P:DCI:GRA:ARAGON:SICIL:RCX:

016 15132 – 3.21 g – 24 mm



017-018

Constance and Peter of Aragon 1282-85, Messina mint *Carlino (pierreale*) minted perhaps after April 1283, and probably to 1291 *MEC* 14: 262, Class B, no. 1.

Obv. Crowned eagle; +COSTA:DCI:GRA:ARAG:SICIL:RCGIA
Rev. Shield, no segno; +:P:DCI:GRA:ARAGON:SICIL:RCX:



019

James of Aragon 1285-96, Messina mint *Carlino (pierreale)* minted probably from 1291 to 1296 *MEC* 14: 264, no. 1

Obv. Crowned eagle; +:IA:DAI:GRA:ARAGON:SICIL:REX: Rev. Shield, no segno; +:AA:BARAHINONA:AOMAS:

019 15131 – 3.38g – 24x25mm



SAN LUCIDO 1929

Find-spot and find-context: The village of San Lucido lies on the Tyrrhenian Sea, due west of the city of Cosenza, in the latter province. More precisely, the area is identified as the 'contrada' Pietro Scivola, a name which may have gone out of usage since the 1920s. The documentation present with the hoard relates that Giovanni Chiappetta found the hoard sometime in 1929 while extracting stones from a cave. The coins were contained in a two-metredeep (*sicl*) terracotta vase sitting in the stony ground. After being reported to the relevant authorities the hoard was, according to the law at the time, split evenly between the state and the finder. 31 coins entered the Reggio museum in 1930.

Composition and disposition: 31 coins are in the Museo Nazionale, Reggio di Calabria (inv. nos 14882-14912). Nothing is known about the other 31 coins originally in the possession of the finder.

Bibliography: Procopio 1955: 170, no. 4; Carroccio, Castrizio 1995: 607 ss.; *MEC* 14: 421, no. 79; Baker 2001: 221, no. 22; Castrizio 2002: 237; Baker 2002: 180, no. 51.

Proposed date of concealed: A numismatic date of concealment during the very last years of the 1340s is proposed here. It is argued here below that 1348 may well have been the year of the coins' abandonment.

Coins:

KINGDOM OF SICILY (NAPLES) – 31 SPECIMENS

020-021

Robert of Anjou 1309-43, Naples mint

Gigliati 'ROBERTVS', minted probably 1309-17

Cagiati 1911: 38, nos 1-2; Sambon 1912: 191; Sambon 1916: 171, no. 2; *CNI*

XIX: 22-24, nos 11-13, 15-28, and 31; PANNUTI, RICCIO 1984: 20, no. 1; MEC

14: 224, no. 1(a); BAKER 2002/2011: group 1a.

Obv. King seated with sceptre and orb;

+ROBERTUS·DEI:GRA:IERL':ETSICIL:REX

Rev. Cross fleury with lis in each quarter; +hONOR-REGIS-IUDICIU-DILIGIT



022-023

Robert of Anjou 1309-43, Naples mint

Gigliati 'ROBERT', with spur rowel in left obv. field, minted perhaps during 1321/3-24

CAGIATI 1911: 39, nos 5-6; *CNI* XIX: 31, nos 88-93; *MEC* 14: 225, no. 2(c); BAKER 2002/2011: group 2a

Obv. King seated with sceptre and orb, spur rowel in left field;

+ROBERT:DEI:GRA:IER:E:SICIL':REX:

Rev. Cross fleury with lis in each quarter; **+honor:** Regis: IUDIQIU: DILIGIT:

022 14905 – 3.93 g – 27-28 mm

023 14907 – 3.92 g – 26-27 mm

024-028

Robert of Anjou 1309-43, Naples mint Gigliati 'ROBERT' of the early variety, minted probably in the period 1324 to a point in the 1330s (CAGIATI 1911: 39-40, nos 9-16; CNI XIX: 21-27; PANNUTI, RICCIO 1984: 20, no. 2); MEC 14: 225, no. 2(a), nos 706-708; BAKER 2002/2011: group 2b. Obv. King seated with sceptre and orb;

+ROBERT'.DEI.GRA.IERL'.ETSICIL'.REX

Rev. Cross fleury with lis in each quarter; +hONOR-R&GIS-IUDICIU-DILIGIT





029-048

Robert of Anjou 1309-43 and posthumous, Naples mint

Gigliati 'ROBERT' of the common variety, minted probably from the 1330s to early 1348

(CAGIATI 1911: 39-40, nos 9-16; *CNI* XIX: 21-27; PANNUTI, RICCIO 1984: 20, no. 2); *MEC* 14: 225, no. 2(a), nos 712-716; Baker 2002: group 3; Baker 2011: group 3 and 3bis (part).

Obv. King seated with sceptre and orb; +ROBGRTDGIGRAIGRAIGRAIGTSICILREX (sporadic irregular punctuation)

Rev. Cross fleury with lis in each quarter; **+honorregisiudialiudicialit** (sporadic irregular punctuation)

i) Variety with round and smiling face and intricate crown

029 14882 – 3.93 g – 26x27 mm

030	14885 – 3.93 g – 27 mm	
031	14886 – 3.96 g – 27 mm	
032	14888 – 3.95 g – 25x26 mm	
033	14889 – 3.95 g – 26 mm	
034	14891 – 3.95g – 26mm	
035	14894 – 3.95 g – 26x27 mm	

036	14895 – 3.96 g – 26 mm	
037	14896 – 3.96 g – 26x27 mm	
038	14898 – 3.97 g – 26x27 mm	
039	14900 – 3.95 g – 27 mm	
040	14902 – 3.97 g – 26x27 mm	
041	14904 – 3.95 g – 26x27 mm	



ii) Variety with less rounded face and no facial expression and less intricate crown



047 14901 – 3.83 g – 26 mm

The Obv. lacks the usual cross on the king's chest



048 14903 – 3.95 g – 26-29 mm

The lower part of the king's head appears curiously pointed, but this might be the result of a bad strike



049-050

Posthumous *gigliato* issue in the name of Robert of Anjou 1309-43, perhaps minted under the authority of Louis of Hungary in the period January-August 1348, Naples mint

(Cagiati 1911: 39-40, nos 9-16; *CNI* XIX: 21-27; Pannuti, Riccio 1984: 20, no. 2); *MEC* 14: 225, no. 2(a)); Baker 2002/2011: group 4.

Obv. King seated with sceptre and orb; +ROBGRTDGIGRAIGRAIGRAIGTSICILREX (sporadic irregular punctuation)

Rev. Cross fleury with lis in each quarter; **+honorregisiudiciudiciudicii** (sporadic irregular punctuation)



Episcopia 1933

Find-spot and find-context: The village of Episcopia lies in the region of Basilicata and the province of Potenza. At a short distance from the Calabrian border, it is situated between the Ionian and Tyrrhenian seas, though at a shorter distance to the latter (67 km). The hoard was found inside a small chapel, though it appears that this building post-dates the hoard. The documentation contained in the Archivio Storico of the Museo Nazionale, Reggio di Calabria, relates that the hoard was found on 15 November 1933 during digging activities. The coins were contained in a fragile vase. Upon the discovery of the hoard some eyewitnesses removed an uncertain number of specimens. The Soprintendenza of Calabria and Basilicata speculated at the time that some of this material might re-appear elsewhere for identification, specifically at the Taranto Museum. The Ispettore of the said Soprintendenza, Prof. Nicolò Catanuto was sent out to deal with the matter and reported back on 20 November that about 100 coins of this hoard had been secured for the Reggio Museum. The events surrounding this hoard were reported by E. Conte as Scoperta di monete antiche ad Episcopia in the newspaper «Il Popolo di Roma» of 5 December 1933, subsection Cronaca della Lucania.

Composition and disposition: 97 coins are in the Museo Nazionale, Reggio di Calabria (inv. nos 14589-14685); the remainder is dispersed.

Bibliography: Procopio 1955: 170, no. 2; Carroccio, Castrizio 1995: 607 ss.; *MEC* 14: 417, no. 26; Baker 2001: 221, no. 19; Castrizio 2002: 237; Baker 2002: 180, no. 51.

Proposed date of concealed: The hoard has a numismatic *post quem* of 1392. It is argued here below that concealment may well have occurred in that same year or shortly thereafter in line with known historical events.

Coins:

KINGDOM OF SICILY (NAPLES) – 97 SPECIMENS:

051-055

Robert of Anjou 1309-43, Naples mint

Gigliati 'ROBERTVS', minted probably 1309-17

Cagiati 1911: 38, nos 1-2; Sambon 1912: 191; Sambon 1916: 171, no. 2; *CNI* XIX: 22-24, nos 11-13, 15-28, 31; Pannuti, Riccio 1984: 20, no. 1; *MEC* 14:

224, no. 1(a); Baker 2002/2011: group 1a.

Obv. King seated with sceptre and orb;

+ROBERTUS·DEI·GRA·IERL'·ETSICIL·REX

Rev. Cross fleury with lis in each quarter; +honor-Ragis-Iudiaiu-diligit

051 14603 - 3.90 g - 25x26 mm052 14682 - 3.61 g - 26x27 mm053 14685 - 3.91 g - 25x26 mm054 14681 - 3.87 g - 26 mm054 and 055 are stylistically close and unusual, and they both read 'ROBER-TU'. They were minted from the same Obv. die, though not from the same Rev. die 055 14683 - 3.85 g - 26x27 mm054 and 055 are stylistically close and unusual, and they both read 'ROBER-TU'. They were minted from the same Obv. die, though not from the same Rev. die

056

Robert of Anjou 1309-43, Naples mint

Gigliati 'ROBERT', with annulet in left obv. field, minted perhaps during 1321/3-24

CAGIATI 1911: 39, no. 7; *CNI* XIX: 30, nos 83-86; Pannuti, Riccio 1984: 20, no. 2a; *MEC* 14: 225, no. 2(b); Baker 2002/2011: group 2a.

Obv. King seated with sceptre and orb, spur rowel in left field; +ROBGRT:DGI:GRA:IGR:G:SICIL':REX:

Rev. Cross fleury with lis in each quarter; **+honor:** Regis: IUDICIU: DILIGIT:

056 14669 – 3.80 g – 26x28 mm



057-061

Robert of Anjou 1309-43, Naples mint

Gigliati 'ROBERT' of the early variety, minted probably in the period 1324 to a point in the 1330s

(Cagiati 1911: 39-40, nos 9-16; *CNI* XIX: 21-27; Pannuti, Riccio 1984: 20, no. 2); *MEC* 14: 225, no. 2(a), nos 706-708; Baker 2002/2011: group 2b. Obv. King seated with sceptre and orb;

+ROBERT'.DEI.GRA.IERL'.ETSICIL'.REX

Rev. Cross fleury with lis in each quarter; +honor-regis-Iudialu-diligit





062-117

Robert of Anjou 1309-43 and posthumous, Naples mint

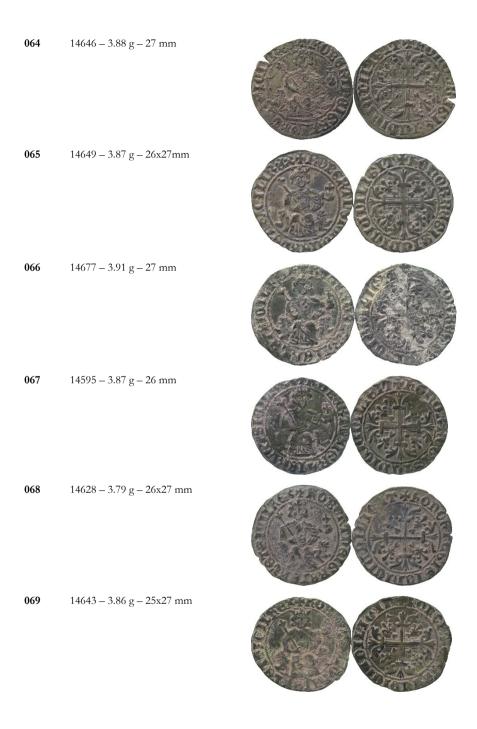
Gigliati 'ROBERT' of the common variety, minted probably from the 1330s to early 1348

(CAGIATI 1911: 39-40, nos 9-16; *CNI* XIX: 21-27; PANNUTI, RICCIO 1984: 20, no. 2); *MEC* 14: 225, no. 2(a), nos 712-716; BAKER 2002: group 3; BAKER 2011: group 3 and 3bis (part).

Rev. Cross fleury with lis in each quarter; **+honorregisiudialiudicialit** (sporadic irregular punctuation)

i) Variety with round and smiling face and intricate crown







ii) Variety with less rounded face and no facial expression and less intricate crown





320	5

14612 – 3.82 g – 26 mm

14613 – 3.86 g – 26x27 mm



14617 – 3.92 g – 26x27 mm



14619 – 3.90 g – 27 mm



14592 – 3.80 g – 26x27 mm



14614 – 3.89 g – 26x27 mm

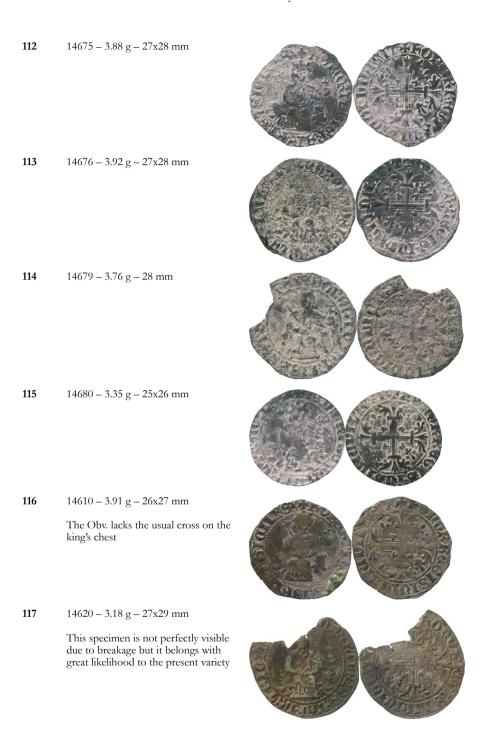




094	14633 – 3.88 g – 27 mm	
095	14636 – 4.10 g – 26x28 mm	
096	14637 – 3.95 g – 27x28 mm	
097	14641 - 3.89 g - 27x28 mm	100
098	14647 - 3.60 g - 26x27 mm	
099	14625 - 3.93 g - 27x28 mm	

100	14654 – 3.88 g – 27x28 mm	
101	14659 – 3.94 g – 26x27 mm	
102	14660 – 3.87 g – 28x29 mm	
103	14652 – 4.40 g – 26x27 mm	
104	14655 – 4.10 g – 27x28 mm	
105	14658 – 3.30 g – 26x27mm	

106	14661 – 4.05 g – 26x27 mm	D. Co.
107	14665 – 3.85 g – 27x28 mm	
108	14668 – 3.72 g – 26x27 mm	
109	14670 – 3.87 g – 28 mm	
110	14671 – 3.78 g – 26x27 mm	
111	14673 – 3.80 g – 26x28 mm	



118-124

Posthumous *gigliato* issue in the name of Robert of Anjou 1309-43, perhaps minted under the authority of Louis of Hungary in the period January-August 1348, Naples mint

(Cagiati 1911: 39-40, nos 9-16; CNI XIX: 21-27; Pannuti, Riccio 1984: 20, no. 2); MEC 14: 225, no. 2(a)); Baker 2002/2011: group 4.

Obv. King seated with sceptre and orb; +ROBGRTDGIGRAIGRAIGRAIGTSICILREX (sporadic irregular punctuation)

Rev. Cross fleury with lis in each quarter; **+honorregisiudialiudicialit** (sporadic irregular punctuation)





125-145

Posthumous *gigliato* issue in the name of Robert of Anjou 1309-43, perhaps minted from about 1350 to about 1400, Naples mint

(Cagiati 1911: 39-40, nos 9-16; *CNI* XIX: 21-27; Pannuti, Riccio 1984: 20, no. 2; Baker 2011: group 3bis).

Obv. King seated with sceptre and orb; **+ROBGRTDGIGRFIIGRLGTSICILREX** (sporadic irregular punctuation)

Rev. Cross fleury with lis in each quarter; **+honorragisiuDiαiuDiLigit** (sporadic irregular punctuation)



127	14597 – 3.93 g – 26x27 mm	
128	14598 – 3.75 g – 27 mm	
129	14602 – 3.90 g – 26x27 mm	
130	14607 – 3.93 g – 26 mm	
131	14609 – 3.95 g – 26x27 mm	
132	14618 – 3.91 g – 27x28 mm	



139	14672 - 3.12 g - 26 mm	
140	14657 – 4.10 g – 27 mm	
141	14662 – 3.88 g – 27 mm	
142	14666 – 3.85 g – 27 mm	
143	14667 – 3.90 g – 27x28 mm	
144	14678 – 3.88g – 28 mm	

145 14664 – 3.95 g – 28x29 mm



146

Charles III of Durazzo 1382-86, Naples mint

Sambon 1893: 472; CNI XIX: 44-45, no. 1-7; Pannuti, Riccio 1984: 27, no. 1; MEC 14: 237

Obv.King seated with sceptre and orb;

+KAOI'TERIDIGRAIERLETSICILREX

Rev.Cross fleury with lis in each quarter; +honorragis-iudialu-diligit

146 14663 – 3.33 g – 26x28 mm



147

Louis II of Anjou 1390-99, Naples mint

Minted perhaps exclusively in the year 1392

CNI XIX: 43, no. 1; Pannuti, Riccio 1984: 32, no. 2; Pournot 1991: no. 38; MEC 14: 239.

Obv.Kingseatedwithsceptreandorb; **+LUDOVIGUSD&IGRAI&RL&SICLR&X** Rev. Cross fleury with lis in each quarter; **+hONORR&GISIUDIQIUDILIGIT**

147 14684 – 3.99 g – 26x27 mm



Issues and types

The three hoards describe slightly more than a century of calabro-lucanese monetization in fine silver, from the 1280s to the 1390s, or better three distinct moments in time during this period. The second and third of these relate to the long history of Neapolitan minting in the name of King Robert of Anjou, which from 1309 onwards boasts complex variations on the basic seated king / lilied cross type, with also a few epigraphical differentiations. By contrast, the earliest phase belongs to a very different period, shortly after the Vespers, in which distinct typological and epigraphical mutations can be observed both at the Naples and Messina mints, and when the respective Angevin and Aragonese issues were still metrological equivalents, and evidently still mixing in some areas of what used to be the unified kingdom of Sicily. Only in the further course of the fourteenth century, as *pierreali* were continuously minted at Messina, especially prolifically under King Frederick (1296-1337), did the much earlier Neapolitan issues of Charles I/II form an increasingly small and dwindling residue³.

The Neapolitan saluti from the Maranise hoard (001-013) are in the name of Charles I, and are all, and in all respects, very similar, even though no single die duplication on obverse or reverse has been identified. Our observations are therefore in line with the many discussions of the issues in question⁴: it becomes amply clear that it will be very difficult to break down the series into any discernible phases within the period from the monetary reforms at the Naples mint in 1278-79 to the death of Charles in January 1285, if not on the level of the many dies used for its minting. More problematic yet is the absence in our hoard of issues of Charles II (reading KAROL'·SCD'·IGRL'·GT·SICIL'·RGX), and the belief, expressed in some of the numismatic literature⁵, that indeed the earlier type reading simply **K'AROL'·IGRL'·** was minted also posthumously after 1285, perhaps until the date of the release of Charles II from Aragonese captivity and his coronation (1288-89). The present hoard may well support this theory, although its idiosyncratic composition may also have been the result of particular circulation patterns in the area in question, or indeed the compositional history of the hoard itself, as will be further discussed in our historical considerations below.

In the same hoard, five of the six known *pierreali* are in the names of Peter and Constance (014-018), the sixth a specimen of James (019). Regarding the issues of Peter and Constance, there are two substantive types with uncrowned and crowned eagles. It has been suggested that the appearance on the island of Constance of Aragon in April 1283 instigated the transition from the former to

³ This can be witnessed for instance in the hoard presented in DOLLEY 1953.

⁴ See most recently Colucci 2011b, especially: 340-344.

⁵ *MEC* 14: 218-219.

the latter⁶. Peter died in November 1285 and was succeeded, as king of Sicily, by his son James. Since the James' Sicilian *pierreali* feature also his Aragonese and Barcelonan titles, which he acquired only upon the death of his older brother Alfonso in June 1291, it is very likely indeed that such issues are dated after this event. The Maranise hoard is important in the way in which the implications of such a dating are showcased: it would indeed appear quite probable that the later issues in the names of Peter and Constance were continued beyond 1285. On the other hand, a dating of the concealment of the hoard on the sole evidence of one coin is less than ideal, and in fact our historical considerations below suggest a somewhat later date than 1291.

The gigliato currency represented in the two hoards from San Lucido and Episcopia consists almost exclusively of robertini, that is to say issues in the name of King Robert of Anjou, minted during his lifetime (1309-43) and posthumously. There are merely two other gigliato issues in these two assemblages, namely one specimen each in the name of King Charles III of Anjou (1382-86) and King Louis II of Anjou (1390-99) from Episcopia (146 and 147). The *robertini* in these hoards follow a well-established pattern, from early issues reading ROBERTUS (group 1a: at San Lucido 020-021; at Episcopia 051-055, note the unusual variety represented by 054 and 055), to intermediary ones reading ROBERT, with or without signs in the left obverse field (groups 2a and 2b: at San Lucido **022-028**; at Episcopia **056-061**)⁷. All of these early groups were minted at Naples and not in Provence, as has been postulated for group 2a8. The vast majority of the robertini in these two hoards belong to groups 3 onwards which can be attributed to the last period of minting of Robert himself, and then after Robert's death in 1343. This is a typical pattern which can be observed in many other hoards.

When the typology which is used here was developed by one of us in 2002 on the basis of the Casálbore (AV) hoard, and further developed in 2011 with reference to other finds, a slight oversight had occurred. The basic scheme whereby group 3 was interrupted by the unusual and short-lived group 4, minted perhaps during the Hungarian occupation in 1348, to be then continued in the form of group 3bis, has been vindicated by the present material. However, the 2002 description of group 3 had been reductionist and had overseen the basic division of this group into two sub-groupings. Consequently in 2011, a part of what should have been termed group 3 was erroneously given to group 3bis. With the present paper we are rectifying this error and are suggesting to use the basic distinction group 3i and group 3ii. The first of these shows the

⁶ MEC 14: 262-264.

⁷ This phase of minting has fewer hoards: see merely the so-called "gruppo Bulgari" (Travaini 1990).

⁸ See for example Testa 2011.

⁹ Baker 2002 and 2011.

well-known rounded and smiling face of the king, the second of which having a very similar but somewhat less rounded face with no facial expression. A good way of distinguishing the two sub-groupings is to look at the crown: the earlier one of the two (3i) has a very intricately designed and harmonious crown, whereas the second (3ii) is executed with broader shapes and is often not symmetrical. The coins in question in the respective hoards are San Lucido **029-045** (group 3i: 17 specimens) and **046-048** (group 3ii: 3 specimens); Episcopia **062-072** (group 3i: 11 specimens) and **073-117** (group 3ii: 45 specimens).

In 2002 it was argued that Casálbore was concealed in 1348 or 1349, on numismatic and especially historical grounds, in relation to military events and/or the Black Death. As the best possible working hypothesis, this is as valid today as it had been two decades ago. Recent attempts to re-date the types in question, and thereby the hoard, to more than a century later, disregard basic numismatic methodology of observing types and their hoarded contexts, and of anchoring types and hoards chronologically according to historical reasoning¹⁰. To explain it more bluntly in this particular context: we know perfectly well how the Neaopolitan robertino currency might have looked in the middle of the fifteenth century, thanks to the detailed publication of the Muro Leccese hoard¹¹. This is dominated by a distinctive and late variation on group 3 which is called 3ter. To suggest in turn that Casálbore, and similar hoards, which display all the hallmarks of a much earlier form of monetization, are to be dated even more recently than Muro Leccese, runs counter to any logic¹². Upon reconsidering the individual specimens in the Casálbore hoard, and comparing them to those in the San Lucido hoard, it becomes in fact apparent how compositionally close they are, in their mix of group 3i (the majority of the coins of group 3: 029-045) and group 3ii (046-048; examples from the plates in Baker 2002 are nos 094, 168, 334). Like Casálbore, San Lucido probably closes in the 1348 issues of Group 4 (049 and 050), and also San Lucido was in all likelihood concealed in that year or shortly thereafter (see further the arguments below).

In fact, as one throws a wider net, this heavy concentration of group 3i and group 3ii together appears to be a recurring pattern. Despite the bad readability of some of the plates in question, the hoards from Manduria, Taranto Celestini, Sava (all TA) appear to have ample or exclusively specimens of group 3i and group 3ii, and none of group 4 nor of group 3bis¹³. This results in two important conclusions: the diffusion of the issues minted during the Hungarian occupation did not reach the most south-easterly area of the Regno, or less

¹⁰ Perfetto 2018a, 2018b and 2019.

¹¹ LIBERO MANGIERI 2010; see also BAKER 2020: 1081-1083, no. 403.

¹² Perfetto 2018a: «[...] questo ripostiglio [NB of Muro Leccese] fu occultato almeno 20 anni prima di quello di Casálbore».

¹³ Stranieri 2000: 344-345; Baker 2001: 274-280.

quickly; and the Black Death of 1347-48 as a factor in the concealment and non-retrieval of hoards becomes ever stronger.

Episcopia is a substantially later hoard than San Lucido. It distinguishes itself from the latter in three ways: it has proportionally more group 3ii than group 3i coins, as one would have expected since the former had had more time to enter general circulation; it contains an entirely new *robertino* variety, group 3bis (125-145: 21 specimens); and it contains issues of Kings Charles III and Louis II (146 and 147). Group 3bis is characterised by two features which distinguish it from Group 3ii: the overall style is again neater and the crown is again more intricate and symmetrical. Its most obvious hallmark are the curls in the hair which are also a feature in the issues of Charles III.

One additional observation regarding the *robertino* typology of groups 3ii and 3bis needs to be made. Quite unlike group 3i (and the earlier *robertino* types), which have very precise appearances indeed, that is to say were produced with a vast number of dies all stylistically very close to one another, groups 3ii and 3bis remain umbrella terms which accommodate what might be termed different die groupings (even if a large number of dies in themselves) or even die cutters' 'hands'. This amalgam of *robertino* minting in the second half of the fourteenth century still requires serious breaking down, first with respect to obverse typologies, and then by putting these into sequence through reverse die links. This will require a much larger sample than merely one medium-sized hoard. Finally, it should be conceded that group 3ii, even though certainly begun in or by the earlier 1340s, might have continued again also after 1348. A gradual transition from group 3ii to group 3bis, or a co-existence of both, are also possibilities, although it is presently not possible to put one's finger on any of these processes¹⁴.

The fact that the issues of Charles III and *robertino* group 3bis are related is confirmed by the typological affinities – especially the form of representation of the obverse king with the round curls in the hair, and by reverse die links observed by Sambon¹⁵. We conducted a die study ourselves for the relevant coins in our two hoards, but the reverses of **146** or **147** did not find matches, even though on occasion the dies were very close indeed.

In recent years a very significant piece of evidence has emerged with respect to the *robertino* chronology in the second half of the fourteenth century. The mixed hoard of Colle Iano near Rocca di Papa (RM) can be dated by papal coins to 1380 at the very latest¹⁶. According to our readings of the published plates, the 31 *robertini* of this hoard have a harmonious distribution of groups 1, 2, 3i

¹⁴ On the fluidity of these typologies and their dating, see already Testa 2008: 555.

¹⁵ Arturo Sambon had an early interest in the coinage of Charles III – based on the Naples 1893 hoard – and its relation to the posthumous types in the name of Robert: Sambon 1893; Sambon 1897.

¹⁶ Travaini 2017: 108.

and 3ii, 4, 3bis. This shows that in this area between Rome and Naples the circulation of Neapolitan *gigliati* was general and even, perhaps less impulsive than in certain parts of the Regno itself. Most importantly, the Colle Iano hoard shows that by 1380 group 3bis had already been minted in substantial quantities. This confirms on the one hand our hypotheses regarding the concealment of the earlier hoards of San Lucido, Casálbore, and so forth, which do not contain this type and can be dated to the last years of the 1340s; on the other hand, it would suggest to us that the concealment of Episcopia itself should not be located too far beyond 1380. For this reason, the date of 1392 given by the issue of Louis II provides also a reasonable point for the concealment of the entire hoard (see further below).

Historical and Geographical Contexts

The formation of the hoard from Maranise in the present-day province of Catanzaro belongs to the earliest period of the *carlino* coinage, c. 1278 to c. 1291. We must remain open to the possibility that the actual deposition of the hoard might have occurred somewhat later than the numismatic terminus post quem. The defining events in this period are the Sicilian revolt against the Angevin monarchy in 1282, the installation of the house of Aragon on the island and the separation of the erstwhile kingdom into respective island and mainland successors, and the protracted state of war between these two entities¹⁷. The region of Taverna, in close proximity to Maranise, was part of a defensive system created by the Angevins already from November 1282 onwards around the Sila range, forming an arch between the Ionian and the Tyrrhenian Seas, from Umbriatico to Belmonte. To be precise, Taverna offered protection to Catanzaro, which at this time was again in the hands of the Ruffo di Calabria family, after an interlude during the Staufer period¹⁸. Count Peter (II) became closely associated with King Charles I of Anjou and was himself active in 1282 in north-eastern Sicily seeking to contain the revolt on behalf of his king. Very intense theatres of war soon developed around the coastal areas of Calabria, many of which were intermittently held by the Aragonese. Also Catanzaro came to be directly threatened, for instance by King Peter of Aragon in 1283. We know that the rural parts of the county of Catanzaro were devastated in June 1285. This would be too early a date of deposition for the Maranise hoard. Peter's lands were also to become a place of exile for displaced island-Sicilians and others. The count subsequently associated himself with the newly released King Charles II (1288-89), whose coins are nevertheless missing from the hoard. In July 1290 his brother Henry Ruffo di Calabria had to flee his holdings in south-western

¹⁷ The classic study is that of AMARI 1886.

¹⁸ In addition to Amari, on this and what follows see: PONTIERI 1942; FODALE 2001: 188-203.

Calabria and sought refuge from the Aragonese with Peter. The most significant military events affecting the area occurred during the reign of Frederick III, in May 1296. The Aragonese-Sicilian offensives on this occasion aimed directly at the Terra Giordana. Charles II, for his part, retained his troops to the north of Rocca Imperiale, and left the coastal defence to Count Peter. The Sicilian offensive had easy play at conquering Squillace, whereupon King Frederick decided to attack and besiege Catanzaro. The situation was very much in the favour of the Aragonese, but a 40-day ceasefire between the two parties was agreed on the grounds of the family ties of Count Peter and Frederick's admiral Roger of Lauria. During this time, Peter sought in vain to entice King Charles to move his troops southwards. Finally, the Terra Giordana and the town of Catanzaro rendered themselves to King Frederick¹⁹. We do not know the precise fate of Taverna on this occasion, although it too must have fallen to the Aragonese since we learn that somewhat later, on 10 April 1299, the fortress and its territory was made over by the Aragonese fiefholder Guido(ne) of Spitafora to Roger of Sangineto, who henceforth held the fief in the name of Charles II²⁰. The Maranise hoard can be harmonized with these historical events, although in which manner cannot presently be reconstructed with complete precision. This is largely owing to the lack of comparative data from Sicily or from the southern part of the Italian mainland. It is clear from the hoard's content that the compromised situation of southern Calabria, and of the area of Catanzaro in particular, from the middle of the 1280s onwards resulted in an interrupted circulation pattern of Neapolitan saluti. This is evident even though the date of issue of saluti in the name of Charles II, which are absent from the hoard, is not entirely certain. Meanwhile, geographical, demographic, and military proximity to Sicily in the period 1282-96 obviously led to a privileged availability of pierreali from the Messina mint. It is very likely that the two coinages in the Maranise hoard - saluti and pierreali - had a separate pre-history, before being probably united in the part of Calabria in which the coins were finally hoarded. It is also likely, though presently not provable, that this combination of specimens occurred in 1296 itself, shortly before the coins' abandonment, and that in fact some or all of the pierreali of the hoard had been in the hands of a member of the expedition of that year.

With respect to the hoard from San Lucido, we have already stressed above its numismatic proximity to the Casálbore hoard. Looking at the geo-political situation, we cannot help noticing that these hoards are also united by the high levels of connectivity of their find-spots, especially in relation to Naples, respectively by land and by sea. This would suggest, in the first instance, that their compositional similarities might have been achieved equally quickly, that is

¹⁹ Amari 1866: 46-50; Amatuccio 2017: 106-110.

²⁰ Amari 1866: 98; Amatuccio 2017: 122.

to say that they have similar processes of formation and abandonment. We are naturally drawn to the events which saw Louis of Hungary and his troops enter and rule Naples in the first eight months of 1348, the subsequent fight-back of Louis of Taranto, and the last Hungarian counter-offensive from 1349²¹. Casálbore, unlike the area of San Lucido, was on the direct route taken by large numbers of combatants in and out of the capital on more than one occasion. Nonetheless, there was a fair level of movement between Calabria and Naples during the period of Hungarian occupation as the feudal and administrative order of the kingdom was being revisited²². This – perhaps more so than the integration of Tyrrhenian Calabria, especially the area between Cosenza and the Valle del Crati in the north, and Tropea in the south, into wider maritime commercial networks²³ – can provide the best explanation for the hoard's composition, not however for its deposition. For the latter, we must invoke the Black Death, hitting Calabria in 1348/1349, as we had done for the abandonment of the Casálbore hoard, and with reservations for the cited Pugliese hoards.

The Episcopia 1933 hoard, especially the gigliato typology and the single specimen of the extremely rare issue in the name of King Louis II of Anjou, already contains ample internal information for the context of its formation and abandonment. In 1381 Louis' father Louis I had been invested by Jeanne of Naples as duke of Calabria, that is to say as her successor²⁴. He achieved some military successes in the east of the Regno. After the respective demises of Louis I (1384) and of his adversary Charles III (1386), Louis II gradually built up his plans to claim his inheritance and to conquer Naples and the Regno. He entered the city in the summer of 1390. According to the cited numismatic literature, he probably minted his gigliato exclusively in the year 1392. At this point, the loyalties of various Calabrian feudatories were split between Ladislaus of Durazzo and his mother Margaret, son and widow of Charles III, and the Angevins. The rapid changes of fortune in the period 1392-93, that is to say first the extension of Louis' control over large areas of Abruzzo, Puglia, Basilicata, Calabria, and then the counteroffensive of Ladislaus of Durazzo, limiting Louis' power to Naples and the Terra d'Otranto, provide an ideal context for our hoard. The composition of the hoard in itself bears witness to a free flow of successive issues over a number of decades in this central part of the Regno, situated as it was on what is now the border of the modern "regioni" of Basilicata, Calabria, and Campania. The inclusion of the most recent specimens, on the other hand,

²¹ Much of the second volume of Léonard 1932 is dedicated to these developments.

²² Fodale 2001: 220.

²³ The Tyrrhenian Sea route is very much played down in the seminal work of YVER 1903: 67-71. Compare also Brasacchio 1977: 324-327.

²⁴ On this and what follows see Fodale 2001: 227-235. On the general political context, see also Cutolo 1936.

might have been the product of the movements during the period 1392-93, the events of which may also have resulted in the coins' final abandonment.

Conclusions

It is evident that we are, in view of the limitations of the presently available data, merely scratching the surface of late medieval calabro-lucanese monetization. Leaving aside the highest and lowest forms of money available, the sources for which are the most ephemeral²⁵, a few outlines can nonetheless be given with respect to silver-based currencies: the three hoards presented here make, each in their own way, unique contributions to our knowledge of the silver carlini in question. It is very likely that the southern part of Calabria was initially supplied with coins from the Naples and Messina mints. The latter retained its importance for reasons of proximity and military conflict. From the evidence of the Maranise hoard, circulation was variously fostered and hindered by events. During the subsequent *robertino* phases, the evidence which has been considered suggests a rather rapid and direct integration with the territories to the north, that is to say a harmonious Tyrrhenian area of circulation between southern Lazio and Calabria. The numismatic record, and the evidence from the gigliato currency, might one day redress Georges Yver's rather pessimistic picture of the vitality of this area. Territories to the east, meanwhile, existed at somewhat of a remove and partially partook in other zones of circulation, beside the one centred on Naples. The Black Death would have been a significant caesura in the availability of coinage in all these territories. Nonetheless, military events can never be discounted as driving forces behind the availability, or not, of money. With respect to the central numismatic concern of this paper, the gigliato typology especially in the second half of the fourteenth century, the way forward seems to be particularly clear, if not especially easy to achieve: to provide ever more precise descriptions, and eventually die sequences, for groups 3ii and 3bis (spanning the period c. 1343-c. 1390), based on a much larger sample of specimens than has hitherto been available.

As an afterthought – since this is not the subject matter of the present discussion – we should highlight the particular evidence of the *denier tournois* coinage also in our present context. It is curious how more than two centuries after the retreat of Byzantium from all Italian territories, many parts of southern Italy were again monetized from the Greek-speaking east²⁶. The coasts of Calabria were great recipients of this coinage, but so were those of Campania, Puglia,

²⁵ Gold abounds in the archival, but much less so in the numismatic sources, although recently some pertinent finds have been classified and discussed: see Locatelli 2019. For interesting phenomena regarding petty cash in an urban context, see Castrizio 1998.

²⁶ For these patterns, see Travaini 1997 and Baker 2021.

Abruzzo, and so forth. What is striking in this case is that again there is a neat separation between Campania and Calabria on the one hand, and the Adriatic coasts of the Regno on the other, in the respective separation and integration of the *carlino* and *tournois* currencies: unlike many of the Pugliese *gigliato* hoards, our two hoards from San Lucido and Episcopia do not contain deniers *tournois*. This will also bear further exploration in the future.

Bibliography

- AMARI 1866 = M. AMARI, La Guerra del vespro siciliano, vol. 2, 7th edition, Firenze 1886.
- AMATUCCIO 2017 = G. AMATUCCIO, La Guerra dei Vent'anni (1282-1302): Gli eserciti, le flotte, le armi della Guerra del Vespro, (independently published) s.l. 2017.
- BAKER 2001 = J. BAKER, Three fourteenth century coin hoards from Apulia containing gigliati and Greek deniers tournois, «Rivista Italiana di Numismatica», 102 (2001): 219-280.
- BAKER 2002 = J. BAKER, The Casálbore hoard of Neapolitan gigliati in the name of King Robert of Anjou (1309-1343), «Annali dell'Istituto Italiano di Numismatica», 49 (2002): 155-200.
- Baker 2011 = J. Baker, *Tipologia ed epigrafia nella evoluzione dei carlini*, Colucci 2011a: 377-393.
- Baker 2021 = J. Baker, Coinage and Money in Greece, 1200-1430, Leiden 2021.
- Brasacchio 1977 = G. Brasacchio, Storia economica della Calabria. Dal III secolo D.C. alla dominazione angoiona (1442), vol. 2, Chiaravalle Centrale 1977.
- CAGIATI 1911 = M. CAGIATI, Le monete del reame delle Due Sicilie da Carlo Io d'Angiò a Vittorio Emanuele II, 1, Napoli 1911.
- CARROCCIO, CASTRIZIO 1995 = B. CARROCCIO, D. CASTRIZIO, Ripostiglio di denari tornesi dell'Acaia angioina da Paracopio di Bova (RC), «Archeologia Medievale», 22 (1995): 589-611.
- CASTRIZIO 1998 = D. CASTRIZIO, *Due ripostigli del XV sec. da Calamizzi (RC)*, «Rivista Italiana di Numismatica», 99 (1998): 257-283.
- Castrizio 2002 = D. Castrizio, Note sulla circolazione dei tornesi dell'Acaia angioina nella Calabria meridionale. Ancora sul tesoretto di Paracopio di Bova (RC), «Rivista Italiana di Numismatica», 103 (2002): 231-239.
- CNI XIX = Corpus Nummorum Italicorum. XIX. Napoli 1, dal ducato napoletano a Carlo V, Roma 1940.

- COLUCCI 2011a = G. COLUCCI (ed.), 3° Congresso Nazionale di Numismatica. La monetazione angioina nel Regno di Napoli (Bari, 12-13 novembre 2010), Bari 2011.
- COLUCCI 2011b = G. COLUCCI, Le origini del carlino nel Regno di Napoli (1278-1309), in COLUCCI 2011a: 333-375.
- Cutolo 1936 = A. Cutolo, Re Ladislao d'Angiò-Durazzo, Milano 1936.
- DOLLEY 1953 = R.H.M. DOLLEY, *A hoard of medieval silver coins of the two Sicilies*, «The Numismatic Chronicle», 6/13 (1953): 156-158.
- FODALE 2001 = S. FODALE, La Calabria angioino-aragonese, in A. PLACANICA (ed.), Storia della Calabria medievale, vol. 1. I Quadri generali, Reggio Calabria 2001: 185-262.
- GRIERSON 1965 = P. GRIERSON, Le gillat ou carlin de Naples-Provence: le rayonnement de son type monétaire, in Centenaire de la Societé Française de Numismatique 1865-1965, Paris 1965: 43-56 [= P. GRIERSON, Later medieval numismatics (11th 16th centuries), London 1979, no. XIII].
- LIBERO MANGIERI 2010 = G. LIBERO MANGIERI, Tornesi, gigliati e pierreali in un tesoretto rinvenuto a Muro Leccese, Spoleto 2010.
- LÉONARD 1932 = E.-G. LÉONARD, La jeunesse de Jeanne Ire, Reine de Naples, Comtesse de Provence, vol. 2, Monaco & Paris 1932.
- LOCATELLI 2019 = S. LOCATELLI, Florins and Ducats in the Kingdom of Sicily-Aragon: The Syracuse Hoard (1313–c.1369), «The Numismatic Chronicle», 197 (2019): 299-340.
- MEC 14 = P. GRIERSON, L. TRAVAINI, Medieval European Coinage, with a Catalogue of the Coins in the Fitzwilliam Museum Cambridge. 14 Italy (III) (South Italy, Sicily, Sardinia), Cambridge 1998.
- PANNUTI, RICCIO 1984 = M. PANNUTI, V. RICCIO, Le monete di Napoli, Lugano 1984.
- Perfetto 2018a = S. Perfetto, I gigliati postumi battuti a Napoli al tempo di Ladislao di Durazzo durante la 'Great Bullion Famine' (1386–1414), «Bulletin du Cercle d'Études Numismatiques», 55 (2018): 16-22.
- Perfetto 2018b = S. Perfetto, Per una cronologia 'estrema' del Robertino: Gli ultimi momenti Angioini nel regno di Napoli (1485-1486), «Acta Numismàtica», 48 (2018): 153-169.
- Perfetto 2019 = S. Perfetto, 'Avemo libre d'ariento il quale metemo in zecha': I 'charlini' postumi battuti a Napoli al tempo di Giovanna II d'Angio (1414–1435), «Rivista Italiana di Numismatica», 120 (2019): 227-268.
- Pontieri 1942 = E. Pontieri, Un capitano della guerrea del vespro: Pietro (II) Ruffo di Calabria, in E. Pontieri, Ricerche sulla crisi della monarchia siciliana nel secolo XIII, Napoli 1942: 135-253.
- Pournot 1991 = J. Pournot, Les monnaies angevines frappées au royaume de Naples (XIII-XIV siècles) dans les collections du cabinet de monnaies et médailles de Marseille, in R. Martini, N. Vismara (eds), Ermanno A. Arslan Studia Dicata Parte III, Milano 1991: 685-709.

- Procopio 1955 = G. Procopio, *Il riordinamento del medagliere nel Museo Nazionale di* Reggio Calabria, «Annali dell'Istituto Italiano di Numismatica», 2 (1955): 166-181.
- SAMBON 1893 = A. SAMBON, *Tre monete inedite di Carlo III di Durazzo*, «Rivista Italiana di Numismatica», 6 (1893): 467-475.
- Sambon 1897 = A. Sambon, Le gillat du couronnement de Jeanne d'Anjou et de Louis de Tarente et les émissions posthumes des gillats de Robert d'Anjou, roi de Naples et comte de Provence, «Gazette Numismatique» (1897): 169-186.
- SAMBON 1912 = A. SAMBON, Monetazione napoletana di Roberto d'Angiò (1309-1343), «Rivista Italiana di Numismatica», 25 (1912): 181-202.
- SAMBON 1916 = A. SAMBON, Le monete delle provincie meridionali d'Italia dal XIIo al XIXo secolo, Paris 1916.
- STRANIERI 2000 = G. STRANIERI, Un limes bizantino nel Salento? La frontiera bizantino-longobarda nella Puglia meridionale. Realtà e mito del 'limitone dei greci', «Archeologia Medievale», 27 (2000): 333-355.
- Testa 2008 = G. Testa, *I gigliati napoletani: il punto della ricerca*, «Rivista Italiana di Numismatica», 109 (2008): 553-560.
- TESTA 2011 = G. TESTA, I gigliati di Provenza, in COLUCCI 2011a: 555-588.
- Travaini 1990 = L. Travaini, Roma, Museo Nazionale. Dono di monete di età greca, romana, medievale e moderna da parte del gruppo Bulgari, «Bollettino di Numismatica», 14-15 (1990): 253-274.
- Travaini 1997 = L. Travaini, Deniers Tournois in South Italy, in N.J. Mayhew (ed.), The gros tournois. Proceedings of the Fourteenth Oxford Symposium on Coinage and Monetary History, London 1997: 421-451.
- Travaini 2017 = L. Travaini, Il tesoro di Colle Iano nel contesto monetario del Trecento, in F. Altamura (ed.), Il tesoro di Colle Iano. Atti dell'incontro di studi (Museo Civico Archeologico O. Nardini di Velletri, 16 maggio 2015), Roma 2017 (Monete. Tesori per la Storia, 3): 107-117.
- YVER 1903 = G. YVER, Le commerce et les marchands dans l'Italie méridionale au XIIIe et XIV siècle, Paris 1903.