

FRANKISH PETTY CURRENCY FROM THE AREOPAGUS AT ATHENS

(PLATE 56)

EXCAVATIONS conducted by the American School of Classical Studies at Athens on the northeastern descent of the Areopagus in May and June, 1963 brought to light, close beside one of the large fallen stones on the slope, some two hundred coins of the thirteenth century. A total of 188 was found scattered through the soil within the space of roughly a cubic foot, and another 15 were recovered by re-sifting the earth that had previously been dug from the same area. All these coins were issues of the Frankish princes who ruled in Greece after the partition of the Byzantine Empire by the participants in the Fourth Crusade. They were all copper coins. A yard or two away to the east, in a little pocket made by the stones, there were found 8 more coins, which by way of contrast were not Frankish but French, and were all of silver (though very debased silver). The dates at which most of the Frankish coins were struck probably fall in the second half of the thirteenth century, although they may reach back into the first half. The French coins are conventionally dated to the second half of the thirteenth century, but the evidence on which that attribution rests is not too firm, and some or all of them likewise may belong to the first half of the century. One similar silver coin was found in the earth a yard or two to the west of the 188 copper coins, and another (No. 209 in the catalogue which follows) was recovered from beneath fallen rock a foot or so vertically below the large group of copper coins. All were from the upper side of the boulder, and virtually within its overhang.¹ Thus, the coins came from four (or more) separate places within an overall distance of each other of three or four meters; and two groups (the 8 silver coins and the one from beneath the piece of rock) were found in a resting place where it seems improbable that they should have been disturbed. A few of the stones pinned below the large fallen boulder had to all appearances been worked. They may have been from the walls or foundations of some building which stood on the narrow terrace of the northern flank of the Areopagus, and which, if it was not already disused and in decay, was destroyed when the boulder arrived at its present resting place. The boulder is of such a size that its impact would have been easily

¹ My warmest thanks are due to Professor Thompson, as Field Director of the Agora Excavations, and to Miss Frantz, the excavator, who generously invited me to undertake the study and publication of this deposit. I am further indebted to Miss Frantz for the great skill with which she was able to make direct photographs of the coins. It should be added that neither Professor Thompson, nor Professor Bellinger who was so obliging as to read and comment on a draft of the typescript, altogether shares my estimate of the date of the deposit or loss of the billon coins.

sufficient to ruin a building that stood in its downwards course. Whatever interpretation is put on the worked stones (and the evidence is unfortunately slight) our view of the coins will be that they represent four separate groupings, of which at least the two larger must have been deliberately concealed. There were very few other medieval coins from the excavation of the surrounding area, and only one thirteenth-century piece, a stray copper from a loose stone fill to the east of the church of St. Dionysios the Areopagite.²

The interest of the finds from beneath the boulder rests in their significance for the monetary historian. The problem to which they make a contribution is that of the origins of autonomous local currency in central Greece and the Peloponnese after the Frankish occupation. Attico-Boeotia and the ports of the western Aegean—Corinth, Argos, and others—had had a lively monetary economy in the eleventh and twelfth centuries. The persisting needs of the region's industry and commerce were met, in the first decades after 1204, by the continued circulation of the Byzantine petty currency issued by Manuel I (1143-80) and his successors. (There was, even, in the finds from the Areopagus, one little bronze coin of Manuel, which may reasonably be assumed to have been in use for a century at the date of its concealment or loss.) Later on, the prince of Achaia and the lord of Athens found it necessary or advisable to strike petty coins of their own. The role of the Byzantine small change was taken over by similar coins struck, for the prince of Achaia, mainly at his mint of Corinth, and, for the lord of Athens, at his capital, Thebes. The choice of place is indicative; these two cities no doubt had especial needs for coinage. Both were involved, for example, in the manufacture and sale of silk, and would have had an urbanized population needing to buy their everyday requirements of food in the market place, and to have a coinage of small denomination to make the appropriate payments. How far other cities, and in particular Athens, depended on a monetary economy is difficult to know, since they were not supplied with characteristic coinages of their own.³ Athens did to some extent, certainly, as may be judged from the quantities of stray losses of Frankish petty coinage that have been brought to light in the excavations of the Agora area; but the bulk of the issues struck for the lordship, later the duchy, of Athens were presumably put into circulation in the city of Thebes.

In the latter part of the thirteenth century the same two princes began to strike

² As Type 9 below; 1.00 gm. The coin was found on 27 May 1963.

³ Michael Akominatos, metropolitan of Athens at the time of the Frankish occupation, wrote that the city's only manufactures were soap making and the weaving of monks' habits; and he complained of the absence of blacksmiths. But he seems to have been (zealously) inclined to minimize the city's prosperity in order to prevent imperial demands for taxation. There were apparently no Jews settled at Athens in the later twelfth century, a negative indication of the absence of trade. See W. Miller, *Essays on the Latin Orient*, Cambridge, 1921, pp. 63-66, 74-76. More interesting as evidence for monetary affairs, perhaps, is the localization of Athenian and Corinthian coins, discussed below.

coinage of a rather larger denomination, in base silver or, as it is more usually called, billon. The number of copper coins that went to a billon denier has not been elucidated, but the results of the excavations at Athens and Corinth make it clear that the two types of coin were of different value, for the coppers heavily outnumber the deniers. Site-finds are nearly always coins of trifling value; their statistical accumulation proves not that there were originally more of them, but that people took much more care not to mislay coins of larger denomination, or, if they did, to search for them until they were found. It does not follow that the citizens of medieval Athens were extremely careless with their small change; the twelve hundred Frankish coins from the Agora represent the losses of at least half a century, which can be construed to mean that in an average year two dozen people out of a population of some hundreds or thousands using the area covered by the excavations might have lost one coin each. The deniers were coins of modest value, in comparison with many medieval silver pieces, and could almost be called petty coins themselves. Had they been more valuable, there would doubtless have been many fewer of them found singly.

At Corinth there were two denominations of copper as well as the billon. The little halves, however, are very scarce among the site-finds, and must therefore have been relatively unimportant in the currency. The copper coins, both of Achaia and Athens, sometimes appear to be of a poor billon, but this may be because the metal for them was obtained by melting down Byzantine stamena; there is no reason to imagine that such pieces were intended to be worth more than those of the same design but of a more normal copper alloy.

The different face value of the copper and billon had an opposite, and more striking, effect on the conditions under which the coins have survived. When someone wished to put together a large sum of money, as a savings store or as a payment, he chose only deniers. More than twenty hoards of Frankish currency found in central Greece have been published so far, with a total of over 13,000 deniers apart from various Venetian and other silver and gold coins. The same hoards have yielded a total of two Frankish coppers.⁴ The Areopagus deposit is unique, to date, in that it consists of petty coins. There is a presumption, therefore, that it was not the normal type of accumulation representing a capital sum; and there is the problem of finding a body of evidence on which to base comparisons. Failing hoards, the numismatist is generally able to turn to photographic illustrations in sale catalogues and to build up from them a useful idea of the stylistic varieties, their scarcity, and so on, in a particular coinage. An Athenian copper of the type that made up the bulk of the Areopagus deposit figured in the R. C. Lockett sale in 1956. It came from the Lambros collection, and, along with one further Athenian copper of a different type,

⁴ The hoards are listed in D. M. Metcalf, "The Currency of *Deniers Tournois* in Frankish Greece," *B.S.A.*, LV, 1960, pp. 38-59. Both the coppers were in the second Delphi hoard of 1894, which is dated to 1325-1340. They were both of Type 5 below; the hoard, of which the age-structure is slightly unusual, is the only available evidence for its place in the sequence of issues of petty coinage.

with an equally desirable pedigree, realized £24. In the same sale Athenian deniers fetched as little as 2s. apiece. Few other Frankish coppers have appeared in the auction room in recent years.⁵ The only other evidence to which one can profitably turn for purposes of comparison is that of the site-finds from central Greece. Many of them, unfortunately, have suffered from their seven hundred years in the soil so much that they are almost indecipherable.

The Athenian issues, with the quantities found in the excavations of the American School at Athens, and at Corinth up to 1929, are as follows (Fig. 1):

OBVERSE AND REVERSE TYPES	SCHLUMBERGER	ATHENS	CORINTH
1. Genoese gate / Cross	XII, 31	32	2
2. G in center / Cross	XII, 30	20	0
3. Fleur-de-lis / Genoese gate	XII, 32	61	1
4. Coat of arms / Cross	XIII, 1	20	2
5. Castle / Tower	XIII, 6	11	0
6. Castle / Cross (GVIOT)	XIII, 8	97	0
7. Cross / G in center	XIII, 12		
and (?) XIII, 11		15	0

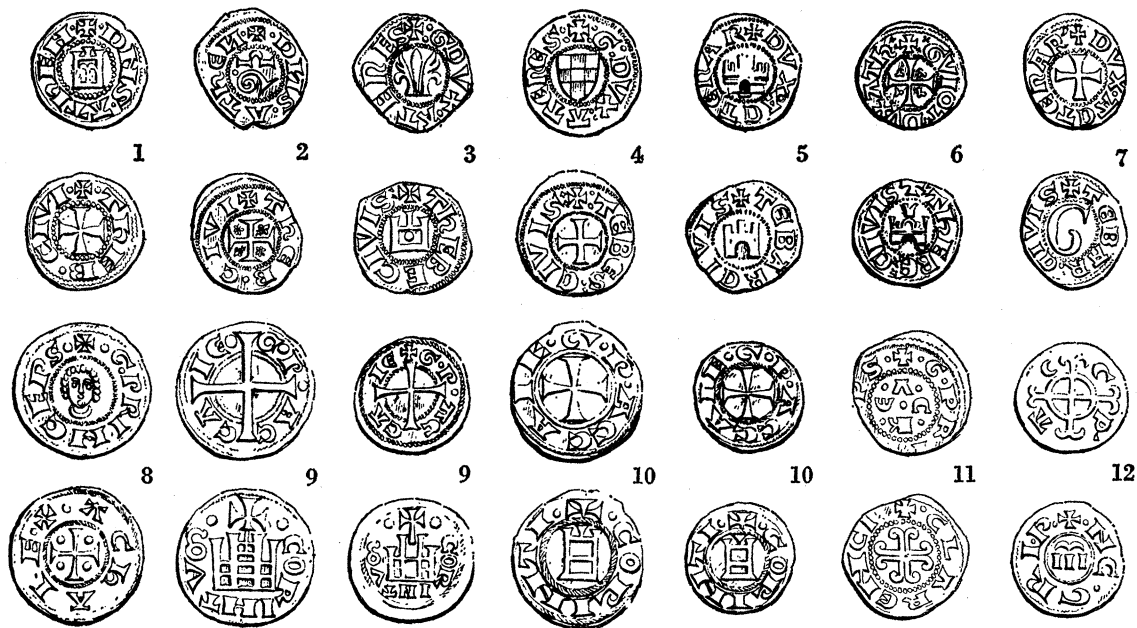


FIG. 1. Thirteenth century Frankish Copper. Types 1-8 Athenian, 9-12 Achaian.

⁵ R. C. Lockett Collection, Part III, *Continental* (London, 29 February 1956), lot 666, plate XVII. In the same sale there were coins of Types 8 and 10 below and a Negripontine piece (lot 658), Types 3 and 4 (lot 667) and 6 (lot 668). See also *Collection d'un Amateur Suisse*, Part IV, (Münzen und Medaillen AG., Basel, forthcoming).

Types 1 and 2, with the legend DNS (*Dominus*), must belong to the period when the rulers of Athens still bore the title of Megaskyr, or Grand Lord. The rest, with the title DVX, will belong later. It has been accepted as a cardinal point in the chronology of the Frankish coinage that the change took place in 1260, on the occasion of Guy's visit to Paris to appear before Louis IX. Longnon, however, dismisses the chroniclers' record summarily as a fiction, and asserts that it was not until *ca.* 1280 that the title *Dux* was used. The very plentiful Type 6 bears the name of Guiot, the diminutive by which Guy II was familiarly known during his minority (1287-94); but Types 3, 4, and 7 are signed only G, which could apply to Guy I as duke, if one accepted the traditional chronology, Guillaume I (1280-87), Guy II (1287-1308), or Gauthier (1308-11), except that Type 4 bears the Roche arms and so cannot belong to Gauthier. Type 5 is completely anonymous, and is attributed to the first part of Guy's minority, 1287-91, during which Helena Angela was regent. Schlumberger categorized as very rare or extremely rare all except Types 3 and 4. No coins have been attributed to Jean (1263-80).⁶

The Achaian types are fewer (Fig. 1):

OBVERSE AND REVERSE TYPES	SCHLUMBERGER	ATHENS	CORINTH
8. Facing head / Cross	XII, 6	94	1
9. Cross / Castle at Acrocorinth	XII, 7, and 8 (obol)	276	192+2
10. Cross / Genoese gate	XII, 10, and 9 (obol)	49	136+1
11. The letters A C H E / <i>Croix ancrée</i>	XX, 28	0	0

The relative proportions of Type 8, which is the only one with no mint-signature (it reads G. PRINCEPS on the obverse and ACHAIE on the reverse) stand out from the tables as an absurdity, and we may without hesitation re-identify it as an Athenian issue. There is one caveat: the statistics of site-finds are occasionally distorted by the inclusion of small hoards or parcels each of which should properly be reckoned as a single discovery for purposes of comparison. Among the 94 coins of Type 8 from Athens, however, the only such groups are a deposit of 3 coins from the site of the Stoa of Attalos⁷ and 2 coins from a grave.⁸ There is no possibility of confusion at

⁶ The statistics of Athenian finds are as published in M. Thompson, *The Athenian Agora*, II, *Coins from the Roman through the Venetian Period*, Princeton, 1954, and those of Corinth are from K. M. Edwards, *Corinth*, VI, *Coins, 1896-1929*, Cambridge, Mass., 1932. The later finds from Corinth (to 1939) have been published too summarily to be taken into account. The standard work of reference on the coinage of central Greece is still G. Schlumberger, *Numismatique de l'Orient Latin*, Paris, 1878, supplement and index, 1882.

⁷ From Section Σ, Room XII, between stroses 1 and 2.

⁸ One of a number from the church of St. George (the temple of Hephaistos): Section KK, Grave LXIII; there was a coin of Type 9 in the same grave. See W. B. Dinsmoor, *Observations on the Hephaisteion (Hesperia, Supplement V)*, 1941, pp. 9-10. Note the curious imitative pieces, e.g. five coins from Grave XLI. Is there a significant preponderance of Corinthian, as compared with Athenian, issues among the grave finds?

Corinth, of course, where only the one specimen was found.⁹ The contrast is so marked that one can rule out the possibility that Type 8 was, for example, a coinage for the county of Argos and Navplion, which was held as a fief by the lords of Athens from the princes of Achaia. If it had been, more specimens would surely have found their way into the currency of Corinth. Type 11, which was absent from the finds at both sites, was struck at Clarentzia; it is a great rarity. Neither of the remaining Achaian types has a fuller signature than G, and their attribution as between Geoffroi (1218-45) and Guillaume de Villehardouin (1245-78) is therefore problematic. But there are no coins reading C or F, for Charles I d'Anjou, Charles II, or Florent (1278-97), so that it appears that all the Corinthian coppers must be earlier than 1278. We have noted above that Athenian coppers were certainly being struck as late as *ca.* 1290.

There are two or three scraps of documentary evidence for the date at which the Frankish issues began. They are conflicting, and, as they have been discussed at length elsewhere, it need only be said that the dates they mention are 1218 and 1250.¹⁰ The chronology of the copper coins has remained very obscure. It is, however, evident that copper and billon were issued (and used) concurrently, and that they were not purely successive coinages.¹¹ Bellinger, noting that the excavations on Acrocorinth had yielded 24 specimens of Type 10 but only one of Type 9 (and none of Type 8), and that the proportions were very different from those in the main excavations, drew the conclusion that the two varieties could not have been contemporary issues. He suggested that, as Guillaume is mentioned by a chronicler as having carried on the building and repairs on Acrocorinth, Type 10 should be assigned to the earlier years of his reign, while Type 9 might belong to that of Geoffroi.¹²

There is one other coin (Fig. 1, 12) which, although rare, must be mentioned, as there were two specimens of it in the Areopagus deposit. On one side the inscription is G P' AC, with the same *croix ancrée* of the Villehardouins as on Type 11 above, and on the other NEGRIP. It was Lambros who found the very first coin of this type to come to notice, in the possession of a simple inhabitant of Khalkis. Schlumberger, who knew of only four or five specimens in all, followed him in attributing it to Guillaume de Villehardouin and to the period 1255-60. It was evidently a propaganda coinage, struck in connection with Guillaume's claim to be the heir to one of the "thirds" into which Euboea had been divided by Venetian intervention in 1216. This portion of the island was originally shared between the brothers Marino and

⁹ That is, in the period up to 1292.

¹⁰ G. Schlumberger, *op. cit.*, pp. 308-312, and D. M. Metcalf, *Coinage in the Balkans, 820-1355*, Thessaloniki, 1965, p. 224.

¹¹ This was always implicitly understood, but it is re-emphasized in D. M. Metcalf, "The Currency of *Deniers Tournois* in Frankish Greece," *loc. cit.*

¹² A. R. Bellinger, "The Coins," in C. W. Blegen and others, *Corinth*, III, i, *Acrocorinth, Excavations in 1926*, Cambridge, Mass., 1930, pp. 61-68. Other finds of the period included one denier of Tours, struck before 1204, and one of Louis IX, and a coin of Guy de la Roche.

Rizzardo dalle Carceri, who, with a sixth each, were entitled *sestieri*. It was agreed that if one should die, his part was to be inherited by his colleague, to the exclusion even of his children. Carintana, the only daughter of Rizzardo, married Guillaume de Villehardouin; on the death of Rizzardo, in 1246, Guillaume contested the claim of Marino, on behalf of his wife. On Carintana's death, in 1255, Gulielmo di Verona and Narzotto dalle Carceri, who were ruling half the island, set Grapella di Verona in possession of Oreos. The prince of Achaia, displeased by the summary way in which his wife's claim had been overridden, put Gulielmo and Narzotto in prison. Thus began the "war of the *terzieri* of Euboea." Paolo Gradenigo, the Venetian bailiff, took Negripont; the prince sent his forces under the command of Geoffroy de Carytaena and took it back. Early in 1256, the Republic of St. Mark sent an expedition to blockade Negripont. The other political powers with an interest in the area were drawn into the conflict: the Genoese sided with Achaia, the lordship of Athens with Venice. The Venetian commander succeeded in taking Negripont after a lengthy siege, and Guillaume thereupon dispatched another force, which was defeated by the Venetians under the walls of Negripont. Other Achaian troops, meanwhile, advanced as far as Athens, while those of Guy de la Roche moved towards Corinth. Guillaume then decided that it was time to make a serious effort if the affair was to be brought to a conclusion. He led his army into Athenian territory, and, meeting Guy at the pass of Mount Karydhi, on the route to Thebes, defeated him decisively. The Athenian knights fled to Thebes, leaving Attica in the hands of Guillaume's troops. Guy's real mistake had been strategic; legally his error was to have taken up arms against his feudal overlord (he held Argos and Navplion from the prince of Achaia). It was no doubt Guillaume's intention to extend his control as effectively as possible over the duchy of Athens, but the High Court of Achaia, before which Guy was summoned, did not feel strong enough to reach a decision, and referred the case to the king of France, Louis IX. The king's assessment of the state of affairs in Greece would seem to have been along the same lines as those of the High Court, for, at Paris, Guy was found guilty but was deemed to have been sufficiently punished by the trouble and cost of his journey to France.¹³

The most likely dates for the issue of Guillaume's Negripontine coinage, then, are 1255, before the first Venetian capture of the city, or 1256, during the Venetian blockade. A stylistic comparison with the eleventh type listed above, Schlumberger, plate XII, 28, admits another possibility, namely that the coins were not in fact struck at Negripont, and were purely a propaganda issue; the find-evidence speaks against this hypothesis, although not decisively. Three specimens were found in the excavations at Athens, and four at Corinth, among a larger total.¹⁴ It is, in any case,

¹³ J. Longnon, *L'empire latin de Constantinople et la principauté de Morée*, 1949, pp. 220 ff.

¹⁴ The Athenian coppers are from Sections AA, OA, and EE. Note that the basis of comparison is different: there were no Negripontine coins found at Corinth up to 1929. Two came to light in 1930-1935 and two in 1936-1939.

very improbable that the type is later in date than 1259, when Guillaume was captured and imprisoned as a result of the Byzantine victory at the battle of Pelagonia.¹⁵

Out of all the Frankish coppers found at Athens, 350, or 52 per cent. of the identified total, are Athenian issues (if one includes the problematic Type 8), and 325, or 48 per cent., are Corinthian. At Corinth 331, or 98 per cent., of the finds are Corinthian, and only 6 specimens are Athenian. On an overall view one would say that there was a much greater penetration of the Corinthian currency into the currency of Athens than *vice versa*. One straightforward explanation would be that the output of petty coinage from the Corinth mint was vastly greater than that from Thebes. A more plausible explanation, which would fit in with the current views on chronology, is that Types 9 and 10 were struck before the issue of the Athenian coins had begun, and that, having been carried to Athens in quantities for the good reason that they met a need there, they remained in circulation, and accumulated among the stray losses. Neither of these explanations, it will be suggested below, is the correct one; but the second does at least give a much more self-consistent picture of the localized use of petty currency than the first.

If a large quantity of Corinthian coppers had been put into circulation at Athens, one would expect a residue of them to be found in the currency even after the introduction of other types. Their total absence from the Areopagus deposit presents a thorny problem. Among 203 coppers, 1 was Byzantine, 2 were Negripontine, and 200 were of Type 1, signed DNS ATHEN. The absence of Type 2, which is also signed DNS, suggests strongly that it was a later issue than Type 1, for the site-finds show it to have been quite plentiful enough to have occurred in the Areopagus deposit if it had been earlier. There are no parcels to distort the statistics of the site-finds.¹⁶ It is very unlikely that the title DNS would have been used on coins struck after 1280. On the other hand, there may have been a short period after the title *Dux* was adopted during which no coppers were struck. (But it is certain that large quantities of deniers *tournois* were struck at Thebes in the years 1280-85). If some allowance is made for the period of issue of Type 2 (the absence of which among the Areopagus coins absolves us from making allowance for a possible intermission in the issue of coppers), the terminal dates for the deposit are apparently 1255 and, at the very latest, *ca.* 1278. It is extremely difficult to suppose that all the Corinthian coins could have fallen out of use in the ordinary way through the lapse of time by *ca.* 1278. Type 9 alone was represented at Athens by 276 specimens, far more than all those signed DNS ATHEN. We must therefore explore the acceptability of a radical revision of the attributions, which would give Types 8, 9, and 10 to a date after the deposit of the Areopagus coins. There is only one obvious historical occasion: they would have to be

¹⁵ See Schlumberger, *op. cit.*, pp. 331, 352-357.

¹⁶ Two coins, found in the same area of 6 square meters (H, June 6, 1933), are the only possible exception.

attributed to the short period between the meeting of the High Court at Nikli and the favorable judgement that Guy received on appeal to Louis IX. This hypothesis appears at first glance to be disproved by the evidence from Acrocorinth. But before we conclude that Types 8, 9, and 10 can only be issues of the first half of the thirteenth century, and that their absence from the Areopagus deposit remains a puzzle, there is one more variety of evidence to be considered.

The Frankish coppers are localized in their occurrence within the area covered by the Agora excavations. There are several instances of the concentration of medieval coinages at particular points within the Agora area, usually along the axis of the Panathenaic Way. The little copper coins of Philippicus (711-13) have been plotted on a map, and show such a distribution.¹⁷ The folles of Basil I (868-86) are sharply localized along the central sections of the Panathenaic Way, that is, in front of the Stoa of Attalos; and "Rex Regnantium" folles of the late tenth and early eleventh centuries are to some extent concentrated a little lower down the same road.¹⁸ The Athenian coppers of Type 2 are very heavily concentrated in a small area yet further along the Panathenaic Way, in the excavation sections H' and, especially, H. Nine out of 20 specimens are from these two out of some fifty sections; and the other 11 are widely scattered. The distribution of Type 1 is similar, although less pronounced.¹⁹ All these concentrations of stray losses are very probably to be associated with the main trading quarter of the area covered by the excavations, as, over a period of centuries, it shifted gradually to the northwest. When we turn to the very plentiful Corinthian variety, Type 9, there is, again, a concentration, amounting to a seventh of the 276 specimens, in Sections H and H', but an even larger number of coins comes from the quite distinct area of Sections AA and, especially, BB (see Fig. 2), on the right-hand side of the upper slope of the Way, and notably close to the point where our deposit was discovered.²⁰ The same pattern is to be discerned among the coins of Type 10, and, very clearly, among those of Type 8.²¹ Types 1 and 2, on the other

¹⁷ M. Thompson, "Some Unpublished Bronze Money of the Early Eighth Century," *Hesperia*, IX, 1940, pp. 358-380.

¹⁸ D. M. Metcalf, "Coinage and City Life in Central Greece ca. A.D. 1000," *B.S.A.*, LX, 1965.

¹⁹ Type 2: 1 from MM, 1 from AA, 7 from H, 2 from H', 1 from Z, 2 from B, 1 from O, 2 from Σ, 1 from BB, 1 from II, 1 from OA; total, 20. Type 1: 1 from MM, 3 from KK, 3 from H, 2 from H', 2 from P, 2 from Σ, 2 from E, 1 from IIΘ, 2 from Γ, 1 from ΣΤ, 1 from IIII, 1 from N, 1 from M, 1 from Θ, 1 from K, 1 from I, 1 from A, 1 from II, 2 from T, 1 from AA, 1 from BB, 1 from ZZ; total, 32.

²⁰ Type 9 is represented in H by 16 single finds plus a group of 5 (discovered on May 26, 1933, in square 63/Δ); and in H' by 2 coins, possibly associated, from Room XXVIII of a "Byzantine building" (May 11, 1938), and 18 other single finds. There are no fewer than 43 specimens from BB, and 10 from AA. Twelve coins are from KK, 12 from E, and 10 from Z, and the rest are scattered. The only obvious parcel of Type 9 is 8 coins from Section OA (the Late Roman Fortification), May 20, 1938.

²¹ Among 49 coins of Type 10, 5 are from H, 2 from BB, and 3 from AA; there are 3 from KK. There is an interesting group of 6 coins found in Section N, February 28, 1936. Among the 94

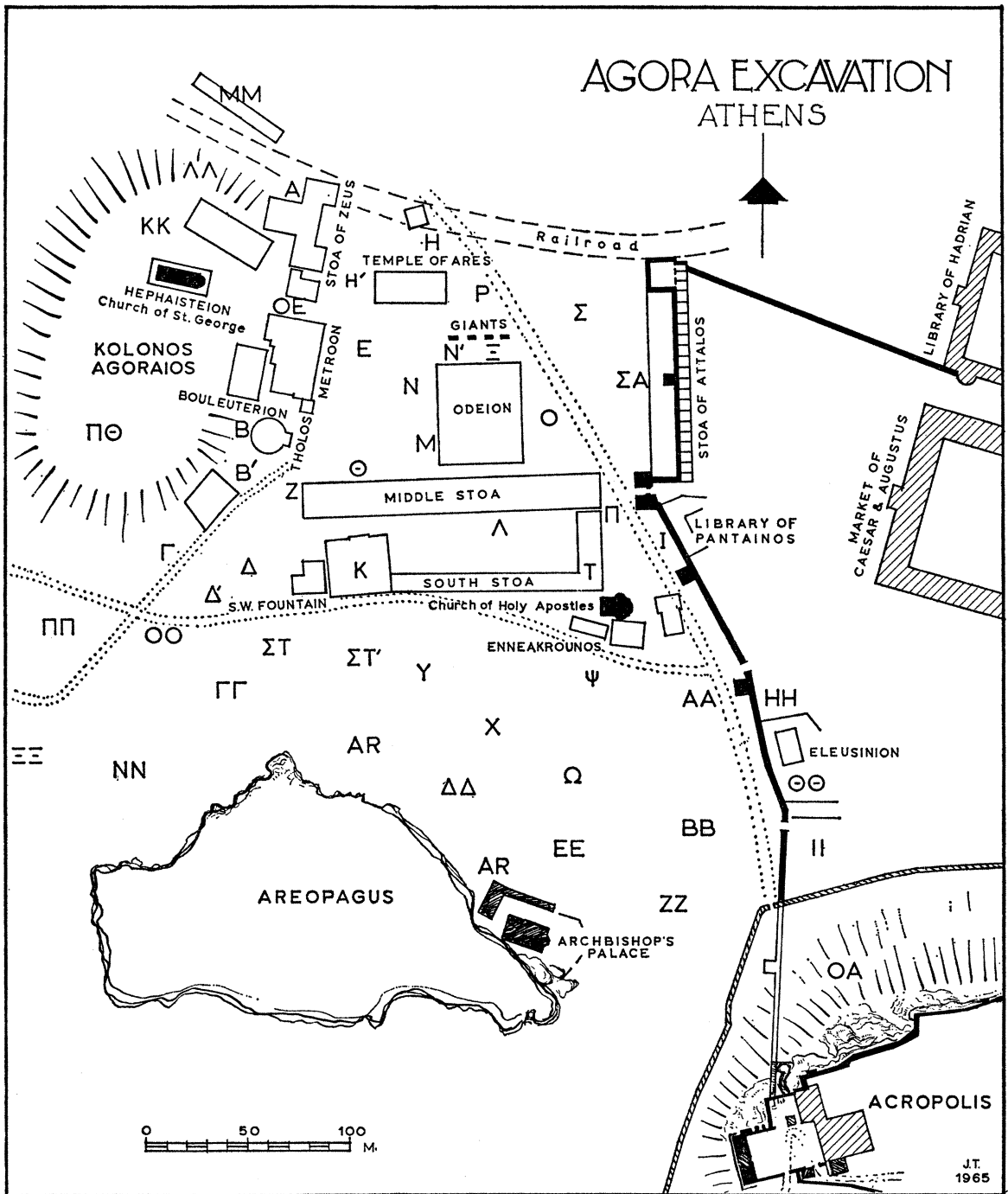


FIG. 2

hand, show no sign of concentration in Sections AA and BB. If the χ^2 test is applied to the apparent localization of Type 9, using Sections H and H' as the control, the probability of its being merely a random effect is well under one in a hundred. It may be asked whether it is not "cheating" to apply the test of significance to that part of the evidence only which is most likely to yield a positive result. This is a question within the scope, not of statistics, but of the design and analysis of scientific experiment. It is not clear that different issues of coinage, or different sections of an excavation, are analogous to crops, for example, grown on the randomly distributed plots of an experimental field station. Rather it would seem that non-significant results do not minimize those which are significant (within reason, of course), and which suggest that in one period, or in one district of a city, if not in others, there was something unusual about the character of monetary affairs. There would seem, then, to be at any rate a *prima facie* case for special use of Type 9 in Athens, the more so since a similar, but statistically much more striking, instance of localization within the Agora area has been noted among the Rex Regnantium folles of the late tenth and early eleventh centuries.²²

The only plausible explanation which comes to mind is that, if Corinthian but not Athenian petty coins accumulated as stray losses to a marked extent in Sections BB and AA, it was because persons from Corinth, or persons paid in Corinthian money, were living either there or on the Areopagus; in a word, that there was a Corinthian quarter of some sort (perhaps a garrison?) on the Areopagus or on its slopes.

The thesis of a military or para-military encampment on or near the Areopagus finds support in a similar instance from the seventh century. Constans II made Athens his temporary capital, and wintered there in 662/3 with an army, in the course of the journey that took him to Rome, and, eventually, Syracuse.²³ The bronze coinage of Constans has been found in very large quantities in the Agora excavations, and hoards of gold are recorded from the Asklepion,²⁴ no great distance southeastwards from the Areopagus. The Agora coins are markedly localized in a compact area on both sides of the upper slopes of the Panathenaic Way, in Sections AA, BB, ZZ, HH,

coins of Type 8, 12 are from H and 5 from H', 8 are from BB and 6 from AA, 6 are from KK of which 4 are from graves, and the only other traces of concentration are in E, Z, and MM. A coin of Type 8 was the only identified Frankish coin from the Pnyx; see G. R. Davidson and D. B. Thompson, *Small Objects from the Pnyx: I (Hesperia, Supplement VII)*, 1943, p. 24.

²² It must be emphasized that the statistical reliability of the evidence is enormously enhanced by the division of the finds among a large number of standard sections, each of which is a compact area.

²³ P. Charanis, "The Significance of Coins as Evidence for the History of Athens and Corinth in the Seventh and Eighth Centuries," *Historia*, IV, 1955, pp. 163-172.

²⁴ I. N. Σβορώνος, *Θησαυροὶ Βυζαντινῶν Χρυσῶν Νομισμάτων ἐκ τῶν Ἀνασκαφῶν τοῦ ἐν Ἀθήναις Ἀσκληπιείου*, *Journal International d'Archéologie Numismatique*, VII, 1904, pp. 35-52, and D. M. Metcalf, "The Aegean Coastlands under Threat: Some Coins and Coin Hoards from the Reign of Heraclius," *B.S.A.*, LVII, 1962, p. 23.

ΘΘ, and II. A quarter of the identified folles are from this area, and half of them are from Section BB alone.²⁵ The main concentration in the lower part of the Agora area is in Section Σ and, to a lesser extent, I, and there is a secondary concentration involving Sections Z, with Γ and IIΘ (again, see Fig. 2). In other periods the percentage of finds from the slopes of the Areopagus is generally much smaller. Under Leo VI, for example, it is 5 per cent., and under John I and his successors, 7 per cent. If the localized occurrence of the coins of Constans around Sections AA and BB is to be explained, at least in general terms, by reference to the presence of his troops in Athens in 662/3 (as it surely must be), the statistics show how large a mark some special event of quite brief duration can leave on the relative proportions of the finds from a site.

With that thought for encouragement, there would seem to be no great obstacle (and there is on historical grounds no obvious alternative) to dating the arrival in Athens of the numerous Corinthian coins of Types 8, 9, and 10 to the period 1258-59, even if it involves looking for another and possibly similar explanation for what is, after all, a parallel instance of localization, that of Type 10 on Acrocorinth. The chroniclers do not mention an Achaian occupation of Athens; all that we are told is that after the battle of Karydhi Achaian troops overran the duchy. The surviving accounts of the happenings of 1258-59 are, however, brief, and their silence on this point does not seem a compelling reason for rejecting the hypothesis. The relative volume of the stray finds at Athens, of Type 9 especially, may be partly a reflection of the greater reliance of troops or temporary residents on monetary payment to obtain food and other everyday requirements. Guillaume's Negripontine type shows him to have been capable of issuing special coinages; and we may also recall the curious phrase in Marin Sanudo's *Istoria del Regno di Romania* where (rightly or wrongly) he describes Guillaume as pleading the case before Louis IX in 1249 to be allowed to strike coins to pay his troops, with the words, "Signor Sir, tu sei maggior Signor di me, e poi condur gente dove vuoi e quanta vuoi senza denari: io non posso far cosi."²⁶ All this is building on what is only a guess, but it sits rather more closely to the whole range of evidence than the earlier guesses can now be made to do.

The case for dating Types 8, 9, and 10 after 1255 rests largely on their absence from the Areopagus deposit. Suppose, however, that that find were of an unusual character, for example an official disbursement consisting of coins that had come directly from the Theban mint. The two Negripontine coins among the rest give some indication that the deposit was in fact a sum of money withdrawn from circulation in the ordinary course of events; but it is possible to test the proposition more carefully by checking how many different dies are represented among the 201 coins. If they were all from the same two or three pairs of dies, then either the issue of

²⁵ It is hoped to publish a detailed study of the evidence relating to this reign.

²⁶ K. Hopf, *Chroniques Gréco-romaines inédites ou peu connues*, Berlin, 1870, p. 102.

Type 1 was on a small scale, or the deposit was not a random sample of the whole of it. One would expect a batch of coinage that had not long left the mint to be from a very restricted number of dies.

To check each of 200 obverses against every other obverse and each of 200 reverses against every other reverse would involve $2 \cdot \frac{200(200-1)}{2}$, or 39,800 comparisons of pairs of dies. The little Athenian coppers are generally so alike, and often so defectively struck,²⁷ that a single comparison usually involves long and careful scrutiny if one is to be absolutely certain whether or not the dies are the same.

A preliminary sample check of 20 coins in good condition but otherwise chosen at random revealed the following pattern of die-linkage: five coins were from the same obverse die, but were from different reverse dies. Three other coins shared an obverse die, but were from different reverse dies; and another pair of coins were linked in the same way. Finally, three common obverses were linked with three common reverses in a group of four coins. This is more or less what was to be expected: the life of a reverse die, that is, the puncheon, which receives the full impact of the hammer-blow, is a good deal shorter than the maximum life of an obverse, or anvil die, and consequently one often finds two or more different reverses in association with the one obverse. In English mints, at certain periods from which documentary records have survived, it was the practice for obverse and reverse dies to be supplied for use in a fixed ratio, typically one obverse to one and a half, two, or even three reverse dies. The use of as many as five reverse dies with a single obverse die, the chain-linkage of coins through a series of obverses and reverses, and the skilled but hasty workmanship of many of the coins all suggest that the Theban mint was striking a considerable volume of currency quickly, in the issue of Type 1—more so than one would have guessed from the rather small total number of dies involved, as estimated statistically.²⁸ The preliminary check revealed several useful things: first, that the Areopagus deposit was not manifestly a sum of money of unusual character; secondly, that die-analysis of it for statistical purposes could afford to ignore the reverse dies, among which there was far less duplication than among the obverses; and thirdly, that it was quite impracticable to make a list of the coins showing die-duplication that could be guaranteed as completely accurate.

A complete check was therefore confined to the obverses of 140 coins, the rest being very obscure. It produced 7 pairs, 5 triplets, 2 quadruplets, and 2 quintuplets.

²⁷ The main difficulties are due to "shadowing": the flow of metal into the dies is incomplete, being influenced (through some mechanism of the stresses that occur at the moment of striking) by the corresponding part of the opposite die. A very good example of "shadowing," in which the cross of the reverse has come through, as it were in intaglio, onto the obverse, is illustrated on Plate 64. The subtler effects, whereby a serif, for example, may not be struck up, make positive die-identification very difficult.

²⁸ See below.

The figures may be as much as 10 per cent. on the low side, but can hardly be more. The ratio of multiples to pairs is much higher than is probable in a random sample, and the incidence of duplication is much higher in the 20 coins in good condition than in the rest of the parcel. Together these two discrepancies suggest that the deposit consisted to some extent of chosen pieces. In that case, the duplicates might be expected to include a high proportion of coins issued not long before the date of deposit.

The average number of coins struck from each reverse die was probably in the range 7,500 to 12,500.²⁹ The total number of reverse dies used to strike Type 1 can be estimated from the extent of die-duplication in the deposit, although not at all precisely. If the quintuplets and quadruplets are ignored, as reflecting the special choice of good coins by the owner of the money, the other instances of duplication suggest an original total of a few hundred obverse dies, say, three to five hundred. On a conservative estimate, therefore, some five million coins may have been struck. It may be taken as virtually certain that more than a million coins were issued, since there are at the very least a hundred different reverse dies represented in the Areopagus deposit. Here is a fragment of quantitative evidence about the economic development of central Greece that can be set alongside the statement by Benjamin of Tudela that there were two thousand Jews living in Thebes in the 1160's.³⁰

There is some stylistic variation among the Athenian coppers, by which they can conveniently be grouped for the purpose of checking die-similarities; the gateway is sometimes rather wider, and sometimes taller, than on the average specimen. Details such as these are, however, probably of little or no significance from the point of view of mint-history. Both wide and tall gateways occur among the duplicates, although the wider variety is relatively less plentiful than among the unduplicated specimens. There are no appreciable metrological differences between any of the main variants. The average weight of the coins is 0.48 gm.³¹ It is hardly possible to place them into even

²⁹ D. Sellwood has suggested, at a recent meeting of the Royal Numismatic Society in London, that the limiting factor was the gradual flaking away and destruction of the top of the upper die, where the hammer-blow fell upon it, until it was too short to hold. (If it was more than a certain length to start with, there was the danger that stresses within the puncheon would cause it to break in two in the middle.) Recent study of mint records and other evidence by B. H. I. H. Stewart indicates that fourteenth-century mints in England were capable, when working under pressure, of producing 12,000 to 15,000 coins from a reverse die. The Athenian coins are so small that the figure for them might easily have been somewhat higher.

³⁰ See A. Andréadès, "The Jews in the Byzantine Empire," *Economic History*, III, 1934, pp. 1-23. This was an outstandingly large Jewish population, and they were said to be "workers in silk or purple." There were 2,500 Jews at Constantinople, 500 at Thessalonica, 300 at Corinth, 200 at Negripont; 400 was the largest figure among the other places mentioned; Athens is not in the list. Note a possible connection between the 200 living near Delphi as "agriculturalists" and the numerous hoards of Frankish tournois from Delphi and its immediate environs.

³¹ The coins were weighed correct to the second decimal place, and also in batches of about twenty; there were minor discrepancies, but the total for Nos. 1-200 was in each case the same,

an approximate chronological sequence, until a second hoard comes to light, to permit comparisons to be made.

Nevertheless, we are already in a position to conclude, from a study of the copper coins, that Type 1 was almost certainly the first of the local Frankish coinages in use in Athens. It copied the coinage of Genoa presumably for political rather than monetary reasons, since the two coin-types, although very similar in appearance, were by no means equivalent in value. Guy I made important trading concessions, in 1240, to the Genoese residing at Thebes; the design of his coinage is, no doubt, to be seen in that context, and the first issue may have been in 1240 or not long afterwards. The Areopagus deposit offers some small support for an early date, since a proportion of the coins show wear. Secondly, it suggests that the Corinthian coppers which are so numerous among the Agora finds may first have come flooding into Athens in 1258-59. (This thesis provides an explanation for the lack of Athenian coppers attributable to Jean, 1263-80.) If the petty currency of the two cities was in the ordinary course of events very localized, the total absence of Corinthian pieces from the Areopagus deposit does not allow one to say that the beginnings of an autonomous coinage at Corinth are likely to have been later than some particular date, although it must still seem that if there had been an interval of any great duration (before 1258-59) when Corinthian but not Theban coppers were being struck, a few would have found their way to Athens. The deposit, in other words, makes a date of origin of 1218 rather implausible. Thirdly, the complete absence of Corinthian coppers, and the presence of two Negripontine coins, makes it very difficult to envisage a date of deposit approaching 1280. We have seen that *all* the Corinthian coppers must be earlier than 1278, and that enormous quantities of them were current in Athens. The relative proportions of Types 9 and 10 are quite different at Athens and Corinth; Type 9 is relatively several times more plentiful than Type 10 at Athens. On the hypothesis just outlined, the straightforward explanation of them is that the coins of Type 10 are earlier, while Type 9 (which shows the more pronounced localization within the area of the excavations) was currently being issued during the brief Corinthian ascendancy over Athens. This would involve reversing Bellinger's order, although Type 10 could still very well be assigned to the earlier years of the reign of Guillaume. Whatever the date at which the title *Dux* came into use, the numismatist will wish to envisage that the Athenian coppers found on the Areopagus were struck mostly during the 1250's, and it would raise serious difficulties for him to date their deposit later than 1258. They are, then, of considerable interest for both numismatic and monetary history. They are the only large deposit of Frankish petty coins, and the only satisfactory evidence for the metrology of the series; they are perhaps twenty-five years earlier in date than the earliest hoard of Frankish tour-

and gave a mean average of 0.480 gm. The quartiles are 0.53 gm. and 0.43 gm., and the deciles 0.61 gm. and 0.38 gm.

nois;³² they suggest (even if they cannot prove) major revisions in the chronology of the Athenian and Corinthian issues; and they give some idea of the scale on which the Athenian coinage was struck.

The interest of the few billon coins from the Areopagus is almost as great, for they, too, offer unique evidence about the origins of an autonomous currency in Frankish Greece. They are all deniers tournois, but they are French, not Frankish, issues. The first Achaian tournois are undoubtedly earlier than 1278, and the first Athenian tournois are undoubtedly later than 1280, but only by a year or two. The composition and close age-structure of the Xirokhoris hoard, which establishes these facts, suggest that the date of origin of the Achaian tournois was not more than a few years before 1278.³³ The only documentary evidence, on the other hand, is that which mentions the date 1249,³⁴ while the general background of monetary and political history has prompted the suggestion that tournois may first have been struck in Greece following the treaty of Viterbo in 1267, by which Guillaume de Villehardouin accepted Angevin overlordship of Achaia.³⁵ The main support for this theory comes from the persistent occurrence (although in small quantities) of Provençal deniers tournois in central Greek finds. Charles of Anjou, count of Provence from 1246, himself became prince of Achaia in 1278. Another suggestion is that the Frankish tournois were a parallel creation, dating from 1249, to those of Alphonse de Poitiers or of Charles.³⁶ A third possibility is that these latter were carried to Greece as a result of the move by Louis IX, in 1263, to suppress their circulation in France.³⁷

The choice of dates for the introduction of Achaian tournois, then, includes 1249/50, 1267, and *ca.* 1275, and the only find-evidence which bears on it is that of the Corinth hoard of 1934. It consisted of 369 French deniers tournois, together with 18 other English, Venetian, and French silver and billon coins and one Byzantine gold nomisma. The date of concealment is shown by the Venetian coins to be after 1253, but the age-structure is such that the later terminus might easily be in the 1260's. The deposit was described, when a note of its discovery was published, as a crusader's hoard.³⁸ Half-a-dozen undoubted traveller's hoards, consisting of west

³² That from Xirokhoris, on the west coast of the Peloponnese, deposited 1285-*ca.* 1287. See below.

³³ The hoard was published by E. Varoukha-Khristodoulou, in *B.C.H.*, LXXXII, 1958, p. 654, and is discussed in D. M. Metcalf, "The Currency of *Deniers Tournois* in Frankish Greece," *loc. cit.*

³⁴ See Schlumberger, *op. cit.*, pp. 308 ff.

³⁵ Metcalf, *op. cit.*

³⁶ I am indebted to Mons. J. Yvon for a number of valued comments on this topic.

³⁷ The general background of French monetary history is very clearly explained in T. N. Bisson, "Coinages and Royal Monetary Policy in Languedoc during the Reign of Saint Louis," *Speculum*, XXXII, 1957, pp. 443-469.

³⁸ K. M. Edwards, "Report on the Coins Found in the Excavations at Corinth During the Years 1930-1935," *Hesperia*, VI, 1937, pp. 241-256.

European coins, are known from the Balkans,³⁹ but it is by no means certain that this is another. It is in principle impossible to discount the unknown particularities of a hoard that is without parallel; was the Corinth find a traveller's hoard, or was it a sum drawn from the local currency? French and Provençal tournois are many times more numerous among the stray finds at Corinth than at Athens, no doubt because Corinth was a busy port. There is a presumption, in other words, that the foreign coins were carried to Greece by merchants engaged in international trade. They are more numerous, too, in relation to the corresponding stray finds of Frankish tournois than one would have expected from the trifling proportions in which they occur in hoards from the end of the thirteenth century. This suggests that there may have been a phase in the monetary history of Corinth—represented, it may be, by the hoard of 1934—when the local currency was largely made up of French and Provençal issues of deniers tournois. It would then be natural to suppose that the very similar Achaian coins were struck to replace them.

The tournois in the Areopagus deposit, 9 pieces in the name of Louis IX and one of Alphonse de Poitiers as marquis of Provence, add to the earlier finds to make it reasonably certain that there was a period when the currency needs of central Greece were supplied by foreign tournois. But what can one say about their date of deposit or loss? Their location in three separate places on either side of and below the copper coins, the virtual absence of other medieval coins from the general area, and the context suggestive of a building destroyed by a fall of rock, all seem to imply a date very close to, or the same as, that of the concealment of the copper coins. Having examined the site, while the trench was still open, I am in no doubt that such was the case. This is, however, a personal judgment, which may be viewed with some reserve by archaeologists who are conscious of the perverse way in which coins are capable of intruding into apparently closed deposits.

With that caveat, let us nevertheless examine the implications of dating the deposit of the group of 8 tournois, and the loss of the two single-finds, to 1255-59. They would push back the date at which Provençal coins were being carried to Greece to the late 1250's, that is, before the legislation of 1263, and well before the treaty of Viterbo of 1267.

Six of the French tournois have the reading TVRONVS CIVI, which was originally the mint-signature of Tours but was used mechanically by half a dozen mints in the time of Louis IX. The other three read TVRONVS CIVIS. This would prove that the use of the variant CIVIS antedates the reform of 1266.⁴⁰ The alterna-

³⁹ J. Duplessy and D. M. Metcalf, "Le Trésor de Samos et la Circulation Monétaire en Orient Latin aux XIIe et XIIIe Siècles," *Revue Belge de Numismatique*, CVIII, 1962, pp. 173-207.

⁴⁰ See J. Lafaurie, *Les monnaies des rois de France*, I, *Hugues Capet à Louis XII*, Paris-Bâle, 1951, pp. 23f.; A. Dieudonné, *Manuel de numismatique Française*, II, *Monnaies royales depuis Hugues Capet jusqu'à la révolution*, Paris, 1916, p. 229, writes more cautiously and, as it now seems, more correctly, "Les *Turonus civis* nous paraissent avoir commencé avant la réforme de

tive would be to argue that the copper and the billon coins from the Areopagus were concealed at dates two decades or more apart, for the tournois show appreciable signs of wear. It may be, of course, that the variant CIVIS was introduced earlier at some mints than others.

Finally (although negative evidence is never altogether conclusive) the absence of Frankish tournois goes far to weaken the traditional dating of their origin to 1250.

CATALOGUE OF THE COINS

The coins illustrated on Plate 56, where they are given the same numbers as in the catalogue, are marked thus: *. The coins from the group of 15 recovered subsequently are marked s.

ATHENS: GUY I DE LA ROCHE, 1225-63

Æ, Schlumberger, *Orient Latin*, p. 337, plate XII, 31

Obv. + DNS ATHEN Gateway.

Rev. + ThEB CIVI Cross.

(a) *Die-linked specimens*

- | | |
|--|---|
| *1 0.42 gm. Unusually wide, boldly delineated gateway. | 14s 0.46 gm. From the same obv. die as No. 13, and from an extremely similar rev. die. |
| *2 0.55 gm. From the same obv. die as No. 1, and from an extremely similar rev. die. | *15 0.45 gm. Taller gateway. |
| *3 0.59 gm. Wide gateway. | 16 0.43 gm. From the same obv. die as No. 15. Rev. in rather crude style. |
| *4s 0.39 gm. From the same obv. die as No. 3. | 17 0.43 gm. From the same obv. die as No. 15. Rev. in rather crude style. |
| *5 0.47 gm. From the same obv. and rev. dies as No. 4. | *18 0.45 gm. |
| *6 0.33 gm. From the same obv. die as No. 3. | *19s 0.53 gm. From the same obv. die as No. 18, and from an extremely similar rev. die. |
| 7 0.49 gm. From the same obv. die as No. 3. | 20 0.63 gm. From the same obv. die as No. 18. |
| *8 0.63 gm. Wide gateway, but with less conspicuous serifs. | *21 0.64 gm. Wide gateway. |
| *9 0.38 gm. From the same obv. die as No. 8. | *22 0.58 gm. From the same obv. die as No. 21. |
| *10 0.48 gm. From the same obv. die as No. 8. | *23 0.51 gm. |
| *11 0.49 gm. From the same obv. die as No. 8. | *24 0.50 gm. From the same obv. die as No. 23. |
| *12 0.34 gm. From the same obv. die as No. 8. | 25 0.63 gm. From the same obv. and rev. dies as No. 24. |
| *13 0.46 gm. Wide gateway. | 26 0.62 gm. From the same rev. die as Nos. 24 and 25. |
| | *27 0.41 gm. Note "shadowing" on obv. |
| | *28 0.42 gm. From the same obv. and rev. dies as No. 27. |
| | *29 0.63 gm. The obv. is similar to No. 8. |
| | *30 0.73 gm. From the same obv. die as No. 29. |

1266, si nous comparons leur style et leurs marques ou points secrets avec le style et les différents des Louis VIII et des Gros."

- | | |
|--|---|
| 31 0.48 gm. From the same obv. die as No. 29 . | 58 0.47 gm. |
| 32 0.28 gm. From the same obv. die as No. 29 , and from an extremely similar rev. die. | 59 0.52 gm. |
| *33 0.41 gm. The obv. is similar to No. 13 . | 60 0.54 gm. Cf. No. 1 . |
| *34 0.61 gm. From the same obv. die as No. 33 . | 61 0.51 gm. |
| *35 0.40 gm. | 62 0.54 gm. |
| *36 0.54 gm. From the same obv. die as No. 35 . | 63 0.53 gm. |
| 37 0.38 gm. From the same obv. and rev. dies as No. 36 . | 64 0.37 gm. |
| 38 0.46 gm. From the same obv. die as No. 35 . | 65 0.46 gm. |
| *39 0.44 gm. | 66 0.43 gm. |
| 40 0.54 gm. From the same obv. die as No. 39 , and from a very similar rev. die. | 67 0.46 gm. Cf. No. 66 . |
| *41 0.46 gm. | 68 0.39 gm. |
| *42 0.43 gm. From the same obv. die as No. 41 . | 69 0.48 gm. |
| *43 0.52 gm. From the same obv. die as No. 41 . | 70 0.44 gm. |
| *44 0.63 gm. | 71 0.52 gm. Cf. No. 70 . |
| *45 0.45 gm. From the same obv. die as No. 44 . | 72 0.49 gm. |
| 46 0.44 gm. From the same obv. die as No. 44 , and from an extremely similar rev. die. | 73 0.74 gm. |
| *47 0.44 gm. | 74 0.61 gm. |
| 48 0.37 gm. From the same obv. die as No. 47 . | 75 0.39 gm. |
| | 76 0.57 gm. |
| | 77 0.47 gm. Cf. No. 76 . |
| | 78 0.57 gm. |
| | 79s 0.46 gm. Cf. No. 78 . |
| | 80 0.46 gm. |
| | 81 0.42 gm. |
| | 82 0.55 gm. |
| | 83 0.48 gm. |
| | 84s 0.48 gm. |
| | 85 0.71 gm. |
| | 86 0.42 gm. |
| | 87 0.38 gm. Cf. Nos. 86 and 27 . |
| | 88 0.35 gm. |
| | 89 0.48 gm. |
| | 90 0.52 gm. |
| | 91 0.46 gm. |
| | 92 0.38 gm. |
| | 93 0.36 gm. |
| | 94 0.40 gm. |
| | 95 0.43 gm. Cf. Nos. 33 , 34 . |
| | 96 0.45 gm. Cf. No. 24 . |
| | 97 0.52 gm. |
| | 98 0.53 gm. |
| | 99s 0.52 gm. |
| | 100 0.45 gm. |
| | 101 0.46 gm. |
| | 102 0.68 gm. |
| | 103 0.57 gm. |
| | 104 0.50 gm. |
- (b) *A few selected specimens*
- *49** 0.57 gm.
- *50** 0.30 gm. Note "shadowing" on obv.
- *51** 0.29 gm. Note "shadowing" on obv.
- *52** 0.39 gm. Note "shadowing" on obv.
- *53s** 0.48 gm.
- *54** 0.52 gm.
- *55** 0.55 gm.
- *56s** 0.47 gm.
- *57** 0.50 gm.
- (c) *Clear specimens, in an approximate stylistic sequence based on the obverses: (i) wider castles*

105 0.75 gm. Cf. No. 104 .	144 0.43 gm.
106 0.84 gm.	145 0.49 gm.
107 0.42 gm.	146 0.48 gm.
108 0.39 gm.	147 0.43 gm.
109 0.46 gm.	148 0.30 gm.
110 0.43 gm.	149 0.32 gm.
111 0.49 gm.	150 0.39 gm.
112 0.47 gm.	151 0.56 gm.
113 0.61 gm.	152 0.39 gm.
114 0.46 gm.	153 0.32 gm.
115 0.41 gm.	154 0.45 gm.
116s 0.51 gm.	155 0.41 gm.
117 0.47 gm.	156 0.47 gm.
118s 0.46 gm.	157 0.48 gm.
119 0.54 gm.	158 0.40 gm.
120 0.49 gm.	159 0.46 gm.
121 0.44 gm.	160 0.47 gm.
(c) (ii) <i>prominent central serif</i> (cf. Nos. 44-46)	
122 0.47 gm.	161 0.37 gm.
123 0.46 gm.	162 0.50 gm.
124 0.51 gm.	163 0.46 gm.
125 0.57 gm.	164 0.54 gm.
126 0.53 gm.	165 0.43 gm.
127 0.56 gm.	166 0.52 gm.
128 0.50 gm.	167 0.43 gm.
129 0.50 gm.	168 0.40 gm.
130 0.66 gm.	169 0.39 gm.
131 0.35 gm. Cf. No. 25 , obv. and rev.	170 0.47 gm.
132 0.63 gm.	171 0.42 gm.
133 0.65 gm.	172 0.36 gm.
134 0.40 gm.	173 0.45 gm.
135 0.40 gm.	174 0.61 gm.
136 0.64 gm.	175 0.43 gm.
(c) (iii) <i>tall turrets</i> (cf. Nos. 35-38 , 41-43 , and 47-48)	
137 0.44 gm.	176 0.58 gm.
138 0.48 gm.	177 0.48 gm.
139 0.49 gm.	178 0.54 gm.
140 0.58 gm.	179 0.51 gm.
(d) <i>coins in no particular order</i>	
141 0.32 gm.	180 0.43 gm.
142 0.55 gm.	181 0.35 gm.
143 0.69 gm.	182 0.52 gm.
	183 0.59 gm.
	184 0.28 gm.
	185 0.48 gm.
	186 0.48 gm.
	187 0.46 gm.
	188 0.57 gm.
	189 0.34 gm.
	190s 0.49 gm.

- 191s 0.48 gm.
 192 0.52 gm.
 193 0.39 gm.
 194s 0.53 gm.
 195s 0.40 gm.
 196 0.43 gm.
 197 0.55 gm.
 198 0.50 gm.
 199 0.30 gm.
 200 0.55 gm.

ACHAIA: GUILLAUME DE VILLEHARDOUIN,
 1245-78

Æ, Schlumberger, *Orient Latin*, p. 356, plate
 XIII, 15.

Obv. G P/ AC Croix ancrée.

Rev. + NEGRIP Numeral III with contrac-
 tion-mark above.

- *201 0.41 gm.
 *202 0.19 gm.

BYZANTINE EMPIRE: MANUEL I, 1143-80

*203 Æ follis, *British Museum Catalogue*,
 Type 7.

Obv. Monogram of ΜΛΔΚΠ (Μανουηλ
 Δεσποτης Κομνηνος Πορφυρογεννητος, "following
 the movement of the hand in making the sign
 of the cross"—de Marchant) Rev. Facing
 bust of Manuel in jewelled vestment (loros?),

wearing a crown, holding a labarum and
 globus cruciger.

FRANCE: LOUIS IX, 1226-70

Bil. denier tournois, Lafaurie, no. 195.

Obv. + LVDOVICVS REX Cross.

Rev. TVRONVS CIVI "Châtel tournois"

- *204 0.96 gm.
 205 0.98 gm. Worn and corroded; but the
 dies are similar to No. 204.
 *206 0.95 gm.
 *207 0.97 gm. The obverse is corroded, but
 the die is similar to No. 206.
 *208 0.90 gm. Similar.
 *209 0.48 gm. Found beneath fallen rock,
 below deposit.

SIMILAR, Lafaurie, no. 201, with CIVIS

- *210 0.88 gm. Found to the west of the main
 group.
 *211 1.03 gm.
 *212 0.88 gm.

PROVENCE, MARQUISATE: ALPHONSE, 1249-71
 Bil. denier tournois, Poey d'Avant, *Monnaies
 Féodales de France*, no. 3735, plate LXXXI,
 20.

Obv. A. COMES TOLOSE "Châtel tournois."
 Rev. MARCK. PVINCIE Cross.

- *213 0.98 gm.

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