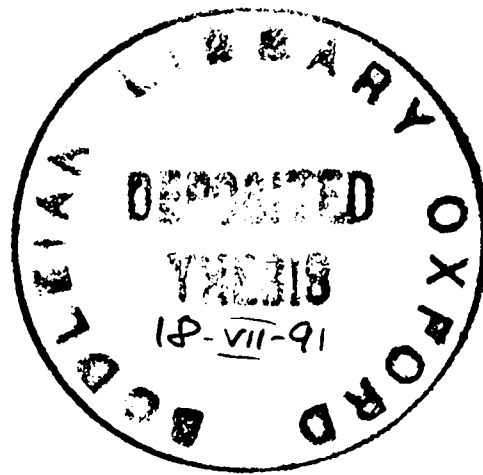


BYZANTINE MONETARY AFFAIRS
during the 8th, 9th, 10th and 11th centuries

by
Vassiliki Athanassopoulou-Pennas
Candidate for a D.Phil. thesis



TRINITY TERM 1990

WOLFSON COLLEGE
OXFORD

To
Michael Metcalf and Mando Oeconomides

A b s t r a c t [1]

"Byzantine monetary affairs during the 8th, 9th, 10th and 11th centuries."

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The subject for this dissertation is the study of Byzantine monetary affairs from the accession of Leo III (717) up to the beginning of Alexius I's reign (1081).

The work is divided into the following main chapters:

I. Gold Coinage: Taking into account documentary and fragmentary numismatic evidence new chronologies and a few new attributions are attempted. A thorough survey of the recorded types and a detailed discussion of the relevant literature is included. References to iconography, monetary reforms and minting process are made.

II. Silver Coinage: A similar study, including a separate section on metrology and valuation.

III. Copper Coinage: The focus is concentrated in the coinages of Michael II, Theophilus and the anonymous folles of Class A. With the aid of detailed stylistic analyses, the study of dies and then the geographical distribution of the stylistic groups, the complex problem of provincial mints is discussed. The study is supplemented by four Appendices. Appendices I-III include a descriptive catalogue of 378 copper coins of Michael II and Theophilus upon which the stylistic analysis is based. Appendix IV contains catalogues of hoards and stray finds of Anonymous folles of Cl.A from Greece, Yugoslavia, Bulgaria, Romania and Asia Minor.

IV. Monetary Circulation. A detailed survey of the attested evidence from all the areas under Byzantine dominion is included. On the basis of hoards and stray-finds the trends of the circulation in Greece are described. This study is supplemented by Appendix V, where a corpus of 122 coin hoards is presented.

Abstract (2)

The subject of this dissertation is the study of the Byzantine monetary affairs from the accession of Leo III (717-740) to the beginning of Alexius I's reign (1081). On the basis of the monetary history the whole period may be sub-divided as follows:

The eighth century was characterized by the decline of urban life, the recession of monetary and economic affairs and the dwindling of copper coinage.

The two hundred years 820-1025, which followed, witnessed a progressive recovery whose cumulative effect by the first quarter of the eleventh century was great. It is clear from a comparative study of hoards and site-finds that the volume of the currency gradually grew and that Byzantine coins penetrated, either via commercial routes or in the wake of the territorial expansion, into Asia Minor, the Balkan peninsula, Moldavia, Transylvania, the coast of the Black Sea and at crossing points of the Danube.

The death of Basil II (1025) marked a turning point in Byzantine economic history. The Empire accepted a radical change in its social and economic structure after the landed aristocracy had gained ascendancy. Wealthy landed proprietors retained large reserves of gold in their treasure-chests. At this very period, the debasement of the gold Byzantine nomisma and a rise in prices took place and it is obvious that a reform and a revival of the monetary economy were necessary, namely the drawing up of a monetary policy in accordance with the requirements of an increased consumption.

The aim of this dissertation was to reconstruct the broad outlines of monetary affairs and trends during the centuries in question.

The work is divided into the following main chapters :

I. A study of the gold coinage: it consists of three sections.

First there is a thorough survey of the recorded types and chronological problems of the period, spanning from the accession of Leo III up to the death of Basil II. Taking into account the historical events of each reign and the fragmentary numismatic evidence, new chronological schemes are proposed. Although chronological problems largely have been solved some specific issues attract the attention for a further investigation. Moreover, the use of coinage in interpreting obscure and controversial documentary evidence is a promising exercise, for it not only helps to develop a thorough understanding of each period's attitudes but also proves the validity of the numismatic evidence.

Special references are made to iconography, and minting process.

Second there is a general survey of the gold coinage from the second quarter of the eleventh century onwards. This survey is included because a comprehensive outline of the monetary affairs should be given. The period is characterized by a great variety of each coin type which suggests a complex system of mint-administration. Unfortunately the lack of gold hoards of the period from Greece and the fragmentary publication of hoards found in other countries cannot permit, at the moment, an internal chronology of the available varieties of each series.

Third there is a detailed discussion of the *nomisma tetarteron* introduced by Nicephorus II Phocas in accordance with the fiscal and economic policy of the first Macedonian emperors.

II. A study of the silver coinage.

It contains a survey on the evolution of the *miliaresion* reformed by Leo III. In addition, there are special references to problems of metrology, valuation of the currency to the gold, and mint administration. Finally there is a separate piece of work on the chronological classification of Theophilus' *miliaresia* : in the light of a recently found silver hoard, most probably in Asia Minor, a type, previously attributed to Michael III, is actually a *miliaresion* of Michael I; this provokes further discussion of the chronology of Theophilus' silver issues.

III. A study of the copper coinage. It consists of five sections.

First the period from Leo III to Leo V inclusive is discussed. In addition to a comprehensive survey of the character of the copper coinage of this period new chronologies and a few new attributions are made, in accordance with the gold coinage.

The copper coinage of the Amorian dynasty is examined separately. The focus concentrates on problems of mint attributions. The period is characterized by an unequal artistic execution of the *folles* out of which disparity has arisen a scholarly dispute concerning the operation of provincial mints. With the aid of detailed stylistic analyses, based on Metcalf's method, the study of dies and then of the geographical distribution of the various stylistic groups, this complex problem is examined. The study has been supplemented by three Appendices which include a

descriptive catalogue of the 378 copper coins of Michael II and Theophilus, upon which the stylistic analysis is based. Diagrams of reverse die-similarities, and histograms of the weight distributions illustrate the various stylistic groups. Since the analysis was a laborious project, especially with regard to its final representation, it was necessary to omit many details, albeit useful, for the sake of clarity.

The anonymous *folles* of Class A are also examined in detail, using a similar method. Appendix IV contains analytical descriptive catalogues of hoards and stray finds of this issue. Comparative material from various places in the Balkans including Greece, and Asia Minor is presented. As much documentation of the available material as possible is exposed. At the end of Appendix IV a provisional chronological scheme of the recorded varieties of the anonymous *folles* of Class A is attempted. This is, as yet, a tentative but still quite promising classification. The problem will be the subject of further research undertaken with the assistance of computer-driven statistical programme.

IV. Monetary circulation:

A detailed survey of the attested evidence from all the areas under Byzantine dominion is included with special references to regional peculiarities in accordance with the historical background of the period. The expansion of the monetary sector was impressive during the period under consideration. Nevertheless Byzantine coinage was the only currency which existed in the Balkans and even in nations to the north of the Empire.

and therefore its circulation in these areas must be viewed differently from the circulation in traditional urban centers of the empire both in Asia Minor and in Greece. The examination of the attested material was entirely based on this consideration.

The final section of this dissertation concentrates on the trends of the numismatic circulation in Greece based on hoards and stray-finds. A considerable volume of new material is presented from all over Greece.

The study of the numismatic circulation is supplemented by Appendix V where a corpus of 122 coin hoards is presented. They come from Greece, Yugoslavia, Bulgaria, Romania and Asia Minor. Hoards included in Mosser's gathering are mentioned only when new documentation exists. The others are occasionally mentioned in references in the main text.

**

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This thesis is dedicated to Dr. D.M.Metcalf and Dr.M.Oeconomides, the two scholars responsible for my studies on Byzantine coinage.

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Having had the good fortune to work in the Numismatic Museum of Athens from 1977 to 1980 and from 1987 to the present I have benefited greatly from the wisdom of Dr Mando Oeconomides. She frequently offered valuable criticism of my early studies on Byzantine Coinage. I was also, with her kind permission, able to inspect all the available hoards stored in the Athens Numismatic Museum; and here I should express my gratitude to my colleagues in the museum, Mrs Mina Galani, Dr.John Touratsoglou and Mrs Eos Tsourti for their help.

In the preparation of my corpus and survey of coin hoards and stray-finds from Greece, I was invariably received with consideration and kindness by the various Ephorates of Antiquities and Museums. The list of colleagues who have provided assistance

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6: Theophilus' copper coins: Classes 1 and 2

7-16: Class 3

17: The Argos hoard/1983.

Abbreviations

1) Publications from Museums.

BNF Morrisson, C. *Catalogues des monnaies byzantines de la Bibliothèque Nationale*, 1970.

BMC Wroth, W. *Catalogue of the Imperial Byzantine Coins in the British Museum*, 2 vols., 1908.

DOC Grierson, P. *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection*, vol. III. *Leo III to Nicephorus III, 717-1081*, Washington, 1973.

MIB Hahn, W. *Moneta Imperii Byzantini III. Von Heraclius bis Leo III. Alleinregierung (610-720)*, Vienna, 1981.

Mirnik, I. A. *Mirnik, Coin Hoards in Yugoslavia*,

2) Titles of periodical publications.

ABSA *Annual of the British School of Archaeology at Athens*, London.

AI *Αρχαιολογικόν Δελτίον*, Athens.

AnnMusNatArchFlowdiv *Annuaire du Musée National Archeologique, Flowdiv*, Plovdiv, Bulgaria.

ANSIN *American Numismatique Society Museum Notes*, New York.

BCH *Bulletin de Correspondance Hellénique*, Athens-Paris.

BSNR *Buletinul Societatii Numismatice Romane*, Bucharest.

BE *Byzantinische Zeitschrift*, Munich

CahArch *Cahiers Archeologiques*, Paris

CENB *Cercle d'Études Numismatiques Bulletin*, Belgium

- Cercet Num* *Cercetari Numismatice*. Bucharest
- CFM* *Club Francais de la Medaille*. Paris.
- CH* *Coin Hoards*. England
- DOF* *Dumbarton Oaks Papers*. Washington.
- Epyov* To 'Epyov της' Αρχαιολογικής Εταιρείας. Αθήνα.
- GRBS* *Greek, Roman, and Byzantine Studies*. North Carolina
- HBN* *Hamburger Beiträge zur Numismatik*. Hamburg.
- Hesperia* *Hesperia. Journal of the American School of Classical Studies at Athens*.
- IBAD, IBAI, IAI* *Izvestiya na Bulgarskoto Arkheologicheskoto Druzhestvo* continued as *Izvestiya na Bulgarskiya Arkheologicheski Institut*, continued as *Izvestiya na Arkheologicheskiya Institut*.
- Iliria* *Iliria*. Tirana.
- JEH* *Journal of Economic History*.
- RN* *Revue Numismatique*. Paris.
- MusNat* *Muzeul National*. Bucharest.
- NC* *Numismatic Chronicle*. London.
- NCirc* *Numismatic Circular*. London.
- NS(Czech)* *Numismaticky Sbornik*. Prague.
- Numismaticar* *Numismaticar. Casopis za anticki i s stari Jugoslavenski novac*. Belgrade
- Numismatika* *Numismatika. Komitet za Iskustvo i Kultura*. Sofia.
- Feuce* *Feuce. Muzeul Delta Dunarii*. Tulcea.
- Pontica* *Pontica. Studii si Materiale de Istorie, Arheologie si Muzeografie*. Constanta.
- RevEtSEEur* *Revue des Etudes Sud-Est Europeennes*. Bucharest.
- RIN* *Rivista Italiana di Numismatica*.
- SA* *Sovetskaia Arkheologiya*. Moscow.
- SCIYA* *Studii si Cercetari de Istorie Veche si Arheologie*. Bucharest.

- SCMB *Seaby's Coin and Medal Bulletin*. London.
- SCN *Studii si Cercetari de Numismatica*. Bucharest.
- SN *Schweizer Münzblätter*. Berne.
- TI *Travaux et Mémoires*. Paris.
- VAHDalmat. *Vjesnik za Arheologiju i Historiju Dalmatinsku*. Split.
- VestGosMusGruz. *Vestnik Gosudartsvennogo Museia Gruzii imeni Akademika S. N. Dshanashia*. Tiflis.
- VV *Vizantiiskii Vermennik*.
- WN *Wiadomosci Numizmatyczne*. Warsaw.

GOLD COINAGE:

A. Introduction.

The Byzantine gold *solidus* was the main instrument of imperial economic policy: not only was it an international coin¹, but its fineness and nominal value also remained unchanged from the Constantinian period until the first half of the eleventh century. Because of its prestige it was more suitable than the two other metallic currencies for furthering the interests and dynastic ambitions of the emperor and its iconography was designed to promote imperial principles.

Whereas in the early Roman empire, coins were used to carry propaganda in support of government ideas and programmes, from the fourth century onwards their propaganda content was greatly reduced and very different in character². Evidently the Christianization of the Empire and the incorporation of some Christian symbols in the established iconography gradually changed the purposes for which the propaganda was used. For instance the representation of the angel holding a cross sceptre, which replaced the Roman victory, emphasised the victorious majesty of the Christian sovereign.

1. C. I. Brătianu, *Études byzantines d'histoire économique et sociale*, 1938, esp. 237; C. M. Cipolla, *Money, Prices and Civilization in the Mediterranean World, Fifth to Seventh Century*, Princeton, 1956, 13-26; R. S. Lopez, "The dollar of the middle ages", *JEH*, 11, 1951, 209-34.

2. A. R. Bellinger, "The coins and Byzantine imperial policy", *Speculum*, 31, 1956, 70-81; see also for general conclusions, A. Grabar, *L'empereur dans l'art byzantin*, 1936, 155-62.

Bellinger writes¹: " There were in fact, two parallel cults: that of the church and that of the court, each with its appropriate ritual. As the icons visibly served the one the coins visibly served the other..."

It is significant, however, that pure religious figures only appeared on coins for the first time at the very end of the seventh century. During the reign of Heraclius (610-41) the sole Christian theme was the cross potent on a three-stepped base: the monumental cross raised on Golgotha by Theodosius II in 420 and it was only during Justinian II's first reign (685-95) that this standard type was replaced by a portrait of Christ. Then too, for the first time in the history of Byzantine coinage, the emperor's figure was removed from the obverse, the position of greatest honour, to the reverse, while the effigy of Jesus Christ was stamped on it. Breckenridge's² study of the iconography of Justinian II's coinage remains fundamental since he approaches the topic from both archaeological and numismatic viewpoints. Justinian II's gold coinage shows also two more remarkable points which actually require emphasis: firstly the high level of its technical and artistic style and secondly the omission of the mint indication *CONOB* and of the *officina* letter from the reverse of the Constantinopolitan *solidi* issued during the emperor's second reign (705-11).

It has been suggested that both these innovations indicate a

1. *Ibidem*, 70.

2. J.D. Breckenridge, "The numismatic iconography of Justinian II", *ANSANNI*, 144, 1959, 1-104

new policy in the Constantinopolitan mint, connected with an attempt to revolutionise the minting of gold coins¹. However there is no evidence for this supposition. True, mint-marks were occasionally used by Justinian II's successors, but only on coins of traditional design, carrying the cross potent on the reverse. In contrast the *officina* letter continued in use almost up to Theophilus' reign, but, as we shall see, after Leo III's reign the system fell into confusion.

In conclusion, Justinian II altered the iconography of the Byzantine *solidus*, for the first time in a century, removing elements that had evidently ceased to perform any actual function. However, it is unclear whether this was the beginning of a proposed reform of the coinage, which did not proceed, probably because of his second dethronement.

In 711 the Heraclian dynasty, whose representatives had ruled the empire for five generations during the course of a whole century, came to an end. Philippicus Bardanes was proclaimed emperor (711-3) as a result of a bloody revolt, and Justinian and his heir Tiberius were murdered. During the next six years the empire saw three violent changes of government, before the accession of the Isaurian dynasty. The coinage of these short

1. The dropping of *CONOB* and the *officina* letter occurred also on some Constantinopolitan *tremissis* and *semissis* of the first reign, due plausibly to the smaller surface of the fractional issues. Perhaps similar problems of space forced the mint authorities to omit these indications from the *solidi* of the second reign since the new design did not leave enough room for them.

reigns¹ was of the traditional type with the emperor's bust on the obverse and the cross potent on the reverse². Its most important features are as follows: on the reverse of some Philippicus's *solidi* the traditional letter of the *officina* is accompanied by a second letter B, Γ or Θ whose the meaning is unknown. This device continues to occur until the beginning of the ninth century.

On March 717 Leo, the *strategus* of the Anatolikon theme and a man of Syrian origin, was crowned emperor bringing the series of revolts and short reigns to an end. From then until the first quarter of the eleventh century a more or less regular dynastic succession was maintained. There were a few short-lived attempts to usurp power³ and the transitions between dynasties were somewhat violent but there were long periods during which power was transferred peacefully, due to the practice by which each ruler regularly associated his son with him on the throne during his life-time.

Moreover Leo III's reign opened a new and unusual chapter in Byzantine history, since he was the first emperor who promulgated iconoclasm as the official doctrine of the Empire. From then onwards a struggle ensued which lasted until 842, with a temporary break in 787, under the reign of the empress Irene.

1. Philippicus: 711-3; Artemius-Anastasius: 713-5; Theodosius III: 715-7.

2. Philippicus is shown holding a consular symbol, the eagle-headed sceptre: its last appearance in Byzantine art.

3. i. e. the usurpation of Artavasdus in July 742; the deposition of Irene followed by the short reigns of Nicephorus I (802-11), Stauracius (811), Michael I (811-3); the usurpation of Leo V against Michael I in 813; Leo V's murder by the partisans of Michael II.

B. From Leo III to Basil II (719-1028): Types and chronological suggestions.

Leo III(25 March 717 - 18 June 741):

(Table I.a)

With respect to its iconography, Leo III's gold coinage falls into two main groups¹:

Class I: adheres to the traditional type with the cross potent on the reverse and is dated between Leo's accession (717) and his son's association (720)².

Class II: bears imperial busts on both sides, that is Leo's bust on the obverse and his son's Constantine on the reverse. This iconography of the *solidus* was maintained up to the end of the iconoclastic controversy although from Constantine V's reign (741-775) onwards deceased members of the dynasty gradually began to appear on the reverse.

Despite the fact that the coinage throughout the whole period, examined here, is characterized by impressionistic portraits,

1. On the gold coinage of Leo III see A.R. Bellinger, "The gold coinage of Leo III and his successors", *ANSIM*, 13, 1967, 123-6 and P. Grierson in *DMC*, 226-30. The iconography of the fractional issues is similar to that of the *solidi*, but on the series with Constantine on the reverse, the young co-emperor is depicted holding a cross potent on globe instead of a *globus cruciger*.

2. This first issue, preserving traditional elements of the previous reigns, may carry an actual portrait of the emperor; it has been noticed that the imperial representations from the beginning of the 7th century show a naturalism and might even be portraits.

details such as the co-emperors' age are indicative in distinguishing sub-types. However, they cannot always be dated precisely.

Thus Bellinger and Grierson divide Class II into three sub-types according to Constantine's features while they distinguish also a third Class: **Class III**.

Bellinger dates Class II as a whole to the period 720 - 37, but Grierson proposes the following dates for these three sub-classes: Class IIa: 720; Class IIb: 720-c.725; Class IIc: c.725-c.732. Moreover Bellinger dates Class III between 738 and 741 while Grierson identifies two sub-classes (IIIa & IIIb) and dates them correspondingly to 732-c.737 and c.737-741. Grierson's dating of Constantine's bust on the basis of his gradually maturing features is essentially attractive. However it is sometimes difficult to attribute a bust to a specific sub-class.

Leo III's coinage presents a number of problems and some of its features hint at an involved system of minting, the details of which unfortunately elude us. For instance the three Classes can be divided into the following four categories on the basis of their *officina* - marks: 1. - issues with *officina* letter at the end of the reverse inscription (Classes I, IIa and IIb); 2. - without *officina* letter at all but sometimes with an abbreviation mark (c) after the last letter of the reverse inscription (Class IIc and Class IIIa); 3. - a different *officina* letter on each side (Class IIIb); 4. - *officina* letter only on the obverse (Class IIIb). On some issues of the two last categories the inscription bearing Constantine's name is preceded by the inexplicable initial N, which also appears on the obverse inscription of some *solidi* of Constantine's own reign.

Interpretation of these innovations requires evidence from several reigns and so must wait. Nonetheless, irregularities in the *officina* - marks enable us to draw some preliminary conclusions about the chronology of Leo III's gold coinage.

Class IIa is dated by Grierson in 720. However he also notices that the *officina* - letters of this Class are normally much smaller than the letters of the inscription and infers that they were inserted after the main design of the coin had been cut. He therefore suggests that the type was originally intended for a temporary special issue, probably for ceremonial purposes on Constantine's coronation in which an *officina* letter might be dispensed with¹; and that *officina* letters were added later when the issue became permanent. If so, the issue should probably cover a longer period: 720-5 (?) [in 725 Constantine was seven years old]. Class IIb has then to be moved to the period 725-30.

The most remarkable feature of Class IIc is the omission of the *officina* letter, which probably results from a reform of minting procedures².

Grierson's Class III shows the following features: the inscription of the reverse has been divided as CON STAN... instead of CONST AN... for more space is now available in the right half. Moreover the initial letter of the reverse inscription of Class IIIb has altered from ϑ into δ . Most *officina* - letters of

1. *DOC*, 230.

2. This may have confused the mint workmen causing them to add some meaningless letters, such as an L or a second M, after the final M of Constantine's inscription on the reverse; the inscription of Class II generally reads NCONST ANTINUSM.

Class IIIb occur on Leo's side, that is on the obverse, while there are specimens with an *officina* letter only on the Constantine's side and others without any *officina* letter at all.

The latter as well as Grierson's Class IIIa, which similarly appears to bear no *officina* letter, should surely constitute a single sub-class, succeeding Iic, regardless of the form of the initial letters of their inscriptions, though those with ϑ might be the earliest examples of the variety being influenced by the preceding types. Some specimens of this sub-class show a more mature face of Constantine than others¹, with a triangular shape, very much reminiscent of the next sub-class in the sequence. The change in Constantine's depiction may plausibly be dated around 738, when he became twenty years old. If so the specimens with Constantine's face rounded would belong to 733-8 and those with triangular to 738-741. Then Class Iic would belong to 730-3. The choice of the year 733 as the starting date of the renovated Class III is conjectural, although it does coincide with Constantine's first marriage to the daughter of Khazar Khan.

As has been already mentioned the *officina* letters of Class IIIb occur merely with the bust of Leo. Grierson interprets this practice as resulting from the greater space available on this side. Where a different *officina* is used on each side of the coin he suggests that a "change in practice occurred while the type was being issued, and during the period when the dies of the two groups were available, the workmen did not trouble to ensure an exact correspondence between those which they were using...". He clearly

¹ Compare in *DC.P1. I*, no. 7a.1 and no. 7a.2.

considers this variety to be transitional. Although this is plausible, certain details suggest a different explanation though the number of coins considered here is limited. Actually the change in practice proposed by Grierson may have happened in a different way and after Leo's death: the appearance of an *officina* letter on Leo's side could be intended by the mint authorities to make clear what is presumably now the reverse. Specimens with an *officina* letter on both sides might represent either the earliest examples of this new practice, that is before it had become familiar to the workmen, or a stockpiling of dies prior to Leo's death although it is not clear whether an indication of *officina* on the reverse, was introduced again sometime after 838¹. However, there are cases where the final S of Constantine's name has been altered to a Θ^2 . This probably implies that some *officina* marks had started to be engraved on Constantine's side (reverse) just before Leo's death.

The next development in this new practice is represented by the issues with an *officina* letter only on Leo's side and the initial N before Constantine's inscription. The two examples of this device illustrated in DOC³ do bear a more mature face of Constantine which might be that of a twenty-year old. Actually Constantine was about twenty-three years old when his father died during the summer of 741⁴.

1.No *officina* - letters appear on specimens of our Class IIIa.

2 DOC, 7d.

3. DOC 7f.1 & 7f.2.

4. About Leo III's death see DOC, 225.

In conclusion to this section on Leo III's gold coinage, I suggest that all the issues with an *officina* mark on Leo's side may belong to Constantine's own reign¹.

However, new material, especially from hoards, should shed further light on the problem. The Liopesi hoard², is not a great help since there is no detailed publication of the coins themselves³ and the reason for its concealment is difficult to be determine. The latest issues of the Liopesi hoard (668-741) are of our Class IIIb⁴. The Lagbe hoard, which covers a period of about a century, contains only three issues of Leo III. They are all of our Class IIIb⁵.

Artavasdus (July 742- November 743):

As has been already mentioned, after Leo III's death the throne was occupied by his son Constantine V. A year later Artavasdus, Constantine's brother-in-law, an image-worshipper, seized the throne for more than one year (July 742-November 743).

1. See below.

2. S. Vryonis, "An Attic hoard" of Byzantine gold coins (668-741) from the Thomas Whittemore Collection and the numismatic evidence for the urban history of Byzantium" *Zbornik Radova Vizantoloskog. S. 1966* ^{*Iaskhuta*}
(= *Mélanges Georges Ostrogorsky I*) 291-300.

3. Moreover their indentification among the coins of DOC, where it has been incorpotated, is suspect owing to inadequate labelling;
DOC, 1a.

4. DOC. 7f. 1 & 7f. 2.

5. E T. Newell, "The Byzantine hoard of Lagbe". *ANSANNI*. 105, 1945, 7-8 nos. 1-3.

Artavasdus' coins are amongst the rarest in the Byzantine series though several types were issued during his short reign¹. These may be divided into three classes:

Class I (742): It bears Artavasdus' bust on the obverse holding the patriarchal cross. The reverse seems to have been modelled on that of the reformed *miliaresion*² except that there is the mint mark *CVMB* in the exergue, retained from the traditional *solidi* of the 6th and 7th centuries. Because of this, it was once supposed that the earliest reformed *miliaresia* were those struck by Artavasdus. Why Artavasdus adopted a pattern which is now generally connected with the iconoclastic policies of Leo III for his *solidus* is uncertain. Perhaps the coins were minted in haste after the success of his rebellion. A new design would have taken time to devise, while this of the reformed *miliaresion* roughly adhered to the traditional pattern of the *solidus* of the 7th century ensuring continuity.

However, that the emperor should hold the patriarchal cross before his breast on the obverse is surely deliberate, signifying that the cross of Christ, which had protected the Empire against

1. L. Laffranchi, "Il solido di Artavasdo nel medagliere reale di Torino", *Munismatica*, 2, 1936, 85-7; A. Boyce, "A solidus of Artavasdus", *ANSMN*, 5, 1952, 80-102; D. M. O'Hara, "Another solidus of Artavasdus", *Coins of the World*, D. J. Crowther, 5, 1967, 2-3.

2. *i. e.* the cross potent accompanied by the inscription *IHSUSXRISTUSNIKA*.

the Arabs in 717, would continue to protect the new emperor from his domestic and foreign enemies¹.

Class II: On the reverse the bust of Nicephorus, Artavasdus' son, is depicted. Both emperors hold the patriarchal cross before their breasts in their right hands.

Class III: It also bears the busts of the emperors on each side but they hold the *globus cruciger* in the right hand and the *akakia* in left. Nicephorus wears lozenge patterned *loros*.

Artavasdus' coinage raises two particular problems.

Firstly, though few examples survive, it is remarkable that three distinct types of *solidus* should be issued in a reign of only fifteen months. It must be wondered why a second type of *solidus* was introduced during the first year of the joint reign of Artavasdus and Nicephorus.

Secondly, the sequence of Classes II and III is not clear². The existence of a *semissis*, variation of Class III³, might be indicative for the sequence of the two Classes, implying a

1. C. Morrisson, *BNF*, 478 and Breckenridge *op. cit.* n. 5, 100-2. Actually Artavasdus' religious convictions seem to have produced no real change in the coinage which continued to extol the Christian virtues of the sovereign; nor does the theology of iconoclasm seem to have influenced it as generally has been alleged; for this see A. R. Bellinger, *op. cit.* n. 2, 72.

2. Grierson considers Class II earlier than Class III; he describes Nicephorus' bust on Class II as beardless, but this is not entirely clear.

3. *DC*. no. (5); on this fractional issue Nicephorus holds the cross potent on a globe instead of *globus cruciger*.

precedence for Class III since the fractional gold denominations have been considered as having a ceremonial character, and being issued usually on the proclamation of a co-emperor. True the patriarchal cross of Class II shows a closer relation with Artavasdus' Class I. Probably Class III constitutes a hasty issue for the coronation of Nicephorus while Class II may reflect a second step aiming at a more permanent and careful issue.

Constantine V (741-775) :

(Table I.b)

On 2 November 743 the legal emperor, Constantine V entered the capital after a brief siege and the civil war ended with the cruel punishment of Artavasdus, his two sons and some of his supporters.

Constantine's coinage is divided generally into two classes : that of his own reign and that of his period of co-rule with his son Leo IV. We have already argued above that *solidi* with *officina* marks on Leo's side, which are attributed to Leo's reign, could in fact belong to that of Constantine soon after his father's death. If so, the coinage is divided into three Classes:

Class I = Leo's Class IIIb.

Class II: It depicts on each side Constantine V and Leo III respectively holding the cross potent on a base in their right hands and the *akakia* in their left; they are both dressed in the same way wearing a chlamys.

Class III: The obverse shows Constantine V and his son Leo, who was proclaimed co-emperor in 751, while the reverse carries a

redesigned bust of Leo III¹. The obverse inscription, with the word *NEOS* after Leo's name is an innovation. Apparently this issue is dated from 751 to Constantine V's death in 775.

There has been considerable debate as to whether the side with Leo's bust in Class II should be regarded as the obverse or the reverse of the *solidus*. However it is now generally accepted that the bust of Constantine occupies the obverse².

The inscription on the reverse with Leo's name is sometimes followed by an *officina* letter on what appears to be early issues of the type. Once again Constantine's name is sometimes followed by NC or OC or is preceded by a B or Γ. These are presumably control marks, though their meaning is uncertain. Bendall has noticed an instance where the final letter of Constantine's name .S. has been recut over OC³. Though perhaps of little significance this alteration implies that coins with an inscription followed by control marks are early in the sequence.

1. Grierson on the basis of Leo IV's features distinguishes two sub-classes: IIIa (751-c.757): the bust of Leo IV is small and childish; IIIb (c.757-775): Leo's bust is larger and more mature; *NC* 300-1; there is also a *semissis* from the joint reign of Constantine V and Leo IV.

2. P. Grierson in *NC*, regarded the side with Leo's bust as the obverse; but recently he has revised this theory and now accepts that Constantine occupies the obverse; see P. Grierson, *Byzantine Coins*, Berkeley and Los Angeles, 1982, 157.

3. S. Bendall, "Constantine V, an altered solidus-die", *NCirc*, 85, 1977, 304.

In view of our suggestion that Leo III's Class IIIb might belong to Constantine's own reign, a question arises as whether it would constitute his only issue, for the period before Artavasdus' rebellion (17 June 741- July 742). Consequently it is not clear when Constantine's Class II was introduced. There are two possibilities:

a.- Class II may have been introduced during the winter 741/2, but Artavasdus' rebellion should have caused its interruption. If so, Class I (= Leo's Class IIIb) might have covered the previous period soon after Leo's death in July of 741. The practice of altering Leo's coinage to Constantine's is rather peculiar but it actually fits in with the emperor's miserable financial activities, as described at least by contemporary writers¹.

b.- Class II may belong to the period from 743 onwards, that is after the defeat of Artavasdus. If so, Class I, would cover the whole period from Leo III's death up to the rebellion of Artavasdus.

Two *solidi*² which show Constantine's face apparently without moustache or beard³ as well as a rare *semissis* seem to decide the problem. The latter is a variation of Class II, where Constantine is depicted with moustache and beard holding a cross potent on globe. It has been suggested that this *semissis* was probably issued on Constantine's accession in 741. But in view of

1. *DMC*, 291 and esp. n. 8.

2. *DMC*, 1b, Pl. VIII; *BMC*, 378, no. 1, Pl. XLIII, 22.

3. The heavy line of the chin, might be an attempt to depict a slightly bearded face.

Constantine's features, as they are represented on the two *solidi* mentioned above, it might be of a later date. It seems highly likely that this rather ceremonial denomination was issued on the occasion of the emperor's final victory and his entry into Constantinople on 2 November 743. If so the two *solidi* under consideration imply that the introduction of Class II should be dated before Artavasdus' usurpation.

The Lagbe hoard includes eight specimens of Constantine V's Class II. All are of the type with moustache although some of those belong to an early period, when control marks were engraved after Constantine's name. On the contrary there are three specimens of Class I. Although this evidence is very patchy one cannot preclude the thought that the collection of the hoard could have started when Constantine was in Asia Minor, in which case Class I could represent "emergency" money used for the needs of Constantine's troops.

Leo IV: (775-80)

During the brief reign of Leo IV two types of *solidi* were struck.

The obverse of Class I carries the busts of Leo IV and his son Constantine VI, who was crowned co-ruler in 776, and the reverse the busts of Leo III and Constantine V. Class II bears the same effigies but on the obverse the two emperors are seated on lyre-backed throne. The change of type probably followed a major victory over the Arabs in 778¹.

1. Theophanes (ed. de Boor) 453.

A remarkable feature of the coins of the time is the depiction of members of the imperial family from four different generations, each accompanied by an inscription. Thus the effigies of Leo IV and Constantine VI are entitled "Leo the son and grandson, Constantine junior" (*LEONVSSESSONCONSTANTINOSJUNIOR*), while the busts of Leo III and Constantine V "Leo grandfather, Constantine father" (*LEONPATERCONSTANTINOSPATER*)¹.

Again there has been debate as to whether the side of the coin with Leo IV and Constantine VI should be considered the obverse or the reverse². However it is now generally accepted that living emperors are represented on the obverse. Moreover in the case of Class II the two seated emperors should occupy the obverse, the side of greatest honour, for specific reasons³: the two seated figures may be derived from a historical event after the victory of the Byzantines over the Arabs in 778 when according to Theophanes "the two emperors showed themselves seated side by side to the crowd ..."

1. A. Veglery, G. Zacos, "Enigmatic inscriptions on Byzantine coins", *NCirc.* 63, 1955, 109-11; *ibid.* "New light of the solidus of Leo IV", *NCirc.* 69, 1961, 30-1. These scholars corrected the word *ESSON* to read *EGGON*, an obvious abbreviation of the Greek *eggonos* (=grandson); a new *solidus* with the word *eggon* proves the validity of their reading; see also S. Mashev, "O nekotorykh voprosakh, svyazannikh s vizantiiskimi pamyatnimi monetami", *VV*, 18, 1961, 236-8; see also *DC*, 326.

2. Veglery and Zacos have suggested that Leo IV assigned the obverse of his *solidi* to his ancestors for dynastic reasons.

3. A. R. Bellinger, *op. cit.* n. 9, 125; C. Morrisson, *BNF*, 484.

Constantine VI and Irene (780-797):

(Table II. a)

In September 780 Leo IV died at the age of thirty-one and his son Constantine VI was crowned emperor. He was only ten years old and his mother, the mighty Irene of Athens, acted as regent for her son.

Constantine VI's gold coinage is of two main classes; the first is divided into two sub-classes :

Class Ia: The obverse bears on the left the bust of Constantine beardless, holding a *globus cruciger* in his right hand, and on the right the bust of the queen-mother, holding a *globus cruciger* and a cross sceptre in her right and left hand respectively. The reverse represents Constantine VI's ancestors, Leo III, Constantine V and Leo IV. The inscription commences on the reverse with the name of Constantine followed by some letters which are not always legible¹.

Class Ib: It is similar to Class Ia, but Irene holds only a cross sceptre in her left hand. Constantine's name is transferred to the obverse.

Class II: An important innovation occurs on coins of this Class: the ancestors' busts are banished from the reverse and so each side of the *solidus*, bears the imperial busts of Constantine VI and Irene correspondingly.

1. For the interpretation of the different letters following Constantine's name see A.R. Bellinger, "The end of the Isaurians". *ANSMDN*, 13, 1967, 128; see also for some other interpretations *DMC*, 338

The relationship between the various types and the main events of the reign is disputed and consequently scholars disagree over their chronology.

Grierson dates Class Ia to 780-90, when the queen-mother probably held power as guardian of the very young Constantine. He then places Class Ib in 790-2, when it is known that her power was declining¹. Finally he dates Class II to the years between Irene's return to power and Constantine's eventual deposition and blinding: 792-7². He actually considers the side with Irene on it as the obverse of Class II.

Bellinger's chronology is roughly the same, except for his dating of Class Ib to 780-90 and of Class Ia to 790³. A similar arrangement has been proposed by Misiou, though she dates Class Ib to 780-7 and Class Ia to 787-90 and, finally she dates Class II to 790⁴.

1. In the autumn of 790 Irene demanded an oath of allegiance from the army with a clause in which it swore not to accept Constantine as ruler for as long as she was alive. The army of the Armeniac theme refused and a little later the other troops, who had first agreed, reversed their decision. Constantine was declared sole emperor and on November the 10th Irene was temporarily deposed.

2. For Grierson's chronology see *DOC*, 337-9.

3. A. R. Bellinger, *op. cit.* n. 41, 130-1. He connects Class Ia with the events of 790, when Irene took vigorous measures against her son. However, Class Ia is quite common and must have lasted for longer than two years.

4. Δ Μισιου, "Στάδια βασιλείας Κωνσταντίνου Στ' και Ειρήνης και τα νομισματά τους", *Βυζαντικά*, 1, 1981, 141-56.

Morrisson, however, has proposed a quite different scheme retaining Class Ia in 780-90 but shifting Class Ib to 790-7.

Moreover she connects Class II with the period between January and September 790, during which Irene persuaded the troops to not recognize Constantine as effective emperor during her lifetime¹.

In November of 787 a Synod took place in the imperial palace of Magnaura, at which Constantine VI and his mother Irene presided. They ratified the resolutions of the Synod and signed its proceedings. The two co-emperors were acclaimed by those present as "New Constantine and Helene". Irene was called Christoforos² while at the very end of the Synod the participants received different gifts from the two emperors. This important event might have eventually promoted the issue of Class II.

Actually Class II shows a technical superiority to Classes Ia & Ib; the more refined modelling, the higher relief and the increased clarity of the inscriptions constitute a definite advance. The letters which on Classes Ia & Ib are misspelt and misunderstood can now be deciphered on both sides, though there are still spelling mistakes (*i. e.* IRINI AGOVSTI). Thus Class II could be considered as an elaborate issue minting on the occasion of an important event and in order to publicise it.

1. *BNE*, I, 490. Morrisson argues there that the removal of Constantine's ancestors may have occurred in January - September 790, when Irene took the measures against her son described above, 19 n. 1; when Constantine returned to power he restored them to their former position, at the same time abandoning the *globus cruciger* held by his mother on the early issues.

2. Theophanes (ed. Bonn)

The *officina* marks of this Class are engraved on Constantine's inscription although there are specimens without any *officina* letter. This practice probably indicates that Constantine's side was the reverse. Presumably Irene, the moving spirit of the Synod and the restoration of the icons had occupied the side of the greatest honour.

The chronological frame of Class II might be defined between 787 and 792, when Irene, after a year's removal from the throne, was once again crowned co-ruler. Specimens without an *officina* letter on Constantine's side might be then dated from 10 November 790 to 15 January 792. Their disappearance here might intend to emphasise Constantine's solitary confinement, after his mother's banishment to the Palace of Elephtherios.

In view of our suggestion about the chronology of Class II, Class Ia might cover the period from 792 to 797, while Ib from 780 to 787.

Class Ia shows Irene bearing the same insignia¹ as Class II and therefore might follow in the sequence. The unusual practice of placing Constantine's name on the reverse, the less important side of the coin, probably illustrates Constantine's repentance to his mother and his complete obedience to her, as well as the public acceptance which Irene's resettlement received. However, Constantine's Iconoclastic ancestors appeared again on the reverse.

Class Ib, the earliest class, according to our chronological scheme, depicts Irene without the symbol of the imperial dominion, the *globus cruciger*, while Constantine's name appears

1. See *DOC* 139. Actually the cross sceptre was first introduced in the iconography of the coins by Irene.

on the obverse. This probably reflects a decision of the mint authorities deriving from the rather restrained acceptance accorded the coronation of a woman as co-ruler¹. Moreover, the silver *miliaresion*, which was apparently issued at the very beginning of the reign, on the coronation of the two co-rulers, bears Constantine's name first.

In August 797 the ambitious Irene (797-802) had achieved her aim: she was now the sole ruler of the Byzantine Empire while her blinded son was exiled to Principo, where he died some years later.

The coinage of Irene's reign is the most remarkable in Byzantine monetary history. Her own bust occupies both sides of the *solidus* and she is given the title of BASILISSH. Her name is now spelt EIPINH and she again holds a cross sceptre in her left hand and a *globus cruciger* in her right. The reverse inscription is regularly followed by control or *officina* letters².

In October 802 Irene was desposed and exiled to the island of Lesbos, where she died a year later. The new emperor, Nicephorus I (802-11) a former minister of finance, tried to reform the Empire's financial administration, adopting many shrewd and significant measures to which Theophanes refers abusively as the "ten misdeeds" of the emperor Nicephorus³.

1. Theophanes writes with a restrained admiration: "Εἰρήνη ἡ εὐσεβεστάτη... παραδόξως θεοθεν τὴν βασιλείαν ἐγχειρίζεται."

2. On the *solidi* of the previous period Irene's name is misspelt IRINI. The recorded *officina* letters are either a Θ, or an X, or a curious O.

3. P. E. Niavis, *The Reign of the Byzantine Emperor Nicephorus I (AD 802-811)*, Athens, 1987, 91-110.

The coinage of the reign falls into two periods, that of Nicephorus alone (802-3)= Class I, and that of the co-reign with his son Stauracius (803-1)= Class II.

Class I: The obverse depicts Nicephorus holding in his right hand a cross potent on base and the *akakia* in his left. The reverse is modelled on the type of *miliaresion* showing a cross potent on steps accompanied by the inscription *IHSUS XRISTUS NICA* accompanied by an *officina* letter¹.

Class II: The obverse depicts a similar bust of Nicephorus, while the effigy of the co-emperor on the reverse is depicted holding in his right hand a *globus cruciger* and in his left the *akakia*. The inscription calls him *despotes*².

Stauracius succeeded his father to the throne after the latter was killed in a battle in Bulgaria, but his reign lasted only a few months and no coins seem to have been issued. Stauracius' brother-in-law, the *couropalates* Michael I Rangabes, was crowned emperor on 2 October 811, after a *coup d' état*, while the deposed emperor withdrew to a monastery and died three months later, having been wounded in the same battle in which his father died.

There are no coins from the period when **Michael I** (811-3) ruled alone (October-December 811). The coinage of the joint reign with his son Theophylact is similar to that of Nicephorus and Stauracius.

1. The recorded *officina* letters are X or O.

2. The recorded *officina* letters are E, Θ, X.

In 813 Michael I was deposed and Leo V (813-20) the Armenian came to the throne.

Leo V's gold coinage falls into two classes:

Class I: It carries the emperor's bust on both sides; on the obverse he holds a cross potent in his right hand and the *akakia* in his left, while on the reverse a *globus cruciger*. The obverse inscription names him as *basileus* while the reverse as *despotes*, a title normally given to the co-emperor. The *officina* marks are replaced by a star. **Class II:** It is struck in the names of Leo V and his son Constantine who was crowned co-emperor on Christmas day 813 and follows the pattern of Nicephorus I's coinage. *Officina* marks appeared again on the reverse.

Leo V's reign ended on Christmas day 820, when he was murdered by the supporters of Michael the Amorian (820-9) who was actually crowned emperor the same day.

Michael II continued to issue gold coins on almost the same pattern as his predecessors. These are also divided into two classes:

Class I: At the very beginning of his reign both sides of *solidi* show the emperor's bust but the dress and insignia differ; on the obverse he wears a chlamys and holds a cross potent in his right hand and the *akakia* in his left, while on the reverse he wears the *loros* and holds respectively a *globus cruciger* and a cross sceptre. He is entitled *basileus* on both sides, while a six-pointed star precedes the obverse inscription.

Class II: Michael's bust on the reverse has been replaced by his son's, Theophilus, who was crowned co-emperor in May 821. He is named *despotes*.

Michael II's gold coinage shows a gradual process of technical improvement and a tendency towards greater elaboration though the portraits of the emperors remain impressionistic and stylised, in the Isaurian tradition.

* * * * *

Theophilus (829-42):

Table IIb

Theophilus' reign begins a new era in the history of Byzantine coinage for, although he revived the Isaurian custom of placing the image of his father on the coins, his issues differ markedly in general appearance from those of the beginning of the eighth century. They fall into five main classes:

Class I: On the obverse Theophilus is depicted wearing the *loros* and holding the *globus cruciger* and cross sceptre. On the reverse there is a patriarchal cross on three steps accompanied by the inscription *CYRIEDOHOHTO CODOVLO**.

Class II: The obverse bears Theophilus' cloaked bust holding the patriarchal cross in his right hand and the *akakia* in his left. The reverse shows the cloaked bust of his son Constantine entitled *δеспότης*, holding a patriarchal cross on a globe in his right hand and a cross sceptre in the left.

Class III: On the obverse Theophilus is presented as on Class II while on the reverse his father Michael II and his son Constantine are depicted, both cloaked.

Class IV: This Class is an extremely rare issue depicting five members of the imperial family. More precisely on the obverse there are, in the centre, the cloaked bust of Theophilus, to his right the bust of his daughter Thecla and to his left the bust of his wife Theodora, both wearing the *loros*. On the reverse there are the busts of the emperor's two other daughters, Anna and Anastasia, dressed similarly.

Class V: On the obverse Theophilus is shown as on Classes II and III while on the reverse Theophilus' son Michael, wearing the *loros* and holding the *globus cruciger* in his right hand and a cross sceptre in the left.

The letters E, X, L, Θ, and A are recorded as the so-called *officina* marks. Normally they appeared on the reverse, but on some specimens of Class III they are engraved on the obverse, while Class IV and a rare specimen of Class III have no letter at all; on Class V they appeared on both sides¹.

The chronology of Theophilus' gold coinage raises many problems, partly because the literary sources are scanty and often contradictory² and partly because there are few hoards.

Dikigoropoulos³ proposes that Classes II, V, and IV are ceremonial issues and gives the following chronological scheme: Class III: Substantive issue from 829 to 834/5; Class II: special issue for Constantine's coronation on 5 June 830; Class I: substantive issue from 834/5 to 842; Class IV: special issue, perhaps struck either for a victory celebration in 837 or for the birth of Michael III in 838; Class V: special issue for Michael III's coronation as co-emperor on 1st September 838.

1. It is difficult to verify if those letters still functioned any more as an *officina* indication. Probably, from the ninth century onwards it is preferable to call them control marks, although it is not possible to trace the system of this control. Perhaps Michael II's attempt to reform the coinage (see below under the section on the copper coinage) resulted in a change in the function of these letters; a question arises as to whether they could represent the initials of the die-sinkers. However, they might be meaningless letters, since they no longer performed their original role.

2. Symeon the Logothete, the 'Pseudo-Symeon', Joseph Genesius, Theophanes *Continuatus*, *De Ceremoniis* etc.

3. A. I. Dikigoropoulos, "The Constantinopolitan solidi of Theophilus", *DCP*, 18, 1964, 353-61.

Morrisson¹ follows Dikigoropoulos' identification of the ceremonial issues and proposes a similar chronology: Class III: from 829 to April 835; Class II: special issue in 830?; Class I: from 835 to 842; Class IV: special issue from 838 to 840; Class V: special issue in 842 on Michael III's coronation as co-emperor.

Grierson² in his turn, alleges that only Class IV could be ceremonial and interprets the rarity of some types as due to their being struck for only a very short period³. Grierson's chronology is as follows: Class I: from 829 to 830/1; Class II: in 830 or 831; Class III: from 830/1 to 840; Class IV: late 830s; Class V: from 840 to 842.

Both Bellinger⁴ and Treadgold⁵, without resorting to the hypothesis of ceremonial issues, give the following chronological schemes respectively: Class I: 829-31; 829-33. Class II: 832; 834-5. Class III: 833-7; 835-40. Class IV: 838; 833. Class V: 839-42; 840-2.

1. *BNF*, 515.

2. *DOC*, 407-16; P. Grierson, *Byzantine Coins*, Berkley and Los Angeles, 1982, here he suggests that there are two, or perhaps three groups of ceremonial *solidi*.

3. Similarly the issues from the eighteen-month co-rule of Theophilus and Michael III are very rare. Grierson believes that this is due to unusual overstriking of *solidi* of the first month of Michael III's own reign; see also G. Ostrogorsky and E. Stein, "Die Krönungsordnungen des Zeremonienbuches", *Byzantion*, 7, 1932, 228.

4. A. R. Bellinger, "The emperor Theophilus and the Lagbe hoard", *Berytus*, 8, 1944, 102-6.

5. W. T. Treadgold, "The marriage of the emperor Theophilus", *GRBS*, 16, 1975, 340-1; *Idem*, *The Byzantine Revival, 780-842*, Stanford, California 1988, 284.

A survey of the arguments used by the above scholars in dating the various issues may be summarized as follows:

a. - Dikigoropoulos considers Class III to be the first issue of the reign on the basis of two factors. Firstly he demonstrates that the cloaked bust of Theophilus on this Class is very much reminiscent of that on his pre-reformed *folles*, dated during the first half of 830s. Moreover he concludes that the series lasted up to the death of Constantine, in 834/5, a year or more before his sister Maria's marriage to Alexius Mousele. We shall, however, come back to the date of Constantine's death. Morrisson concurs, but the rest of the above mentioned scholars consider Class I as the earliest issue of the reign. However, their views about the duration of Class I differ, mainly due to their disagreement about the starting day of the next series.

b. Class II has been classified second in the sequence by all scholars but Treadgold. However there is a long debate about the dates of Constantine's birth and death and consequently about the start and end of the issue. By placing Class III first in the sequence Dikigoropoulos and Morrisson accept the view that he was already born in 829¹; according to their chronological scheme Class II was a special issue on Constantine's coronation as co-emperor in 830². Grierson on the basis of numismatic arguments assumes that Class II represents a very short issue lasting for

1. J. B. Bury, *History of the Eastern Roman Empire*, 1912, 465-7: he places Constantine's birth in 829-30, and his death before 831, based on Constantine Porphyrogenitus' remarks [*De Ceremoniis*] (ed. Bonn), 645].

2. For Constantine's coronation see also G. Ostrogorsky, E. Stein "Die Krönungsordnungen", 228: they proposed that Constantine would have been crowned on 25 December 829.

only a few weeks¹, either in 830 or 831, when he also dates Constantine's death. Bellinger² dates Class II in 832, the year which according to his scheme, Constantine was born. Finally, Treadgold, adopting a chronological scheme based merely on the evidence given by Symeon the Logothete places Constantine's birth in 834 and his death in 835 and dates the series correspondingly³. He classifies it third in the sequence of Theophilus' coinage.

c. The above suggestions about Constantine's birth and death have obviously resulted in some debate on the chronology of Class III

1. *DC*, 412. Grierson has noted that the period from Oct. 829 (Theophilus' accession) to Dec. 829 or even to June 830 (Constantine's coronation) is too short for the issue of Class I. However he accepts the view that Constantine was already dead when in 831 a triumphal procession took place in Constantinople on the occasion of a great victory over the Arabs.

2. For a similar date of Constantine's birth see E.W. Brooks, "The marriage of the emperor Theophilus", *BE*, 10, 1901, 540-5; he places his birth in 832.

3. The same date is given also by Dikigoropoulos. This date is based on the assumption that the passage of Constantinus Porphyrogenitus, which speaks of a Caesar riding side by side with Theophilus in his triumphal procession, must refer to the celebrations of 837 rather than 831; since it concerns Alexius Mousale, Theophilus' son-in-law, the death of Constantine might be in 834/5, a year or more before the marriage of Maria to Alexius. For a recent rejection of this suggestion see C. Mango, "On re-reading the life of St. Gregory the Decapolite"; according to him the description of Porphyrogenitus refers to the triumph of 831, so Constantine may have died before 831. Moreover he suggests that Maria's betrothal, as well as the granting of the title of Caesar to Alexius, probably occurred simultaneously in 831. For Maria's birth and marriage see also, J. B. Bury, and W.T. Treadgold, *op. cit.*; the latter dates her birth in 835 and her betrothal in 836

Moreover, some scholar considered that this type was issued during Constantine's lifetime. Thus the problem becomes even more complicated since Class III has to be accommodated among the recorded events of the period. Taking this into consideration, Dikigoropoulos and Morrisson put the issue first in the sequence, as has been already mentioned. Bellinger in his turn suggested that Class III might be dated in the years 833-7, considering the latter as the possible date of Constantine's death. It was Grierson, who first suggested that the issue must in fact represent a memorial coinage, analogous to that struck under the Isaurians, and Constantine must have been dead when it began¹. Consequently he dated Class III from 830 or 831 to 840. Treadgold followed the same view and consequently dated it from 835² to 840.

d. Class IV is dated normally after Maria's death in the late 830s³ and before Michael III's birth. Treadgold however dates the Class in 833, that is before Constantine's and Maria's birth according to his theory⁴.

1. *ΔΧ*, 409 and n. 12.

2. See above, 30 n. 3.

3. Dikigoropoulos, *op. cit.*; see also *ΔΧ*, 415. Maria's death has also been discussed by the scholars. It is dated in 832 by the Pseudo-Symeon (Symeon Mag., ed. Bonn, 630), but most scholars reject this view, stressing that the dates in this text are pure invention.

4. W. T. Treadgold, "The marriage", 333. Wroth in *BMC* has put Class IV first in the sequence of Theophilus' coinage based on Theophanes Continuatus' statement that Maria was the youngest daughter of Theophilus "πασῶν τὴν ἑσχάτην". Bury and Brooks assumed that the statement is mistaken and that Maria was actually the eldest and died before the issue of Class IV; Bury dates the issue from 838 to 839.

d. The dates of Michael III's birth and coronation have also been the focus of a considerable debate. Dikigoropoulos dates type V in September 838, arguing that Michael was born in late July 838 and crowned on the first Sunday in September of the same year. However, after a thorough study of the literary sources, Mango¹ has proved that Michael was born in January 840, and he suggests that his coronation may have taken place around September 840. Following this scheme, Grierson and Treadgold date Class V from 840 to 842, when Theophilus eventually died.

Unfortunately the hoard evidence of the period is very scanty. The Lagbe hoard² contained only one *solidus* of Class III and thirty-five of Class I. Accordingly, Bellinger argued that Class I is the earliest (829-31) and that the hoard was buried in 832 during the capture of Lulum in Cilicia by Mamun, but this dating of the burial contradicts his own proposed date for Class III from 833 to 837. However this does not seem to invalidate his main argument that the quantity of Class I coins in the hoard shows that they were earlier than Class III.

In contrast Dikigoropoulos³ argues that the Lagbe hoard cannot prove the order of issue. Firstly he suggests that the coins of the hoard need not have been withdrawn from circulation at the time of its burial. Secondly he suggests that the hoard was a

1. C. Mango, "When was Michael III born?", *DOF*, 21, 1967, 253-8.

2. E. T. Newell, "The byzantine hoard of Lagbe", *ANSNMI*, 105, 1945; A. R. Bellinger, *op. cit.* n. 63.

3. He refutes also Bellinger's idea that the hoard has a doctrinal character, containing only the issues of Iconoclastic emperors and suggests that the absence of issues of Iconodule rulers is due partly to their rarity.

composite one "put together under circumstances of which we are ignorant". Because there are few coins of Leo IV in the hoard, despite their relative commonness, he argues that the first part of the collection was assembled at the beginning of this emperor's reign. During Michael II's reign another part was added while a further hoard was assembled under Theophilus. Finally he considers that the specimens of Class I represent the latest issues of the reign, pointing out that Theophilus' bust is more youthful on the single specimen of Class III than on the thirty-five specimens of Class I.

Although Dikigoropoulos' comments on the hoard are very attractive, they do not seem to prove that Class III was earlier than I. Moreover the argument that the bust of the emperor on the unique Class III coin in the hoard is much more youthful than on Class I, and hence must be earlier, seems inadequate for Class III is undoubtedly a very widespread issue with striking differences in the depiction of the imperial bust.

The thirty-five coins of Class I from the hoard are very heavily die-linked. Thus they might have been struck concurrently and not in sequence. This, in connection with the condition of the coins, which are reported as uncirculated implies that they were not withdrawn from circulation by random. It has been suggested that the hoard might represent the contents of a sealed purse¹. However one cannot be sure whether the reported specimens comprise the complete hoard since there are indications for some dispersal².

1. *DMC*, 21 and n. 59.

2. See Metcalf's review of Dikigoropoulos in *HBN*, 20, 1966, 682.

The Lagbe hoard may in fact represent the treasury of a wealthy and aristocratic family of the Anatolikon theme, either civil or military. Such families often received quite lavish imperial allocations, on special occasions and if this is the case so the specimens of Class I of the hoard may represent such a donation.

The thirty-six specimens of Class I, as a total, is very much reminiscent of Santorini hoard of 1900 which includes twenty-nine *miliaresia*¹, all of the same rare variety². The Santorini hoard may also represent a similar donation to a high-rank individual or a special despach[†] to provincial authorities, which was eventually buried on the island of Santorini as a result of the Arab raids that Cyclades suffered during the autumn of 829³, soon after Theophilus' accession.

On these *miliaresia* Theophilus is named DULOS (=servant) of Jesus while the emperor is also called the Lord's servant in the reverse inscription of gold Class I⁴. This probably indicates that both issues were contemporary and perhaps special issues on Theophilus' accession. The existence of a *semissis* of Class I⁵, as well as the Italian provincial issues⁶ modelled on this Class, may also imply that this was actually the first gold issue of Theophilus' reign.

1. F. Hiller von Gaetringen, P. Wilski, *Stadtgeschichte von Thera (=Thera, III)*, Berlin 1904, 13, 200.

2. They are all of *DOC* Class III.

3. W. Treadgold, "The Byzantine Revival...", 268.

4. On *miliaresion* the inscription reads: +ΘΕΟΦΙΛΟΣ ΔΟΥΛΟΣ ΧΡΙΣΤΟΥ ΣΙΣ ΤΩ ΣΕΝΑΥΤΩ ΒΑΣΙΛΕΥ ΡΟΜΑΙΩΝ; on *solidus*: CYRIBOCHHTO CODOVLO.

5. See *DOC* 6.

6. See *DOC* 31 (Mint of Naples?).

As far as the iconography of Class I is concerned there are two views. Dikigoropoulos' proposal that the depiction of the emperor in a *loros* indicates a late date of the series, in the middle 830s has already been mentioned. On the other hand Metcalf¹ connects this depiction and the patriarchal cross of the reverse with the new persecution of the iconodules during the patriarchate of John Grammaticus after a Synod held by him in 837/8². But Theophilus is shown to hold a patriarchal cross on his early copper coinage and so this symbol must not be connected with doctrinal propaganda.

It was the young Theophilus who, in 821, carried the wood of the True Cross around the walls of the capital, during a procession held by Michael II in order to encourage his defenders against the usurper Thomas³. Probably this cross became a symbol of protection for the young co-ruler, on the instigation, perhaps, of his tutor John Grammaticus. If so the choice of the patriarchal cross for his coinage was probably deliberate since this symbol "was conceived of as representing the actual cross of Christ in a particularly intimate fashion"⁴.

Class I, may have stopped issues soon after an important event dictated a new series. This cannot have been very long after Theophilus' accession, since Class I does not appear to have been a large or an extensive one. From a numismatic point of view there is only one possibility: the birth of Constantine or his coronation as co-ruler, the date of which has been so much disputed. The new

1. *Op. cit.*, 34 n. 2.

2. V. Grunel, "Recherches récentes sur l'iconoclasme", *EO*, 29, 1930, 99; see also W. Treadgold, *The Byzantine Revival...*, 297.

3. *Ibidem*, 237.

4. *DOG*, 284.

issue (Class II), although there are a few specimens of it, appears to have been intended for extensive circulation. The only evidence that might support this suggestion is that the three known specimens, differ from each other, in the appearance of the effigies and in the design of their imperial crowns. The specimen from BMC shows the cross of Theophilus' crown on a pointed circlet¹; on that in BNP² this circlet appears on Constantine's side; the third example from DOC³ carries no circlet at all. Then the rarity of the surviving examples might be due to their later overstriking from Class III, when the majority of them were still not put into circulation. Indeed some *solidi* of Class III bear traces of overstriking, but no undertype has been read⁴. The duration of Class II, therefore, might have been interrupted suddenly, just as the death of the young co-emperor was sudden.

Class III is undoubtedly the most extensive issue of the reign and might cover the period from Constantine's death sometime in 831 to 840, when Michael III was born. It is the only type from Theophilus' reign that appears in the reported hoards of the ninth century as well as among stray-finds. *Solidi* of Class III have been found in Asia Minor, west Balkan regions, in Italy, in Greece but

1. BMC, 11, Pl. XLVIII, 17.

2. BNP, 9. This specimen differs also from the two others in the type of the inscription on both sides.

3. DOC, 2a.

4. i. e. DOC 3d, 8. Grierson assumes that the earlier coin was a *solidus* of Constantine V, Class II, since there are traces of S+ on the obverse. He suggests that the S was part of the inscription (CON)S and that the cross belonged to the emperor's crown. However these traces could constitute part of the reverse inscription of Class II.

not one from Class I is reported. The finds from the latter areas probably reflect a revival of trade between Byzantium and the West¹, which, as in the case of the abrupt monetary growth of Corinth, might be dated from the mid-830s onwards². The lack of Class I from the above areas may confirm its early date ; similarly almost no Theophilus' pre-reform *folles* are reported to have been found there.

Class IV, because of its rarity but also because of its iconography, should be a pure ceremonial or commemorative issue. As a matter of fact it is the first time that all living members of the imperial family are depicted on coins. Treadgold suggests that this type "shows Theophilus' particular pride in Theodora and in his first three daughters..."³. Class IV should have been issued on the occasion of a special event, which it is difficult to seek out. A possibility could be the fall of Amorium, the birth-city of the dynasty, to Mutasim in 12 August 838⁴. In this case the issue might be intended as political propaganda or might constitute an act of despair; the demonstration of the whole imperial family could be either a projection of power or promises for stability despite the

1. D. M. Metcalf, *Coinage in South-Eastern Europe*, 1979, 19-20.

2. The revival of trade between Byzantium and the West may be related to the dramatic growth of the monetary economy in Corinth functioning as a transit centre; see below: trends in the circulation...

3. W. Treadgold, *The Byzantine Revival...*, 284.

4. G. Ostrogorsky, *History of the Byzantine State*, Oxford, 1980, 208. The date proposed for Class IV implies that Maria was already dead in 838.

lack of a male heir¹.

In conclusion, Grierson's chronological scheme for Theophilus' gold coinage, seems highly likely. Moreover, the numismatic evidence should be used as a primary source in order to clarify the obscure and contradictory history of Theophilus' family, focusing on the following: a.- Class I is a small issue and has scarcely been found in areas where the circulation of the coins is mainly related to the growth of the economy (\pm 835 onwards) and not with martial enterprises. b.- Class II is a very short issue which ended abruptly. c.- Class III is the most extensive issue and is normally found in areas where post-reformed *folles* are also reported among stray-finds.

Michael III (842-67):

Table IIIa.

Michael III was only two-years old when Theophilus died (20 January 842) and the regency devolved on his mother Theodora, though his sister Thecla was also entitled to share, since, she is mentioned in government pronouncements² and pictured on the coins.

The gold coinage of Michael III is divided into three Classes:

Class I: On the obverse Theodora is depicted holding in her

1. Generally for Theophilus' reaction to the fall of Amorium see W. Treadgold, *op. cit.*, 305-312 (*i.e.* the commission of the bronze doors for St. Sophia, with inscriptions invoking God's help for himself and the Virgin's for the empress Theodora).

2. Acta of the forty-two martyrs of Amorium ed. V. Vasilenski and P. Nikitin, 52.

right hand a globus surmounted by patriarchal cross and in her left a cross sceptre. On the reverse there are the busts of Michael III and his sister Thecla. Michael has the place of honour on the left; he wears the *loros* and holds the *globus cruciger* in his right hand. On the right is the larger half-length figure of Thecla holding a long patriarchal cross in her right hand. The series is characterized by numerous divergences in detail among the various dies and there have been many efforts to identify its chronology. For instance, O'Hara¹ suggests a chronological sequence on the basis of the various combinations of the three co-rulers' crowns.

However there are more divergences. Sometimes the inscription of the reverse MIXAHL S ΘECLA is written either as MIXAHL S Θ ECLA or MIXAHL S Θ E CLA. Moreover, the way in which Theodora's or Thecla's crown is designed varies greatly: the former's cross is either on a pointed or rounded circlet, with a pellet inside it, or rests directly on the crown; the pinnacles may also be pointed or rounded; Thecla's crown appears to be more variable: it may have three pinnacles of equal size, sometimes each with a pellet inside, with a cross carried by the central one; or simply one cross between two pinnacles; or only a cross in the centre².

Quite apart from these variations, however, there is a more substantial one which may be of some chronological significance. Specimens with Thecla's name split into ΘE-CLA or Θ-ECLA, show a half-length figure of the young empress, so that Michael III's bust

1. D. O'Hara, "An unpublished and rare variety of a *solidus* of Michael III, and suggested sequence for his first issue", *Coir. list*, 1, 1969.

2. *DC*, 1a-1f.

appears much smaller. The difference in size of the two figures is not so striking on specimens carrying Thecla's name unbroken on the right of the reverse. The fact that Thecla's name is unbroken may reflect a more developed arrangement of the inscription on the reverse while the abandonment of her half-length figure may be intended to compensate for the unusually small size of the emperor himself. If so this variety was probably later.

Many of the reign's first coins appear to have been carelessly restruck on coins of Theophilus and they were clearly issued in some haste. This may be due to two factors: firstly political propaganda in order for the natural successors to secure their position; secondly that Theodora struck her new coinage on stockpiled *solidi* to obviate the need for fresh supplies of gold¹. This would conform with the moderate financial and monetary policy of her regency².

Class II: The obverse carries the bust of Christ accompanied by the inscription IHSUS XRISTOS. The bust of Christ derives from the second type of Justinian's first reign and its design is copied from it. Its revival has been connected with the triumph of Orthodoxy in 843 and consequently the new series of *solidi* is dated by Morrisson and Grierson shortly before the end of that

1. Theodora probably found large quantities of minted gold coins in the imperial mint after her husband's death. The latter's public works and expenditures probably resulted in an increase in the money supply. There are also hints that prices rose during Theophilus' reign as a result of the increase in the money supply; see R.J.H Jenkins, *Byzantium the Imperial Centuries. A.D 610-1071*, 1966, 146-7.

2 W. Treadgold, *The Byzantine State Finances in the Eighth and Ninth Centuries*, New York, 1982, 9.

year¹. However Wroth dated it c. 852 or earlier². This suggestion concurs with the assumption that the process of restoration was rather slow³.

The introduction of Christ's image on the gold coinage almost immediately after the Council of 843, might have the same symbolic importance as the decoration of the Brazen Gate, where Christ's image was most probably restored before the death of the Patriarch Methodius in June 847⁴.

Nevertheless the chronology of Michael III's Class II in 843 presents the following problems:

a.- The earliest coinage of the reign, as has already been mentioned, shows a great variation among the reported dies. This suggests an extensive issue which could hardly have been confined to one or even two years (January 742- end of 743).

b.- Class II does not appear to be very common, which raises doubts as to whether it can represent an issue lasting thirteen years.

c.-The *Acta* of the forty-two martyrs of Amorium refer to Thecla as co-ruler with Michael and Theodora in the year 845, while only Michel III and Theodora are represented on Class II .

As far as the first problem is concerned Grierson⁵ suggests that the divergences among the dies of Class I reflect the haste with which the coins were put into circulation, implying that different styles may have been produced concurrently. Unfortunately the

1. *DOC*, 455-7; *BNE*, 517.

2. *BMC*, 3 & 4.

3. C. Mango, *The Brazen House*, Copenhagen 1959, 130 and esp. n. 94.

4. *Idem*, 125-32.

5. *DOC*, 457.

hoard evidence from the period is so scanty as to be of little help. Die-links and "near-duplicate" links could provide information about particular groups of dies and indicate whether the stylistic variations in their cutting are attributable to different periods. But at present, as mentioned above, Michael III's Class I may be divided into two main varieties on the basis of Thecla's size. The change in the size of the two co-emperors on the reverse of Class I could have taken place just after the Council of 843.

For the third problem Grierson's suggestion is that Thecla's disappearance was merely due to convenience since there was not any space for her on the flan¹. However it seems more likely that a coin connected with the restoration of the icons would depict all the nominal co-rulers. Moreover, the practice of putting three busts on the same die of a coin was quite familiar to die-sinkers since the busts of Theophilus, Theodora and Thecla had been engraved on Class IV of the preceding reign.

In conclusion, Michael III's Class II was probably not introduced in 843. However more numismatic evidence is needed. The possibility that Class II was introduced in 853 after the crucial, for Theodora's policy, sack of Damietta, is at the moment considered with great scepticism².

1. *DMC*, 454.

2. G. Ostrogorsky, *op. cit.*, n. 103, 222.

Class III: In 856 Michael III acquired sole rule for himself, and his mother disappeared from the coins. On the reverse of the *solidi* Michael III's bust, wearing the loros and holding in his right hand a labarum with cross and in his left the *akakia* appears. The obverse keeps the bust of Christ identical to that of Class II.

Basil I (867-886):

Table IIIb

On 24 September 867 the Amorian dynasty came to an end when Michael III was murdered by his co-ruler Basil I, the founder of the Macedonian dynasty.

The gold coinage of Basil I is of three Classes:

Class I: On the obverse is depicted the seated figure of Christ on a small lyre-backed throne accompanied by the inscription +IHSXPSREX REGNANTIUM*. On the reverse there is the standing figure of Basil I wearing the loros and holding in his right hand the *globus cruciger* and in his left *the akakia*.

A seated figure of Christ had never before been used on coinage and it clearly made a big impression at the time. Theophanes *Continuatus* names the new coin as *σενζάτον* (*senzaton*)¹ and Laurent² has shown that the word derives from *σένζος*, which is frequently used in the Book of Ceremonies for the imperial throne.

However there is some debate over the monumental prototype of this new image. Grierson suggests that it derived from the great mosaic of Chrysotriklinos, which had been restored by Michael III between 856 and 866³. However Veglery proposes that the prototype must be the narthex mosaic of St. Sophia⁴. He maintains that the same representation of the enthroned figure of Christ probably continued to appear on *solidi* of the Macedonian dynasty as late as 944

1. Theophanes *Continuatus* (ed. Bonn), 173.

2. V. Laurent. " Το σενζάτον". *REB*, 12, 1954, 193-7.

3. *DMC*, 154-8.

4. A. Veglery. " The date of the narthex mosaic in St. Sophia at Istanbul". *MCirc*, 79, 1971, 100-2.

because it stemmed from such a striking innovation under Basil I. But the date of the narthex mosaic of St. Sophia is still debated and discussion of the identity of the kneeling emperor is inconclusive¹. In any event whatever its prototype², the seated figure of Christ on Basil I's coinage obviously reflects the new artistic tendencies and activity after the re-establishment of icon worship. The issue is dated by almost all numismatists to the very beginning of the reign up to Constantine's coronation as co-emperor between November 867 and February 868³.

Class II: This type is more problematic. On the obverse there is still the seated figure of Christ, but some details suggest an advance in design. On the reverse there are the busts of Basil I

1. C. Mango, "Materials for the study of the mosaics of St. Sophia, at Instabul", *DOP*, 8, 1962, 96-7; he notes that most scholars think that the emperor, is Leo VI, while others prefer Basil I; see also A. Grabar, *L'iconoclasme byzantin*, 1957, 239-41; he concludes that the kneeling emperor is Leo VI begging the enthroned Christ-Sophia for wisdom. A new interpretation of the mosaic has recently been proposed by N. Oikonomides in his article, "Leo VI and the narthex mosaic of St. Sophia", *DOP*, 30, 1976, 151-72. According to him the mosaic represents the repentance of Leo VI. See also Z. A. Gavrilovic, "The humiliation of Leo VI the Wise", *Cah Arch*, 28, 1979, 87-94, for a criticism of this theory.

2. D. M. O'Hara, "The seated Christ of Basil I", *Coin Lists* (J. Crowther), No 4, 1967, 2, 4. The author contends that the seated figure of Christ is similar in the disproportion of head to body to Thessalonican frescoes in the Rotunda and in the church of St. Sophia; he suggests that the coin type may have been inspired in whole or in part by one of those frescoes.

3. For Constantine's coronation see *DOP*, 474

and his son Constantine ; both figures hold a patriarchal cross with their right hands and are dressed with the *loros* and a cloak respectively. The duration of the issue is difficult to determine. Normally it may have ended just after Constantine's death in 879¹ but here there is a problem, as no other type is known to represent a substantive issue covering the rest of Basil I's reign, that is a period of seven years. From this period there are only a couple of fractional gold coins with Basil I's two other sons Leo and Alexander which are obviously ceremonial issues for the latter's coronation as co-emperor in 879².

It is generally accepted that minting in both gold and silver was intermittent during the last seven years of the reign, though the phenomenon has not been accounted for. However we know that Basil's own state spending was massive since his biography contains a lengthy catalogue of new buildings and restorations³ and this presupposes a good supply of coined money. Thus the sudden break in the issue of gold coins is quite strange. Possibly it was due to over-production of *solidi* and *miliaresis* before Constantine's death. The sources inform us that during the reign of Michael III reserves had declined and that when he was

1. *DOC*, 474, 481. See also *BNP*, 538: Morrisson accepts the view that the issue stopped in 870, before the coronation of Leo as co-emperor, but the issue, as Grierson states, is too common to have been limited to two years.

2. *BNP*, 8 (*semissis*); *DOC*, 6 (*tremissis*).

3. C. Mango, *The Art of the Byzantine Empire, 312-1453. Sources and Documents*. Englewood Cliffs, N. J., 1972, 192-202.

murdered in 867. Basil I found only 1,300 pounds of gold¹. They also mention that Basil quickly increased this to 30,000 pounds and that a little later, when he discovered the rest of Theophilus' gold ornaments in the Treasury - about 200 *kentensaria* of gold- he ordered the minting of *senston*. Although the figures from the sources as well as estimates based on them are of limited value they show that Basil very quickly filled his treasury by applying a foresighted financial policy. This perhaps resulted in the use of stockpiled *solidi* during the last seven years of the reign. At that time the death of his deeply loved son may, anyway, have caused Basil to curtail his artistic activity and proposed expenditure².

Any suggestion that the issue continued in use after Constantine's death seems unlikely for two reasons. Firstly it is unusual for a living and a dead ruler to be shown side by side sharing the imperial insignia. Secondly it is equally unusual for a dead member of the imperial family to be depicted in preference to two co-rulers who were still living.

1. Theophanes *Continuatus* (ed. Bonn) 255-7.

2. All Basil's buildings are dated before Constantine's death; i. e. in St. Sophia the first figured mosaic of the Virgin and the Child in the apse, was made in 867; the church of St. Sergius and Bachus was redecorated between 867 and 877, that of the Holy Apostles between 867 and 886 and that of the Virgin Mary of the Source some time before 879; finally *Nea Ekklesia*, Basil's finest achievement was dedicated on 1 May 880.

Leo¹ was associated as co-emperor in 870, and Alexander after Constantine's death in 879² and it is quite implausible that Basil would not have included them on his coinage. Whatever his feelings were for his sons and colleagues their appearance³ on the coinage after 879 would have been inevitable to ensure normal succession and stability. Since they do not appear the presumption is that no coins were struck at all during the last seven years of the reign.

Class III with Basil on the obverse and Eudocia and Constantine on the reverse is a ceremonial series, connected either with Constantine's coronation as co-emperor⁴ or was struck in commemoration of Basil's beloved Eudocia and Constantine after their deaths⁵. Constantine is represented on the left beardless, wearing the *loros* and holding the *globus cruciger* in his right hand; Eudocia is pictured on the right also wearing the *loros* and holding a cross sceptre in her left hand. The accompanying inscription reads : *CONSTANT' SEVDOCIA**. The absence of any title in both effigies seems quite remarkable, especially for an issue struck to celebrate Constantine's coronation. On the other hand the existence of a *tremissis*⁶ of the same type, a coin normally distributed at celebrations, argues

1. *DOC*, 474-5.

2. *DOC*, 475-6.

3. However the lack of fractional denominations and *miliaresia* in the names Basil-Constantine- Leo, although they coexist as co-rulers for nine years, : see below.53.

4. *BNF*, 538.

5. *DOC*, 481.

6. *DOC*. (4).

against the commemoration of the dead. Moreover the emperor's depiction on the obverse of Class III is very much reminiscent of that on Michael III's copper coinage¹, where Basil is depicted as co-ruler on the reverse. Then the presumption could be that Class III constitutes Basil I's first coinage, issued on his coronation. The arguments in favour of this chronology may be summarized as follows:

a. - It has been noticed that the rarity of Class III is not as extreme as of Class I². The latter therefore might be a special issue, of pure commemorative character, not intended for extensive circulation. Genesisius³ records that after Basil had completed and dedicated the *Nea Eklessia* he received the imperial crown from the Patriarch, so establishing a new beginning for his reign. If so, this re-coronation may have been celebrated with some luxuries, including the minting of Class I which is characterized by an elaborate style as far as the standing effigy of the emperor is concerned⁴.

b. - Theophanes *Continuatus* implies that Basil I ordered the minting of *senzaton*, after he had increased the gold reserves and after he had discovered the remainder of Theophilus' gold

1. On those rare *folles* Basil is also depicted wearing the *loros* and holding in his right hand a patriarchal cross on a globe and in his left the *akakia*.

2. *DOC*, 481.

3. Genesisius, *Besileiai* 4, 54.

4. It has been noticed that some details of the seated Christ of Class II suggest an advance in its design comparing it with Class I; see *DOC*, 481 (this obviously implies that Class II is later than I) Actually this is not obvious while the execution of Class I on both sides appears extremely neat.

ornaments. Given that Class I was a very limited issue and that the discovery of the ornaments did not happen at the very beginning of the reign, we may assume that Theophanes' report concerns Basil's second coinage, that is Class II.

c. -The copper issues in an elaborate style, the only ones showing Basil alone, is now considered, quite certainly, as the latest in the sequence and dated from 879 to 886. It seems therefore highly likely that its iconography might have been influenced by the *solidus* of Class I, where the emperor is also depicted alone.

In the light of these considerations the following chronological scheme could be suggested: Class III: 24 September 867 - November 867/February 868; Class II: 867/868-879; Class I: 880.

Although the iconography of Class III raises some problems as far as its chronology at the very beginning of the reign is concerned, it might be indicative for the history of Basil's family. It is remarkable that Leo, Basil's second son born in 866, is not included among the two other members of the imperial family. This led Morrisson to consider the series as ceremonial on Constantine's coronation and Grierson as an issue in memory of Basil's deceased wife and son. However the absence of Leo from Class III might be deliberate. Leo's parentage has been debated by a number of modern scholars¹ although contemporary historians

¹ J. B. Bury, *History of the Eastern*... 169, n. 5; see also R. Jenkins, *Byzantium: The Imperial Centuries*, 1966, 198. *DOC*, 474. For a different view see C. Mango, "Eudocia Ingerine, the Normans and the Macedonian dynasty," *Zbornik Radova Vizantoloskog Instituta* 14/15, 1973, 23-4.

state quite explicitly that he was Michael's son¹. If so, his absence from an inaugural coinage might imply Basil's intent to secure power and rights in favour of his own son Constantine immediately, before his formal coronation as co-emperor. Moreover Basil should have been very anxious about public reaction with regard to political developments after Michael's murder. This is a context of emergency in which the iconography of Class III might have been devised. True Basil's career and private life appears to have been intimately connected with curious and obscure arrangements with Michael III², with whom he shared, quite hastily, the throne from 866 onwards. It would not be extraordinary if Leo's rejection from Class III, was the result of a similar agreement with Eudocia, whose complicity in Michael's murder is plausible³ even if Constantine was not her own child⁴. It is quite remarkable also that Basil avoided issuing *solidi* or *miliaresia* or even fractional denominations in the names of Constantine and Leo, when the latter became co-ruler in 870.

1. Leo Grammaticus, (ed. Bonn), 255.

2. On the affairs of Basil's wife Eudocia with Michael III, and on the history of Basil's family see C. Mango, *op. cit.*, 23-7, where a select bibliography is given.

3. C. Mango, *op. cit.*, 24.

4. There is a dispute as regards Constantine's mother; i.e. Mango, *op. cit.*, 22, states that he was probably Basil's son from his first marriage to a certain Maria. For an alternative see *DAAC*, 474

Leo VI: 886-912)

Basil died on 29 August 886. as a result of a hunting accident. after a reign of nearly twenty years, and his son Leo VI succeeded to the imperial throne. As well as raising some chronological problems, his coinage has a number of remarkable features reflecting the artistic activities of the age, which art historians call the "Macedonian Renaissance". Leo VI's gold coinage is divided into two classes:

Class I: On the obverse the Virgin is depicted, for the first time in the Byzantine monetary history. Her bust is shown facing and orans wearing tunic and *maphorion*. The date of this extremely rare issue is very problematic and there are different suggestions, although all agree that its character should be purely ceremonial. For instance Wroth¹ dates it at the very beginning of Leo's reign on his coronation as sole emperor. However the emperor's bearded bust on the obverse, which shows the revival of naturalistic portraiture, hardly corresponds to a man of twenty. On the other hand Grierson has suggested that this type was struck between the emperor's fourth marriage in 906 and the coronation of his son Constantine as co-emperor in 908 and that its iconography derives from the image of the Theotokos in the church of Pharos where Leo married his fourth wife Zoe Carbonopsina².

1. *BMC*. xlvii, 444-5.

2. P. Grierson, *Byzantine Coins*. Berkeley and Los Angeles, 1982, 179.

Class II: This type, which is extremely common, obviously covers the period from the coronation of Leo VI's son, Constantine, as co-emperor in 908 and Leo's death in 912. On the obverse is depicted the seated figure of Christ, modified from that engraved on Basil's *solidi* but in a superior artistic style. On the reverse there are the standing figures of Leo and Constantine, wearing the *loros* and each holding a *globus cruciger* and supporting between them a patriarchal cross.

It seems that the minting of gold coins during Leo's reign was intermittent, continuing Basil's practice. As a matter of fact no substantive gold series had been issued for about thirty years¹ and this void might be attributed to the same foresight in financial policy adopted by Basil using stockpiled *solidi*². In contrast, the minting of copper coinage appears to have been abundant with a great variety of types.

When Leo VI died his son Constantine was a child of seven and **Alexander**, Leo's brother, was left as regent. He died a year later and obviously his coinage is very rare. Nonetheless it also demonstrates the innovative spirit of the age. For the first time on Byzantine coinage the emperor is depicted being crowned by his name-saint³.

1. *i.e.* from the death of Basil I's son, Constantine in 879 to Constantine's VII coronation as co-ruler in 908.

2. *DOC* 509-10 and esp. n. 8

3. *DOC* 2.1-2.2. There is also a bronze pattern of a *solidus*: see *DOC* 1: on the ^{ob}verse the bust of Jesus Christ and on the reverse Alexander's bust wearing chlamys with *tablion*.

Constantine VII(913-59):

Table IVa.

Before his death, Alexander appointed seven regents for the young emperor Constantine VII, of whom the Patriarch of Constantinople, Nickolas Mysticus, was the most powerful. Zoe, Constantine's mother, was expelled from the palace temporarily but recovered the regency eight months later, in February 914, and retained it until 919 when Romanus Lecapenus, the admiral of the fleet, entered the capital and was appointed Commander of the Palace Guard. On May 919 Constantine married Helena, Romanus' daughter and Romanus took the title of *Basileopator*, while his son Christopher succeeded him as Guard Commander. Thereafter Romanus gradually increased his power and in August 920 Zoe was finally sent to a monastery. A month later Romanus was created Caesar and later in the same year was crowned Augustus by Constantine and the Patriarch Nickolas. After securing his position, he crowned his wife Theodora as Augusta and his son Christopher as Augustus in 921 and in 924 his two other sons were crowned co-rulers. However his authority in the imperial court began to decline after the death of his son Christopher and in 944 he was exiled by his other sons to Prote. The Lecapenus family disappeared completely, after 27 January 945, when Stephen and Constantine Lecapeni joined their father in exile¹. Then, in April of the same year, Constantine's son by Helena, Romanus II, was crowned co-emperor at the age of six.

¹ For the historical events of the period, see S. Runciman, *The Emperor Romanus Lecapenus and his Reign*, Cambridge, 1929.

It is into this complicated context that the coinage of Constantine's reign must be fitted. The problems of its chronology have been discussed at length by many scholars. There are in fact fifteen types though it is uncertain whether some were struck concurrently.

Class I: This class is known only from one silver pattern coin¹. It has unique features: firstly it gives the earliest representation of the Virgin with the medallion of the infant Christ in front of her breast and secondly bears a legend reminiscent of Greek hymnography, but never recorded on coins. Most probably it represents the earliest issue of the reign, before Zoe's first deposition, which was never actually issued, because of the hostility of the seven regents towards Zoe.

Class II: This rare type represents the regency of Zoe, showing the seated figure of Christ on the obverse and the busts of Constantine and Zoe holding a patriarchal cross by its shaft on the reverse. The seated figure of Christ is quite close in style to that on Basil I's coinage. The type is normally dated between 914 and 919, although it is rare for a coin issued over five years.

Class III: On the obverse is depicted the seated figure of Christ, while on the reverse the beardless bust of Constantine, on the left, and of Romanus, on the right; they hold the patriarchal cross between them.

Class IV: Similar type but on the reverse the positions of the imperial busts are reversed.

¹ A. Vegliery, G. Zacos, "An unique silver coin of Constantine VII", *NCirc.*, 64, 1956, 379-80 and 65, 1957, 195-6.; see also *DOC*, 541

Class V: On the obverse is presented the coronation of Romanus I by Christ. On the reverse there are the busts of Christopher and Constantine; that of the former bearded on the left and that of the latter smaller and beardless, on the right.

Class VI: Similar to the previous type but the positions of the imperial busts are reversed. Both busts are bearded and of equal size.

Class VII: On the obverse the seated figure of Christ appears again. On the reverse the two emperors on the left Romanus I and on the right Christopher, who is depicted smaller and beardless.

Class VIII: On the obverse is depicted the seated figure of Christ in an elaborate style, similar to that on *solidi* of Leo VI with Constantine VII. On the reverse, in the centre the standing figure of Romanus I, on the left the half-length figure of Constantine, beardless, and on the right, that of Christopher, bearded.

Class IX: This type is represented by only two pattern coins¹. On the obverse is presented the bust of Christ and on the reverse the busts of Romanus I and Constantine in that order.

Class X: On the obverse there is the seated figure of Christ as on Class VIII. On the reverse the standing figure of Constantine beardless, and on the right, that of Romanus, bearded.

Class XI: This is also a pattern coin showing on the obverse the bust of Christ Pantocrator and on the reverse a portrait bust of

1. *DNC*, 9

Constantine VII, with long beard and holding the globus surmounted by a patriarchal cross in his right hand¹.

Class XII: This is a similar issue to the pattern coin above but Constantine is dressed in a modified *loros* and holds in his left hand the *akakia*.

Class XIII: Almost the same type as XII but Constantine's left hand is not shown.

Class XIV: On the obverse is depicted the seated figure of Christ in elaborate style. On the reverse on the left, the busts of Constantine VII, bearded and on the right that of his son Romanus II.

Class XV: On the obverse is depicted the bust of Christ Pantocrator, while the reverse is similar to Class XIV.

Several attempts, based on different criteria, have been made to place this coinage in its proper order.

Bellinger's and Morrison's chronology is founded chiefly on historical evidence and the political ambitions of Romanus Lecapenus².

Grierson relies more on numismatic details such as the different styles of the inscriptions and of the seated figures of Christ, which lead him to arrange all the issues with the same obverse type in sequence³: issues with the crude representation of the seated Christ (Basil I's type) should be the earliest and it

1. *DOC*, (11).

2. A. R. Bellinger, "The coins of Constantine Porphyrogenitus and his associates", *ANSION*, 13, 1967, 148-66; *BNF*, 563-5.

3. *DOC*, 529-36.

seems significant that the letters on these types are large and well-formed; on coins with the more elaborate type of seated Christ the letters are much smaller and frequently carelessly engraved. Consequently Grierson sees an evolution of letter size, from large to small, implying that the types with small lettering are definitely late.

Gregory, however, objects to the theory of the evolution of letter size on several numismatic and historical grounds, and argues that coins with the more elaborate type of seated Christ could represent special, perhaps coronation, issues¹. He therefore concludes that there were two separate series of issues, one regular and one special, perhaps struck in separate workshops in the mint at Constantinople.

Grierson's suggestion that the small lettering must indicate a late date seems to accord very well with the evidence from the silver coinage of the period. The *miliaresis* in the name of Constantine VII and Romanus II also have small lettering, while those in the name of Romanus I, Constantine VII, Stephen, and Constantine Lecapenus show an intermediate stage between these and the earliest types in the name of Romanus I and Constantine VII or Romanus I, Christopher, and Constantine, on which the letters are large and well-formed.

However there are specimens of Class VII where small lettering on both sides occurs with the crude type of seated Christ² indicating that at a certain moment both styles

1. T. E. Gregory, "The gold coinage of the emperor Constantine VII", *ANSMN*, 19, 1974, 87-118.

2. *i. e.* DOC 7 13; *BNF* 5.

were used in the mint. Moreover, the seated figure of Christ of the elaborated style appears first on type VIII¹ with lettering which does not seem to be of the evolved type; the letters of the obverse inscription are equal in size to those which accompanied the crude type of seated Christ. Thus the adoption of the new type of seated Christ was not necessarily connected with the small lettering from outset since the more elegant type of seated Christ was already known from Leo VI's reign; its reintroduction during the reign of Constantine VII may have occurred a little earlier than the final evolution of the letters.

In view of this the following chronological scheme seems more convincing:

Class III: 17 December 920- 20 May 921, that is from Romanus I's coronation as Augustus to Christopher's coronation².

Class VIII: 20 May 921, probably being a ceremonial issue for Christopher's coronation. The type with the standing figures of the co-rulers shows an influence from Leo VI's issue with the standing figures of Leo IV and Constantine VII, on which the elaborate style of the seated Christ appeared, for the first time. The same date is proposed by Morrisson and Gregory³. On the other hand Bellinger and Grierson consider it a special issue for an unknown occasion, the former dates between 924 and 927 and the latter in c. 930⁴.

1 i. e. *DOC*, 8.1, 8.2.; *BNF* 1.

2. This date is accepted by all scholars.

3. *BNF*, 563, 566; T. Gregory, *op. cit.*, 104 (type V), 106 and n. 39a.

4. A. Bellinger, *op. cit.*, 159, no. 13; *DOC*, 534.

Class IV: for a short period after Christopher's coronation. It might be placed before the coronation, as most scholars suggest¹, but Theophanes *Continuatus*² informs us that Christopher Lecapenus was crowned by Constantine VII, while later the younger Lecapeni Stephan and Constantine were crowned by their father Romanus. If this is true, it means that Romanus took precedence over Constantine VII from 20 May 921 onwards. Consequently the issues which show Romanus in the place of honour, on the left, should belong after the date of Christopher's coronation. It is curious however that Christopher is absent from an issue dated just after his coronation. Gregory³ suggests that Class IV and its similar Class VII, must have circulated together. He dates, however, the former before Christopher's coronation. Nevertheless both Classes could have been issued concurrently just after the coronation; the minting of Class IV probably ceased sometime after April 922⁴, due to dynastic rivalries, while Class VII continued up to Christopher's death in 931. A second possibility is that the omission of Christopher, who was third by that time in the hierarchy, would facilitate the minting procedures of Class^{IV} which was intended for general

1. i. e. Bellinger *op. cit.* 156, no. 9; *DOC*, 533 (Class IV); Gregory, 103 (type IV).

2. Theophanes *Continuatus* (ed. Bonn) 398. For Christopher's coronation see A. Bellinger, *op. cit.*, n. 156, 157 n. 35.

3. T. Gregory, 107.

4. See below under Classes VI & V. Class IV is very rare; see *DOC*, 533. Grierson comments that it might have been issued for two or three months at most.

circulation and consequently its production was rather massive. When Christopher took actual precedence over Constantine the practice changed and Constantine's name was replaced by Christopher's.

Morrisson dates Class IV between Christopher's death in 931 and Romanus I's exile in 944¹ but it is too rare for a period of thirteen years. Class VII, as has been already mentioned might have been an extensive issue covering a period of about nine years (921/2-931)².

Class V : 924 ; Class VI: 927. Class V bears a beardless bust of Constantine and therefore should be earlier than Class VI³. Since both series are very rare they might have been ceremonial issues. Although it is difficult to determine the occasions of their minting, the iconography of the obverses suggest that they could have been issued on some imperial coronations⁴.

1. *BNF*.564.

2. The issue is very common; see T. Gregory, *op. cit.*, 106.

3. *DOC*.534. However there are cases where the depiction of a co-ruler is not realistic but symbolic of his relationship with his colleague, *i.e.* Christopher's bust on Class VII is beardless although when he was crowned co-emperor he was an adult.

4. Similar representations exist on ivory plaques dated in the 10th century; *i.e.* the ivory plaque in Moscow showing the coronation of Constantine VII or the ivory in Paris which most probably shows the coronation of emperor Romanus II and his consort Eudocia; see D. T. Rice, *Byzantine Art*, 1968, 444-5; see also T. Gregory, *op. cit.*, 108: the author regards the representation of Romanus' coronation by Christ as an announcement that the favour of God had passed to the Lecapeni.

Class V might have been issued on the occasion of Stephen's and Constantine's coronation as co-rulers on Christmas day of 924 and this date accords with the historical background of the period. The reverse of this series shows Christopher and Constantine in this order and actually should belong to the period of Christopher's precedence, which most probably took place some time between 922 and 924¹, that is before the coronation of the young Lecapeni. The representation of the emperor's coronation by Christ probably conveys the symbolism that the emperor, as God's representative on Earth and with the co-operation of his two colleagues, could pursue the completion of his plans. In this case the effect is to justify his attitude to the legitimate emperor at a moment when two more members of his family shared the imperial throne.

Assuming that Class VI is later than Class V the date of this series is very intriguing. The reverse bears the busts of Constantine and Romanus in that order. However, as has been already mentioned, Christopher took precedence of Constantine after April 922 which fact contradicts the evidence given by Class VI. Nevertheless, Theophanes *Continuatus*² records that when Christopher's daughter Maria married Peter, the Bulgarian Tsar, in 927, the Bulgarians demanded his precedence over Constantine. This statement is supported by Constantine Porphyrogenitus himself who says that at the time of his daughter's marriage Christopher was third and least³. Moreover we are told that *Magister*

1. G. Ostrogorsky, *History of the Byzantine State*, Oxford, 1980, 270 and esp. n. 1.

2. Theophanes *Continuatus* (ed. Bonn) 414.

3. *De Administrando Imperio* (ed. Moravcsik-Jenkins), 74

Nicetas urged Christopher to rebel against his father in 928, because he was then only third in dignity¹. Although Ostrogorsky rejects the story concerning the Bulgars² the three references mentioned suggest that Christopher's position was ambiguous sometime in the late 920s. This may not have been due to the decrease for his father's affection to him, but possibly to some opposition either from the people of Constantinople or from state authorities³. Under these considerations Class VI could be a special issue connected with the marriage of Christopher's daughter in 927⁴. Romanus I, a talented ruler and a clever diplomat, would keep up pretences, at least in matters connected openly to imperial court. However substantive gold and silver coinage continued to be issued in the names Romanus-Christopher and Constantine. The symbolism of the representation with Romanus crowned by Christ might be similar to that of Class V: the marriage of an imperial bride to the Bulgarian Tsar had to be publicised as God's will through his representative on Earth.

Morrisson, without regarding the portraiture of the two co-emperors Constantine and Christopher, dates Class VI before Class V that is the former between 921 and 922/4 and the latter in 922/24. She bases her chronology on the fact that Constantine was second emperor in April 922, and therefore the *solidi* bearing

1. Theophanes *Continuatus op. cit.*; see also A. Bellinger *op. cit.*, 161 and T. Gregory, *op. cit.*, 107-9.

2. G. Ostrogorsky, *op. cit.*

3. For a similar suggestion see T. Gregory, *op. cit.*, 109.

4. If Class VI is connected with the marriage it suggests that the demand of Bulgars was never carried out or that the demand followed the wedding festivities.

the names of the co-rulers in the order Romanus-Constantinus-Christopher might belong to that period¹.

Bellinger dates Class V in 927, considering that a second demotion of Constantine might have taken place after the demand of the Bulgars in 927 and Class VI after Nicetas' rebellion in 928².

Gregory, in his turn, considers Class V as a special issue for Christopher's elevation between April 922 and December 924. He suggests also that, since both Classes show close similarities, Class VI might have followed very quickly because of public opposition to Romanus' dynastic plans³. Finally Grierson dates both in 921, classifying Class V first in the sequence⁴.

Class X: 944. This Class is one of the most problematic. Grierson dates it between 931 and 944, suggesting that Romanus I may have been so deeply disturbed by his son's death in 931, that he tried to restore Constantine's position by returning to the scheme used on his earlier issues⁵. Romanus is shown on the right, while Constantine occupies the side of the greatest honour, left, though he is smaller and his hand is lower on the shaft of the sceptre. In contrast Morrisson dates the series to 945 and regards the type as a commemorative issue for Romanus II's coronation⁶.

1. *BNF*, 564, 567. There is a novel which gives evidence that Constantine indeed was second emperor in April 922; see G Ostrogorsky, *op. cit.*, n. 173.

2. A. Bellinger, *op. cit.*, 160-1, nos. 14, 16.

3. T. Gregory, *op. cit.*, 108-9. (Varieties VII & VIII).

4. *DOC*, 534

5. *Idem*, 534-5

6. *BNF*, 565, 569 (Type 9)

Actually there are some difficulties concerning these suggestions. In Grierson's case it seems very odd for a man of twenty-six to be depicted as a beardless youth. Moreover Morrisson's scheme does not explain the peculiarity of Constantine's name being first. The elaborate style of the issue, as well as the advanced execution of the enthroned Christ on the obverse, makes likewise Bellinger's¹ and Gregory's² date of 17 December 920 very dubious. Furthermore details such as the type of the enthroned Christ on the obverse, which connects the issue with Class XIV of the very beginning of Constantine VII's and Romanus II's co-reign, and the type of the reverse which is very much reminiscent of Leo VI's Class II, aggravate the problem. Nevertheless Grierson's suggestion that Class X might be dated in the period between Christopher's death and Romanus I's exile seems at the moment highly likely although it might not constitute a substantive issue³.

During the summer of 944 an unique religious festival took place in Constantinople on the reception of the "Sacred Mandylion". By that time, Romanus immersed in religion and sadness for his son Christopher's death, was ready to amend the suppression of the legitimate emperor Constantine VII⁴.

1. A. Bellinger, *op. cit.*, 155 no. 6, 156.

2. T. Gregory, *op. cit.* 102, 104 (variety II).

3. Grierson notes that the issue is fairly common and fills "an otherwise inexplicable gap in minting between 931 and 944..."; for the size of this issue see also Gregory, *op. cit.*, 94 (die ratio .364)

4. *DOC*, 528 and esp. n. 19, 535.

Class X indeed fits very well into these events. Its refined style, large flan and general appearance suggest that it should be a ceremonial issue for a very special event¹. The issue recalls the type used for the coinage on Constantine's coronation as co-emperor in 908, a vital moment for Constantine's legitimacy. Moreover it follows the correct protocol with Constantine's name coming first and his figure being on the left. Obviously it reflects an intention to reinstate the legitimate heir. Moreover Class X, by attempting to depict the two emperors realistically yet at the same time in a purely symbolic fashion, plausibly aims at conveying the cordial relationship between the two emperors after ten years of dynastic rivalries².

The above chronological scheme leaves the period between 931 and 944 without gold issues. However Class IX which is actually represented by only one pattern coin, indicates that probably soon after Christopher's death in 931 a new type was intended to be issued³. A contemporary pattern *miliaresion*⁴ bearing on the obverse Romanus I's bust and on the reverse a cross, was eventually replaced by the *miliaresion* in the names Romanus-Constantine-Stephen-Constantine. In contrast the pattern *solidus* showing on the reverse the busts of Romanus I and Constantine VII, in that order, was abandoned, while there was no gold issue in the names of the young Lecapeni. Conceivably a claim by them to be

1. T Gregory, *op. cit.*, 114 (variety II).

2. Similarly, Christopher appears as a beardless youth on Class VII, although he was already fully adult at the time of his coronation.

3. *DMC*, (no. 9).

4. *DMC*, (no. 19).

represented on the gold coinage as well, was received with reluctance by the emperor himself, while at the same moment Class VII, in the names Romanus-Christopher, had been considered sufficient for normal circulation. The latter is not unusual since similar cases have been noticed during the reigns of Basil I and Leo VI. It is difficult to define the reasons for such a practice, but as has already been mentioned it might have been connected with a foresighted financial policy under the Macedonian dynasty. In contrast silver and copper coinage continued to be issued regularly¹.

The coinage of Constantine VII's sole reign (945-59) can be easily arranged:

Classes XII² and XIII belong to the period between Romanus I's exile on 20 December 944 and Romanus II's coronation as co-emperor on 6 April 945. The reverse depicts the splendid portrait of Constantine VII, an obvious influence from his father's, Leo VI, coinage. The obverse shows a significant innovation depicting the bust of Christ, which became the dominant representation of Byzantine coinage during the second half of the 10th and 11th centuries.

The introduction of this type and its origin has been the subject of considerable debate.

1. The issue of *miliaresia* and especially of *folles* during the period was apparently very large; bronze coins of *DOC*, Class 5 are plentiful among stray-finds in Corinth while there is a considerable number of hoards consisting entirely of specimens of this Class.

2. There is also a pattern *solidus* (Class XI) similar to these types; see *DOC*, no 11.

Actually, it was during Romanus I's reign that a bust of Christ had appeared for the first time on a pattern *solidus*. The accompanying inscription reads *+IHSUSX PISTUS* and this effectively obviates any connection of the type with that on Constantine VII's coins entitled as *+IHSUSXPSREXREGNANTIUM*¹. The origin of the former is difficult to identify, although it could be a segment of Christ's standing effigy on Romanus' Classes V and VI². If so, Christ's bust on Romanus' pattern coin might well reflect Romanus' purpose to establish a new type for his dynasty by changing that of the enthroned *Rex Regnantium* type adopted originally by Basil I. The bust of Christ could serve as an "emblema" of his family, while at the same time being technically more convenient for a substantive coinage.

Probably Constantine's type was influenced by the same philosophy or perhaps by the pattern coin itself. Constantine had a similar purpose and he too needed to proclaim his independence from the Lecapeni dynasty. He adopted Romanus I's practice and engraved on his coinage a segment of the *Rex Regnantium* of his

1. T. Gregory, *op. cit.*, 112 and esp. n. 60. The author has suggested that the bust of Christ on Constantine's *solidi* was influenced by the Sacred Mandylion and was chosen by the emperor in order to celebrate his liberation from the Lecapeni. For the pattern *solidus* he writes: "it may be that Romanus himself considered issuing a coin with a bust of Christ—perhaps to commemorate the return of the Mandylion. If so, the revolt of his sons prevented him, and the execution of the idea was left to the capable Macedonian".

2. There are similarities between the type of Christ on these classes and that on the pattern *solidus* (i.e. the type of the cross nimbus, the way of holding the Book).

predecessor, Basil I¹. The final evolution of the type may have been influenced by contemporary monumental paintings or mosaics² but not its origin.

Class XIV was most probably a ceremonial issue for Romanus II's coronation on 6 April 945. The enthroned Christ on the obverse is very much reminiscent of Class X, which, as has been suggested, might be a ceremonial issue on the recovery of the Sacred Mandylion.

Class XV was apparently the regular coinage for the period of the joint reign of Constantine VII and his son (945-59).

The gold coinage of **Romanus II** (959-63) is extremely rare and is represented by only a single type with two varieties³, following the tradition of the realistic portraiture.

Nicephorus Phocas (963-9):

Romanus died on 15 March 963 and left his two sons aged five and three, as nominal emperors under the regency of their mother Theophano. Five months later, however, Nicephorus Phocas was hailed as emperor by his troops at Caesarea and on 16 August of the

1. A. Grabar, *L'iconoclasme byzantin*, 1957, 40-1; J. D. Breckenridge, "The numismatic iconography of Justinian II", *ANSNNTI*, 144, 1959, 48-9.

2. J. T. Mathews, "The source for the solidus issued by Constantine VII in 945", *ANSIN*, 24, 1979, 199-213. The author explores Constantine's political motives to interpret the message carried by the new iconographic type of Christ. According to him the inspiration for its design may be the decoration of the cupola of *Nes*.

2. *DOC*, 576-7 (Classes I & II).

same year was crowned in St. Sophia. He subsequently married Theophano and became the protector of the two young princes, Basil and Constantine. There is no gold coinage from the period between Romanus II's death and Nicephorus' coronation, either in the names of Theophano, Basil and Constantine or in the names of the nominal emperors alone.

The gold coinage of Nicephorus Phocas is divided into two types:

Class I: On the obverse there is the bust of the Pantocrator while the reverse depicts the busts of Nicephorus on the left and Basil II on the right, holding a patriarchal cross between them.

Class II: This is an innovation. The obverse depicts the same type of Christ but on the reverse the emperor on the right is accompanied by the bust of the Virgin; quite remarkably the Virgin shares the patriarchal cross, occupying the senior place. It has been suggested that Nicephorus was trying to claim divine sanction for marrying a widow, when himself a widower, and so abandoning his monastic aspirations¹. But the emperor had always been a devout worshipper of the Virgin, as a warrior and a monk, and it was during his reign that the great centre of Greek monasticism on Mount Athos, dedicated to her, began to flourish.

Hoard evidence suggests that the introduction of Class II might have taken place after 965/6. The Edessa hoard/1935, the hoard from the Danube fortress of Iatrus as well as the Voden hoard include only gold coins of Nicephorus Class I². It has been

1. A. R. Bellinger, "The coins and Byzantine imperial policy...", *op. cit.* n. 2, 78.

2. See Appendix V: The hoards.

suggested that the concealment of these hoards might be connected with some hostilities between Nicephorus II and Bulgars, at the frontiers of the Bulgarian Empire, between 965 and 966¹.

In monetary terms the most important event of Nicephorus' reign was the introduction of a second gold denomination, called the *tetarteron* by the sources, which for almost a century circulated concurrently with the full weight gold *solidus* or, as it was called from now onwards the *nomisma histamenon*. The new coin was slightly lighter. The reason for its introduction has frequently been discussed, as we shall see in the relevant chapter. The precise date of its introduction is not reported and the hoard evidence is inadequate on this point, since no *tetartera* seem to have been included in hoards dated to the end of the 10th century².

John Zimisces (969-76):

Nicephorus Phocas was murdered in December 969 by his nephew John Zimisces with the connivance of Theophano. John was crowned emperor a week later, after agreeing to all the Patriarch's demands, such as the banishment of Theophano and the punishment of his own accomplices.

The gold coinage of John Zimisces is represented by one main

1.D.M.Metcalf, *Coinage in South-eastern Europe...*, 45.

2. i. e. The Edessa hoard/1935, the "Ayies Paraskies" hoard/1962; see appendix V.

type on both *nomisma* and *tetarteron*. On the obverse is depicted the bust of Christ Pantocrator and on the reverse the busts of the emperor and the Virgin. The latter is different from that of coins of the preceding reign since the Virgin is shown crowning the emperor and the relative position of the two figures has been reversed. Above them is the *Manus Dei* blessing the emperor, who usually holds a patriarchal cross in his left hand, although there are varieties showing him holding a plain cross on globus and others depicting him with a globus surmounted by trefoil; on the latter there is sometimes a cross in the upper field of the reverse. It is remarkable how all these varieties can be fitted in a short reign of seven years. Possibly they might be connected with mint organization but on present evidence no satisfactory arrangement can be devised¹.

Basil II(976-1025):

Table IIIc.

After the death of Zimisces the two sons of Romanus II, Basil and Constantine, eighteen and sixteen years old respectively, succeeded to the imperial throne, though not without difficulty, since dynastic ambitions were shown for a time by their uncle Basil the *Parakoemomenos* and by some generals such as Bardas Phocas.

The striking feature of the gold coinage of the period is that the *tetarteron* at some stage began to differ from the *histamenon* ;

¹ Grierson considers the varieties without the patriarchal cross as short-lived experimental attempts.

some details of its design being changed apparently to make it more readily distinguishable from the standard weight *nomisma*, which gradually became a large, thin coin, quite similar in fabric to the contemporary silver *miliaresion*.

Another remarkable feature is the great range of variation in the designs. There are differences in the size and decoration of the nimbus of Christ, in the costume of the emperor, in the form of the patriarchal cross and the decoration of its shaft. The emperor's *loros* may be either modified, decorated with the traditional lozenges or with a novel square pattern. The nimbus of Christ was gradually enlarged so that a great variety of ornaments could be inserted on the arms of the cross. The patriarchal cross retained its traditional form or was treated as a crosslet, and its shaft is decorated with various different objects¹.

Recognizing that the different varieties must be susceptible of being arranged in a chronological sequence Grierson divides the gold coinage of Basil II into six Classes and suggests the following chronological scheme².

Class I: January 977.

The obverse depicts the bust of Christ. The nimbus is quite narrow and on each arm of its cross there is a dot. The reverse bears the busts of Basil II and his brother Constantine VIII holding with their right hands the traditional patriarchal cross.

1. *DOC*, 604-5.

2. C. Zdravka, "K"m v"prosa za zlatnoto vizantiisko monetosechene/963-1025/-khistameni i tetarteroni", *Muzismatika*, 16 no. 2, 1982, 18-28; the author proposes three categories rather than six

The shaft of the cross is either undecorated or carries a dot. Basil wears a modified *loros*.

Class II: 977-89 (?)

Christ's nimbus on the obverse is enlarged to allow the insertion of ornaments on its cross¹. On the reverse Basil wears the traditional *loros* with lozenge pattern and the shaft of the patriarchal cross is decorated with various ornaments.

Class III: 989-1001(?)

The different ornaments on the arms of Christ's nimbus cross are more elaborate². On the reverse Basil wears a modified *loros* and the patriarchal cross is treated as a crosslet.

Class IV: 1001-1005(?)

The nimbus of Christ is always decorated by a dotted rosette. On the reverse a crown is suspended over Basil's head. Constantine's chlamys has a decorated *tablion*. After the inscriptions there are various signs, such as a cross, or a rosette. Grierson connects the beginning of the series with the triumphant return of Basil to Constantinople in 1001 after two years of successful campaigns in Asia Minor³.

Class V: 1005(?)

The obverse is the same as in the preceding Class but on the reverse the patriarchal cross has a large globule at the end of each arm⁴

1. *DOC*, 604, Table 21 (IIa-k)

2. *Ibidem*, Table 21 (IIIa-j)

3. *DOC*, 606 and esp. n. 10, 11.

4. Grierson argues that this Class might be experimental and very quickly replaced by Class VI; see *DOC*, 607.

Class VI:1005(?) - 1025.

On the obverse the arms of the nimbus cross have serrated ends where they join the rim of the nimbus and there are crescents in the upper quarters. On the reverse a simple patriarchal cross appears. The flan of the coin is large and there is a triple border of dots on both sides.

Grierson also suggests that the *tetartera* of the reign are of two different sorts. The first were identical in design to the *histamena* of Classes I-IV but were lighter, and were produced down to c. 1005, when the mint authorities subsequently introduced "a miscellany of varying designs", which did not occur on the *histamena*, to differentiate the two coins. The issues of the "reformed" *tetarteron* occur in six Classes¹.

Basil II's coinage is quite difficult to date since the same iconographic types are repeated and the change to a more elaborate style reflects artistic or minting evolution rather than being attributable to some historical events. The only exception might be Class IV with the crown suspended over Basil's head, which must commemorate a notable victory.

Of a hoard of ninety-eight gold coins from Crete, found at Ayies Paraskies near Heraklion in 1962², eight are of Nicephorus II and the rest of Basil II and Constantine. The hoard does not cover the whole period of Basil II's reign and it is difficult to deduce the circumstances under which it was concealed. However it could

1. See *DOC*, 605, Table 21(C).

2. S. Alexiou, "Αρχαιότητες και μνημεία Κρήτης". *ΑΔ*, 18/2, 1963, 213-4.

be connected with the cruel persecutions of the Arab chaliph Al-Hakim, against the Christian populations of Egypt and Palestine in 1009¹. Basil reacted to this with economic reprisals, prohibiting trade with Egypt and Syria. This situation might have eventually created a certain embarrassment among the inhabitants of the island who had been liberated by the Arab occupation quite recently.

The specimens of the hoard belong to Grierson's Classes I, II and III, though not all the varieties are represented and some new ones appear. Their condition implies that they were in circulation for some time before their burial. 6.1% of the hoard's coins are of Class I, 65.9% of Class II, 24.4% of Class III while one specimen belongs to a new type, to which I shall return. These proportions indicate that the hoard was collected mainly during the period that Class II was in full circulation and that it was concealed at a time when Classe III was still in production.

The study of the hoard provides the following new evidence:

1. - A new type of a rare *histamenon* has appeared. The obverse depicts the bust of Christ flanked by the abbreviations $\overline{\text{IC}} \overline{\text{XC}}$; above them there is a dot². On the reverse there are the busts of Basil II and Constantine VIII holding between them a labarum with cross; there is one dot at each corner of the labarum as well as at each angle of the cross inside it. The long shaft of the labarum

1. A. A. Vasiliev. *Ιστορία τῆς Βυζαντινῆς Αυτοκρατορίας* 324-1453, Athens 1954, 387.

2. This feature appears also on some rare *tetartera* of John Zimisces; see *DMC*, 595 6b.

bears a latin cross too. The triangular faces of the two co-emperors look very youthful. Basil on the left is slightly bearded and wears an ornate robe very much reminiscent of the modified *loros*; there are only four squares which are decorated with drop-shaped ornaments¹. The emperor's crown carries five dots and is surmounted by a cross. Constantine on the right is beardless and wears a chlamys with a decorated *tablion* and a crown. A similar type was known to constitute an independent *tetarteron*², since the weight of the unique specimen was recorded as 4.06gr. However the coin from the Cretan hoard weighs 4.38 gr. and is evidently a *nomisma histamenon*. Apparently both issues should be dated at the beginning of the reign³. However the two specimens show two remarkable differences. Firstly on the *tetarteron* Constantine wears a robe decorated by a characteristic V-shaped embroidery which also occurs on other types of *tetartera*⁴. Secondly the inscription accompanying the imperial busts reads differently on the two denominations:

1. Basil's garment is very reminiscent of that worn by the standing figure of Romanus I (Class X); see *DOC*, Pl. XXXVI, 10. 1.

2. See *DOC*, 608 (Type A).

3. The existence of a similar *tetarteron* indicates that the *histamenon* under consideration cannot be dated to the period after Romanus II's death, during Theophano's regency. For the coinage of this period see *DOC*, 578 n. 5, 579.

4 i. e. Grierson's independent *tetartera* of Class F; see *DOC*, 15.

+BASIL'CCONSTA'T. INA: R' (=Βασίλειος καὶ Κωνσταντῖνος Αὐγουστοὶ (?) Ῥωμαίων) on the *histanon* and +BASILC·CONSTANTIB'R (=Βασίλειος καὶ Κωνσταντῖνος βασιλεῖς Ῥωμαίων) on the *tetarteron*. These differences suggest that from the very beginning of the reign the mint authorities were trying to draw distinctions between the two denominations.

Although coins of this Class are extremely rare, it may have lasted for some time, their rarity being due to domestic troubles in the empire¹ and consequent irregular issuing of coinage. It cannot be a ceremonial coin struck for the emperor's coronation, since this happened later, and was probably intended for extensive circulation. Its appearance in the Cretan hoard could suggest that it circulated for a short period of time, in limited quantities, but the greater age of the two co-emperors on the succeeding series suggests that some time elapsed between the two issues. It is impossible to estimate the duration of this rare issue, but it probably ceased in 978, when Basil II was a youth of twenty, and he is represented by a more mature bust.

2. - Grierson has suggested that Class I must have been a very brief issue². However the Cretan hoard includes five specimens of this Class which show considerable differences in style as well as in the two co-emperors' features. This implies that Class I must also have been issued for some period of time.

3. - The hoard shows that there are two more varieties of Grierson's class I, six more varieties of Class II and two more of Class III.

1. See G. Ostrogorsky *History of the Byzantine State* . . . 298-304.

2. *ibid.* 603.

(see Table V), making the total varieties of each Class as follows¹: Class I=3 (**Ia, Ib, Ic**); Class II=18 (**IIa, IIa.1, IIa.2, IIa.3, Ib, Ic, Iicc, Id, Ie, Ie.1, Ie.2, If, Ig, Ih, Ii, Ij, Ik, Ik.1**); Class III=14 (**IIIa, IIIb, IIIbb, IIIc, IIId, IIIe, IIIe.1, IIIe.2, IIIf, IIIff, IIIg, IIIh, IIIi, IIIj**).

It is difficult to be sure whether the mint authorities restricted the issue of each variety to a standard period. The purpose of such a policy might be to control the money supply on an annual basis (?), to enable estimation of the amount of gold coinage in circulation, of state expenditure and the like. Thus, on the assumption that each variety corresponds to a yearly output, Class I might be assigned to 978-81, Class II to 981-1000, Class III to 1000-1014.

This chronological scheme suggests that Class IV, with the crown suspended over Basil's head might have been introduced sometime in 1014. Moreover the crown as a symbol of power and victory implies that this Class is more likely to have been issued after the great Byzantine victory over the Bulgarians in 1014². Class IV could have lasted up to 1018, when it was replaced by Class VI.

Class V seems to have been a very brief issue and plausibly could be considered as transitional, either between Class IV and VI or, most probably, Class III and IV. Nevertheless some details in

1. The varieties in bold letters indicate those included in the Cretan hoard.

2. *NC*, 606 and esp. n. 10. Grierson connects this issue with the triumphant return of Basil to Constantinople in 1001 after two years of successes in Asia Minor.

the treatment of Christ's effigy and beard imply that the latter case could be more likely. In Class V the treatment of Christ's beard is more naturalistic as in late issues of Class III and it does not show the characteristic lumps which are more predominant on specimens of Class IV¹. Moreover, on issues of Class IV, as also on Class VI, Christ's bust is broader and the treatment of his right hand very linear and schematic while that of Class V is very much reminiscent of Class III².

It is true that Class VI is quite common in relation to a period of issue of seven years (1018-25), but it was at this time that the struggle with the neighbouring Slavonic states came to an end and the Empire's frontiers ran once more along the Danube and the Euphrates. Thus new propitious conditions were created for the development of commercial relations with neighbouring states such as Rus, Patzinaks in the north, the Arabs in the east and the Italian states. The *helioselenato*³ might reflect the stability and economic reconstruction which apparently resulted in the abundance in money supply from 1018 onwards.

The Cretan hoard also gives some evidence about the *tetarteron* of the reign. Grierson's types of the so-called "independent" *tetartera*⁴ have to be reduced from six to five, since Type C of

1. see *DC*, Pl. XLIV and compare no. 5 with 3f. 1 and 4a. 2.

2. *Idem* Pl. XLIV and XLV; compare Christ's right hand of no. 5 with nos. 4 and 6.

3. For the term *helioselenaton* applied to this issue as well as Constantine VIII's gold coinage see *DC*, 57-8.

4. The term "independent" *tetartera* has been conveyed by Grierson; *DC*, 608

the *tetarteron* is equivalent to the new variety of *histamenon* IIa.2 without obvious distinctions.

The *tetarteron* of Type A, as has been already mentioned, corresponds to the rare *histamenon* of Class A.I found in the hoard. Thus Type A might belong to the period 976-8 while Type B must belong to 981-1000 since it is similar of Class IIc except that the shaft of the patriarchal cross is decorated with a crescent².

Type E is very reminiscent in iconographical details of the new variety Ic of the *histamenon* in the Cretan hoard, although the latter is of a more elaborate style. Christs's broad nimbus, as well as the co-emperors' features imply that it might be dated later and was quite possibly issued at the period of Class IV *histamena* (1014-8)².

The rare type D is characterized by the elaborate treatment of the two emperors' garments and this probably implies that it was be a special issue for the great victory of 1014. If so, it might be contemporary with the rare Class V, which has been considered above as transitional between Class III and IV.

Undoubtedly Type F is late; its abundance as well as its appearance in a number of hoards from the Balkans indicate that it might belong to the period of stability and economic expansion that is from 1018 to 1025³.

1. For an interpretation of this crescent see *DMC*, 609.

2. The reason for attributing type E to this period is that both co-emperors wear pendilia a feature first introduced in Class IV.

3 The weight of these *tetartera* (4.22g.) indicates that they are probably 23-carat *tetartera*.

C. From Constantine VIII (1025) to Alexius Comnenus (1081): the last phase of the traditional "*nomisma*".

The death of Basil II marked a turning point in Byzantine history. Not only was it followed by a period of decline and weakness, culminating in the defeat of Manzikert in 1071, in which the emperor Romanus IV himself was taken prisoner, but it also heralded a radical change in the economic and social structure of the Empire. The landed aristocracy had won the struggle for political supremacy and it remained to be seen whether civilian or military families would dominate. In the years that followed there was a chaos of court intrigue resulting in short reigns, and on several occasions ambitious empresses and emperor's widows or daughters claimed to rule in their own right¹.

The monetary history of this period is dominated by the devaluation of the Byzantine gold coin, which began in the 1040s and which was the result of a combination of different factors to which we shall return.

The two gold denominations, the *nomisma histamenon* and the *tetarteron*, continued side by side as distinct coinages with different sizes and iconographic types. Under Basil II the module of the *histamenon* had been increased from c. 21mm to over 25mm and its identity was clearly distinguished from that of the *tetarteron*. In the mid 1040s the *histamenon* was even made concave and, after a brief return to flat coins in the reigns of Theodora and Michael

¹ For the history of the period G. Ostrogorsky, " *History of the Byzantine State* " 320-56; see also table

IV, the concave form was revived by Isaac I and from then on is a regular feature of both the full *histamenon* and the *hyperpyron* which replaced it after 1092.

It has been suggested that it was either a means of strengthening the coins, which could be easily bent because they were so thin¹, or an indication of debasement². However the concave fabric is also applied to some large and thin, full *milliaresia* from the reign of Constantine IX, Michael VII and Nicephorus III, which suggests that it was not specially devised for the gold issue alone. Furthermore it can scarcely be interpreted as an indication of debasement, since the *tetartera*, which were apparently debased, remain flat, while the *histamena* of Theodora and Michael VI also stay flat although their quality is reduced. It has been recently shown however that the concave fabric might be due to technical reasons³.

1. T. Bertelè, "Lineamenti principali della numismatica bizantina", *RIN*, 66, 1964, 65. C. Morisson, "La concavité des monnaies byzantines", *BSFN*, 30, 1975, 786-8.

2. M. Hendy, *Coinage and Money in the Byzantine Empire, 1081-1261* (*DO5*, 12), Washington, 1969, 6 and P. Grierson in *DOC*, 6. See also P. Grierson, "Nummi Scyphati. The story of a misunderstanding", *MC*, 11, 1971, 253-60: the author discusses the term 'scyphati', which is commonly connected with concave coins and shows that because it appears in Italian records from 1024 onwards, it derives from the Arab shafah meaning edge or rim and referred initially to the broad thin *histamenon* of Basil II.

3. F. Delamare, P. Montmitonnet, C. Morisson, "Une approche mécanique de la frappe des monnaies. Application à l'étude de l'évolution de la forme du solidus byzantin", *RN*, 26, 1984, 23-5.

The iconography of the *histamena* and the *tetartera* in the period in question is generally restricted to representations of Christ and the Virgin on the obverse and of the emperor, either in bust or standing, on the reverse.

Christ is mainly pictured either seated on a square-backed throne (Romanus III, Constantine X, Eudocia, Michael VII, Nicephorus III) or a backless throne (Isaac I, Nicephorus III), or on a wide lyre-backed throne (Constantine IX, Constantine X) or in bust as Pantocrator (Michael IV, Constantine IX, Michael VII, Nicephorus III). On the *histamena* of Theodora Christ is pictured standing and facing, on square soupedion, raising his right hand in blessing and holding the Book of Gospels in his left. Moreover on an unique copper pattern of a *histamenon* of Zoe there is the very rare representation of Christ Antiphonetes and the coin seems to be one of only three pictures bearing this epithet¹. The iconography of this pattern coin may have been inspired by the particular devotion to Antiphonetes by the empress Zoe herself who, as Psellus informs us, had a copy of his icon which enabled her to foretell the future².

Christ Pantocrator is also represented on some *tetartera* (Constantine XI, Theodora, Isaac I, Nicephorus III), but most bear one or two types of the **Virgin's** bust: a. -Bust of the Virgin

1. In the church of the Dormition at Nicaea there was a mosaic icon of Christ Antiphonetes, now destroyed, showing him, not in three-quarter length, as on the coin, but full-length.

2. C. Mango, *The Brazen House*... 142-8. Zoe also built a church of Christ Antiphonetes in which she was buried: Sathas, *Bibl. gr. med. aevr.* VII, 163.

Blachernitissa (Michael VI, Constantine X); b. - Bust of the Virgin Nikopoios, holding medallion of Christ (Romanus III, Eudocia, Romanus IV and Michael VII). The type of Virgin Episkepsis, that is orans with medallion of Christ, occurs only once on the *histamena* of Zoe and Theodora.

The **emperor** is pictured in three different ways:

a- Emperor in bust wearing collar-piece and modified *loros*, crown with cross and pendilia and holding imperial insignia¹:

r. hand labarum	r. hand sceptre	r. hand <i>globus</i>	r. hand <i>globus</i>
l. hand <i>globus</i>	l. hand <i>globus</i>	<i>cruciger.</i>	<i>cruciger</i>
<i>cruciger.</i>	<i>cruciger</i>	l. labarum	l. hand <i>akakia</i>

Michael IV

Romanus III

Constantine IX **Constantine IX**

Constantine IX Constantine IX

Theodora

Constantine X

Michael VII

Nicephorus III

Nicephorus III

b.- Emperor standing but dressed similarly and holding imperial insignia:

r. hand long cross	r. hand labarum
l. hand <i>akakia</i>	l. hand <i>globus cruciger</i>

Michael VI

Constantine X

Nicephorus III

1. The names in bold print indicate that the denomination is the *histamenon*.

During the reign of Isaac I an iconographic innovation occurred whereby the emperor was depicted either with a labarum in his right hand and a sheathed sword resting point down on the ground in his left, or carrying a sword on his right shoulder and a scabbard in his left hand. This innovation was criticized by contemporaries as seeming to imply that the emperor's authority derived not from God's grace but from his own sword. However the type showing an emperor wearing military costume and holding the hilt of a sheathed sword, was first introduced by Constantine IX for his large *miliaresis* and probably represents nothing more than a warning to domestic and external enemies. Nor does the sword seem intended as a propaganda symbol for the military aristocracy from which Isaac came, since Constantine IX was a member of the civil aristocracy.

c.- Emperor standing by the side of a Holy figure and both holding a labarum. The *histamena* of Theodora show her and the Virgin (in that order) holding between them a labarum on a shaft, while on an issue of Michael IV the archangel Michael, standing on the left, is shown handing a labarum to the emperor.

The attribution of the latter and of the type as a whole has been discussed frequently. Sabatier and Wroth attributed the coin to Michael VI but a discovery of an imitation of the type on Danish pennies of the 1040s favoured its attribution to one of the two other emperors of that name: Michael IV and Michael V. Grierson initially attributed the coin to Michael V on the assumption that otherwise Michael V has no *nomisma*s at all¹.

1. *DMC*, 722.

Two other scholars argued that it should be attributed to Michael IV, although on different grounds.

Fagerlie¹ sees similarities of style between this coin and the *histamena* of Romanus III and argues that since there are also Danish imitations of Romanus III's *miliaresia*, the Byzantine prototype of the coin in question, it must date to the period of Romanus III's immediate successor, Michael IV. She also based her argument on the fact that Michael IV was an epileptic; Psellus informs us that he tried various therapies, such as prayers and purifications and finally built a church in honour of the *ἄγιοι Ἀναργυροί*, the saintly thaumaturges. Thus Fagerlie interprets the representation of the archangel Michael on this coin as ... "another attempt on the part of the ailing emperor to propitiate a saint whose healing powers were well known...".

Hendy attributes the coin to Michael IV but considers it to be a Thessalonican issue on the ground that an identical representation of St. Demetrius is shown on coins struck by Alexius I at this provincial mint². He suggests that a mint was opened at Thessaloniki because it was Michael IV's headquarters for the Bulgarian campaign and argues that since Harold Hardrada took part in that campaign he had every opportunity to take back large quantities of this coin to Denmark.

1. J.M. Fagerlie, "A miliaresion of Romanus III and a nomisma of Michael IV", *ANSMN*, 11, 1964, 234-6.

2. M. Hendy, "Michael IV and Harold Hardrada", *NC*, 10, 1970, 187-97.

Nonetheless the choice of civil rather than military dress for the archangel Michael is difficult to explain in this context. Moreover Cedrenus informs us that when the emperor was in Salonica he visited the tomb of the patron of the city, St. Demetrius, and made lavish gifts of money in the hope of a providential improvement in his health¹. Thus a representation of St. Demetrius seems more appropriate for a coin minted in Thessaloniki, and the question whether an emergency mint should be attributed to this city, during Michael IV's campaign remains unanswered. However, the depiction of the emperor being crowned by the *Manus Dei* and receiving a labarum from the minister and messenger of God, the archangel Michael, probably represents an effort by Michael IV to claim divine sanction for the regime of the Paphlagonian dynasty through the offices of his name-archangel. Harold Hardada had another opportunity of collecting Byzantine *histamena*, in 1040-2, when

1. Cedrenus, (ed. Bonn), 527: he mentions that while Michael IV was in Salonica, John Orphanotrophos sent him ten *centenaria* of gold by ship. Finally the ship was caught in a storm and was wrecked on the Illyrian coast. This incident is obscure, since it is difficult to explain how a ship sailing from Constantinople to Salonica could be wrecked on the Illyrian coast. Nevertheless it may have had orders to sail to the Adriatic sea so that the money could be used there (by the *strategus* of Dyrrachium?), for campaigns against Stephen Voislav. In any case this story weakens the theory of a mint in Salonica; one wonders just why the money had to be sent either to Salonica or to the Adriatic coast from Constantinople if a mint existed in Thessaloniki. Cedrenus however speaks generally about gold and one may suggest that it may not have been in coin but in bullion.

he intervened at Constantinople on the side of the imperial guard¹.

d.- Coronation of the emperor by a holy figure. The most common type is the coronation of the emperor by the Virgin (Romanus III, Michael VI, Constantine X), but during the reign of Romanus IV Christ is shown blessing the union of Romanus and Eudocia.

e.- Two or more imperial figures. The custom of representing members of the imperial family on coins, which had been dominant during the three preceding centuries, now become a rather rare phenomenon. Imperial relatives appear only twice, during the sole reign of Eudocia and of Romanus IV. In the first case the reverse bears in the centre the figure of Eudocia flanked by her sons, Michael and Constantius. In the second case the obverse depicts the standing figures of Constantius and Michael VII, whom Romanus inherited as colleagues, as well as that of their youngest brother Andronicus (in that order). On the reverse of the same emperor's *tetartera* are depicted the half-figures of Romanus, on the left, and Eudocia on the right, while the *tetartera* of Michael VII carry the half-length figures of Michael and Maria. There is also a rare *tetarteron* which bears the half-figures of Eudocia and Michael VII (in that order) on the reverse, which Grierson dates to 1067 before Eudocia's marriage to Romanus IV².

1.C.Morrisson, "Le role des Varanges dans la transmission de la monnaie byzantine en Scandinavie", *Les Pays du Nord et Byzance. Actes du Colloque d'Upsal 20-22 Avril 1979. Acta Universitatis Upsaliensis*. 133.

2 *DOC*, 782.

A notable feature of the gold coinage of the period, is the great variety in details such as the decoration of the garments, or the forms of the labarum held by the emperor. For instance in the representation of Romanus III's coronation by the Virgin, the Virgin is pictured either with or without a nimbus and there is great variety in the decoration of both figure's garments. It has been suggested that these variations may possibly represent a chronological development of the work of different sections or *officinae* within the mint¹. Similarly the *histamena* of Michael IV vary in the forms of the labarum held by the emperor, while Constantine IX's four types show variation in the form of the *globus cruciger*, or of the labarum, or in the ornaments on the cross-arms of Christ's nimbus or in the treatment of the emperor's chlamys which may be with or without a fringe. It has also been suggested that all these varieties may be of different dates². The different varieties of Basil II's coinage have been considered as possibly reflecting a system of annual issues designed to control the circulation of gold coins. However, it is difficult to know whether this new policy was applied temporarily by Basil II as part of his own financial strategy or was the start of a new minting procedure which continued throughout the eleventh century. Detailed

1. *DOC*, 712-3. M. D. O'Hara, "A rare histamenon of Romanus III Argyrus A. D. 1028-1034", *SCNB*, 637, Sept. 1971, 321-4: the author proposes a sequence of five types.

2. P. Grierson, *Byzantine Coins...*, 199. M. D. O'Hara, "An introduction to the gold coinage of Constantine IX Monomachus. A. D. 1042-1055", *SCNB*, 630, Febr. 1971, 46-51.

publications of coin hoards from this period will shed more light on this problem.

One of the most distinctive features of Byzantine monetary history of the 11th century is the debasement of the traditional gold coin, the Byzantine *solidus*, which had remained almost pure, 24 carats, for seven hundred years¹. It is true that from the end of the tenth century the Byzantine gold coin fluctuated between 22 and 23 1/2² carats or even between 21 1/2 and 23³ and that during the long reign of Basil II the measured fineness varies from issue to issue, probably because of a temporary financial crisis due to the immense cost of his military campaigns. However it is generally accepted that this reduction in purity was not deliberate and that actual debasement only took place in the eleventh century, between the 1030s and the monetary reform of Alexius I in 1092. Lopez's assertion⁴ that the introduction of the *tetarteron* gave the first hint of the great crisis of the bezant has been contested

1. It is known that the Byzantine *solidus* was evidently intended to contain 24 carats of pure gold. Brunetti's estimations have showed that the gold coinage of the eighth to tenth centuries maintained a very respectable standard between 23 and 24 carats; see L. Brunetti, "Nuovi orientamenti statistici nella monetazione antica", *RIN*, 52-53, 1950-1, 6-8.

2. *DA* 39 and n. 123.

3 C. Morrisson, "Du Solidus à l' Hyperpère: dévaluations et déclin de la monnaie d'or byzantine", *CENB*, 14, 1977, 65-76. *Id.*, "La dévaluation de la monnaie Byzantine au XIe siècle: essai d'interprétation", *TM*, 6, 1976, 5-6.

4. R. S. Lopez, "La crise du bezant au Xe siècle et la date du Livre du Préfet", *Mélanges Henri Grégoire, II* (= *Annuaire de l'Institut de Philologie et d'Histoire Orientales et Slaves*, 10), 1950, 403-18.

by Grierson who argues that a distinction must be drawn between the debasement of the gold coinage and the introduction of the light-weight *tetarteron*, since the latter was originally of the same high quality as the *nomisma histamenon*.

Scholars do not agree on the exact date when the debasement of the gold coin began.

Grierson has studied the eleventh century debasement using the specific gravity method. Originally¹ he argued that the debasement took place under Constantine IX but subsequently, in the light of further material, he concluded that it might have happened during the reign of Michael IV². The figures show a reduction from between 22 and 23 carats to almost 20. In the course of this study Grierson also attempted to correct some of the doubtful attributions formerly given to Byzantine rulers bearing the same name³.

Morrisson, however, suggests that the debasement took place under Constantine XI and her analysis showed that the fineness of the last two issues of the reign diminished from 89.6% to 84.8% and from 85% to 81.4% respectively (20 1/4 carats and 19 1/2)⁴.

1. P. Grierson, "The debasement of the bezant in the eleventh century", *BZ*, 47, 1954, 379-94.

2. *Id.* "Notes on the fineness of the Byzantine solidus", *BZ*, 54, 1961, 91-7.

3. i. e. he transferred to Constantine IX a series of coins formerly attributed to Constantine VIII, and he reattributed the coins of Michael V and VI; see *DOC*, 721.

4. C. Morrisson, *op. cit.*, 7, 36.

Under Romanus IV the coins fall below 18 carats and after the defeat of Manzikert there was further reduction, to reach 16 and finally only 10 carats during the reign of Michael VII and only 8 carats during that of Nicephorus III¹.

But what were the main reasons for the debasement of the Byzantine gold coin? It is true that many parts of both the Muslim and Christian worlds in the late tenth and eleventh centuries experienced monetary difficulties. During the first decades of the eleventh century the fineness of the gold coin of the Buwayhid dynasty in Baghdad fell to 12 carats, while a depreciation of silver coins in Italy and in France is also attested. This was probably the result of an increase in the volume of trade without any important alteration of the monetary value of the coins. In the Byzantine empire the depreciation was probably a result of several factors since it can hardly be solely the consequence of financial difficulties due to wars. Psellus informs us that despite the immense cost of his military campaigns Basil II left 2,000,000 pounds of gold in the treasury, besides great quantities of precious stones and other valuable objects and contrasts this with the extravagance of Basil's successors.

The eleventh century is crucial for the history of the Byzantine empire and indeed highlights a number of peculiarities. It is intriguing that a sudden collapse occurred after a period of

1. Bertelè has suggested that the *histamens* of Nicephorus III were of 9 rather than 8 carats; T. Bertelè, *op. cit.*, *RIN*, 66, 1964, 33.

economic reconstruction, which as has been already mentioned followed Basil II's victorious campaigns, from 1018 onwards. The growth of the urban economy eventually enabled traders and artisans to assume a role of political significance. The members of this new commercial class of *nouveaux riches* seem to have been prone to extraordinary outbursts of extravagance and were unscrupulous in their search for personal profit, and indeed made no attempt to demand the re-establishment of the traditional fineness of the *nomisma*.

It is remarkable that for the first time in the whole Byzantine period an entrepreneur from the capital, a money-changer, was proclaimed emperor and most probably, under this emperor, Michael IV, the debasement of the traditional gold *nomisma* took place.

Apparently reform was needed to revive the monetary economy and draw up a monetary policy that would meet the requirements of an expanding economy which had passed into the hands of individuals. The government could no longer control trade in every product or material and the well-known Rodosto¹ incident illustrates the important role of private capital in state administration at the close of the eleventh and the beginning of the twelfth centuries.

1. Michael VII's reign was marked by general confusion and he was nicknamed *Farapinaces*; a *nomisma* would now purchase only a *medimnus* minus a quarter of wheat (i.e. minus a *pinakion*, *παρὰ πινάκιον*), and not a whole *medimnus*. Such price rises aroused popular displeasure and when in 1073-4, he and Nicephorus the *Logothete* tried to secure a monopoly of the grain-trade at Rodosto they failed completely and the populace raided and demolished the silos of grain; see M. Metcalf, *Coinage in South-eastern Europe*... 68 and esp. n. 5.

D. *Solidus-nomisma-nomisma histamenon-tetarteron*

Solidus, *nomisma* and *nomisma histamenon* are the three successive names for the Byzantine gold coin with a standard weight of 24 keratia or siliquae, which maintained an unvarying integrity for centuries. Alongside this main gold issue there were also some fractional issues, the *semissis* and the *tremissis*, which eventually ceased to be struck in the East, except as ceremonial coins, toward the middle of the eighth century. Henceforward the only gold coin in the East until the last quarter of the tenth century was the *solidus*, while in the West fractional gold coins continued to be struck as long as the mints remained in Byzantine hands.

The middle-eleventh century chronicler Scylitzes accuses the emperor Nicephorus Phocas of having introduced a light-weight gold *nomisma*, called the *tetarteron* alongside the traditional *nomisma*¹. This statement is repeated in almost every detail by George Cedrenus at the end of the eleventh or the beginning of the twelfth century. In the middle of the twelfth century another account is given by John Zonaras, which narrates the introduction of the *tetarteron* slightly different, although using the original statement of Scylitzes.

Although the above chroniclers seem to agree on the main facts- that Nicephorus II created the *tetarteron nomisma* and that it was a light-weight gold coin modern scholars do not agree about the purpose of its issue nor about the way in which it was

¹ For these accounts see *DOC*, 35-6 and esp. n. 104-6.

used, while there has been a long debate on its identification. However it is now generally accepted that the *tetarteron* was normally a coin of 22 carats weight (theoretical weight of about 4.17g.)² and it was at first indistinguishable from the *histamenon* in its fabric, module, iconographical types and metallic purity; it was only towards the end of the joint reign of Basil II and Constantine VIII that, as has been already mentioned, it assumed distinguishably different features.

Nevertheless attempts by historians and numismatists to determine the purposes for which the *tetarteron* was introduced, in the light of the written sources, have been inconclusive.

Grierson³ contests Lopez's theory that its introduction may give the first hint of the crisis of the bezant due to financial difficulties of Nicephorus Phocas. He proposes that the original motivation for the issue was the government's desire to provide the Syriac provinces, which had been reconquered by the

1. For a substantive survey on the problems concerning the identification of the *tetarteron* see *DAAC*, 29-30 where all the previous bibliography is included; see also M. Hendy, "Light weight solidi, tetartera, and the Book of the Prefect", *BE*, 64, 1972, 75 where attempts to connect the creation of the *tetarteron* with an emperor other than Nicephorus II are mentioned (i.e. Christophilopoulou, Dölger).

2. *DAAC*, 32-3; see also L.L. Uzman, "The tetarteron of Nicephorus Phocas-Fact or Fiction", *MCirc.*, 70, 1962, 4-5 and P. Grierson, "Tetarteron or counterfeit? A note on Mr. Uzman's coin", *MCirc.*, 70, 1962, 53

3. P. Grierson, "Nomisma, tetarteron et dinar: un plaidoyer pour Nicéphore Phocas", *REN*, 100, 1954, 75-84.

Macedonian emperors, with a coin of the same weight and value as the Fatimid dinar.

However, Ahrweiler suggests that Nicephorus Phocas intended to reduce the weight of the *nomisma* and not to establish a double standard in gold coinage. Popular opposition and the early death of the emperor meant that the reform was not completed but that nevertheless the succeeding emperors found the precedent of issuing light-weight gold coins too attractive to abandon. She therefore stresses that different motives were in operation before and after Nicephorus' death¹.

Hendy for his part argues that the *tetarteron* was equivalent to the sixth and seventh century light-weight *solidus*, and was subsequently designed to increase the imperial revenues during a period at which ambitious military and political projects had necessitated extraordinary expenditure².

What were the real financial and monetary tendencies of the period before and during the introduction of the *tetarteron*?

There are five main features of Byzantine financial and monetary history from the reign of Theophilus until the reign of Nicephorus Phocas.

a. - From the second half of the ninth century there are hints of price rises apparently as a result of urban recovery, and there is evidence that the emperor Theophilus himself took a close interest

1. H. Ahrweiler - Glykatzi, "Nouvelle hypothèse sur le tétartéron d'or et la politique monétaire de Nicéphore Phocas", *Mélanges G. Ostrogorsky, I* (=Recueil des travaux de l'Institut d'études byzantines, 8), Belgrade, 1963, 1-9.

2. M. Hendy, *op. cit.* n. 257, 75-80; *Ib. Studies in the Byzantine Monetary Economy, c. 300-1450*, Cambridge, 1985, 507.

in the retail prices of basic commodities in the markets of Constantinople¹

b.-There is extensive overstriking of gold coinage during the joint reign of Theodora and Michael III and gold money ceases to be issued from some time in the third quarter of the ninth century, under the reign of Basil I, as well as at the beginning of the 10th century, under the reigns of Leo VI and Romanus I Lecapenus. This phenomenon, as has been already mentioned, reflects a farsighted monetary policy most probably in order to limit the money supply and so reduce inflation.

c.-There is an increase in the weight of the *miliaresion* and an improvement in its fineness by Basil I. This may reflect an intention on Basil I's part to give the *miliaresion* the character of a genuine currency. The underlying reasons for such a policy can hardly be identified in detail but it suggests that a new convenient currency was required for transactions hitherto conducted with one gold denomination and one copper, or even temporarily with copper issues of different weight-standards². Additionally although the introduction of the silver coin into commercial transactions might merely imply a price rise in commodities it may also have been a measure against usury and profiteering, aimed at protecting the gold coin either from hoarding or from illegal exportation.

1 R. J. H. Jenkins, *Byzantium, the Imperial Centuries, A. D. 610-1071*, 1966, 46-7.

2 i. e. during the reign of Theophilus; see below.

d. During the tenth century new trade routes opened up as the Muslim threat receded and the Byzantine armies penetrated beyond the Taurus mountains into Cilicia and Syria. The newly arrived Russians provided opportunities for long-distance trade and navigation in the Aegean sea was made much safer after the reconquest of Crete in 961 by Nicephorus Phocas. The treaties of 907 and 944/5 between the Byzantines and the Russians¹ and the dispersed hoards and single finds of Byzantine coins found in Moldavia, on the coast of Dobrogea and at the crossing-points of the Danube-few though they are- all suggest that merchants travelled between Constantinople, the Danube and the Black sea ports².

e.- The state financial policy of the period was intended firstly to discourage initiative and the accumulation of wealth, and secondly to enable the greatest possible state control of commercial traffic, through strict regulations and restrictions. The text of the two treaties between the Byzantines and the Russians mention many regulations governing the business activities of Russian merchants in the capital³.

The Book of the Prefect, dating from the reign of Leo VI, is a collection of government regulations for the control of trade, industry, the circulation of money and the activities of the guilds in the capital. A third similar source, the famous manuscript from the Monastery of St. John on Patmos (*Codex Patmianus* 171), contains five short notices concerning tenth century shops in

1 C. Mango, *Byzantium the Empire of New Rome*, 1980, 55.

2 D. M. Metcalf, *Coinage in South-eastern Europe* 23-4, see also below

3 C. Mango *op. cit.*

Constantinople¹. This records a number of transactions, prices and rents and informs us that the members of the aristocracy were forbidden to engage in commerce and hence invested their funds in buying shops, from which they enjoyed a stable and quite high rent. Apparently the financial policy of the Macedonian dynasty was clearly characterized by a spirit of distrust and conservatism which hardly conformed with the general atmosphere of the period.

f.-The tenth century is a turning point for several sectors of the Byzantine world. Military campaigns, stimulating and fruitful activity in the realm of education, scholarship and art, and diplomatic relations with foreign courts undoubtedly created a society with different needs and requirements from that of the eighth, and of the first half of the ninth centuries. The numismatic evidence also implies a great abundance of gold coinage which shows that the government was not generally short of precious metal. Thus its curious financial policy can only have been intended to combat the landed aristocracy, to keep prices at a stable level and to discourage new markets and new connections with foreign areas of production and outlets for commodities by individual entrepreneurs².

It was in this context that Nicephorus II decided to introduce the light-weight *tetarteron* alongside the standard weighted *nomisma*,

1. N. Oikonomidès, "Quelques boutiques de Constantinople au Xe siècle," *DAF*, 26, 1972, 345-6.

2. J. Danstrup, "Manuel I's coup against Genoa and Venice in the light of Byzantine commercial policy," *Classica and Medievalia*, 10, 1948, 197.

and thus its introduction was almost certainly the result of a new monetary policy.

The nearest text to the date of Nicephorus' reform is, as mentioned above, that of John Scylitzes. He reports the creation of the *tetarteron* in the following terms: "he (Nicephorus) also reduced the *nomisma* by inventing the so-called *tetarteron*. *Nomismata* being henceforth of two kinds, the collection of taxes demanded of the heavy *nomisma*, while in expenses the small one was squandered". But Zonaras writing in the middle of the twelfth century produced a quite different version; he describes the event in the following fashion: "... he (Nicephorus) invented the *tetarteron* by diminishing the weight, and he effected on the one part the collection of taxes in heavy *nomisma* and on the other the payments and expenses in the mutilated".

The account of Zonaras indeed seems very curious: how would the citizens provide themselves with the heavy coin to pay the taxes if all state payments were made in *tetartera*? Grierson writes that "it is not necessary to take the chroniclers literally, and suppose that the government made all payments in *tetartera*¹..." and Hendy has noted "that the only feature of the *tetarteron* that seems to have been fundamentally misunderstood by Zonaras is that of using it for state expenditure while using the *histamenon* for revenue"².

1. *DOC*. 37 and esp. n. 109

2. M. Hendy, *Studies in the Byzantine Monetary Economy*... 507.

It is true that Zonaras' statement is strikingly different from that of Scylitzes and consequently of Cedrenus¹. Scylitzes does not specify that the lighter coin was necessarily used only in state expenses. Speaking in the third person he probably states that while the heavy coin had to return to the imperial treasury, the lighter remained in circulation and was generally squandered on expenses. Apparently Scylitzes' account is explicit and must not be involved with that of Zonaras.

Moreover, according to Scylitzes Nicephorus also made a law that his own *nomisma* should be preferred and those of other emperors slighted: "... though it was the law and custom that every coin bearing the imperial portrait, unless reduced in weight, should be of equal value, he made a law that his own should be preferred and diminished the value of the others. This occasioned great hardship among the subjects in the exchanges. And worst of all, because of it there developed a dearth of goods for sale". This statement is viewed as referring to the new light coin².

1. Normally the text of Zonaras and that of Cedrenus, which is actually a direct copy of Scylitzes', have been interpreted as stating the same thing i.e. see M. Hendy, "Light weight solidi, tetartera...", 67; he writes "Both Zonaras and Cedrenus seem to agree ... that it was used in state expenses while revenues were collected in coins of full weight...".

2. M. Hendy, *op. cit.* n. 267: "the *tetarteron* was formally given some sort of preferential tariffing in exchanges". Grierson on the other hand considers the depreciation of the old coins something intrinsically independent of the creation of the new light coin; *DOC*, 37.

However it seems very likely that it might concern the emperor's own heavy denomination¹.

Apparently Nicephorus put into circulation two gold denominations, quite independent of each other, the values of which were mainly determined by financial factors. State payments were made partly in *nomismata* and partly in *tetartera*. Without obvious distinctions between it and the heavy coin, people were presumably forced to accept the new light coin from the government as if both were of equal value from the outset. Eventually the parity of the two denominations became spurious and applied only in the context of payments and not of revenues.

The intention of this curious monetary policy, which seems actually to conform very well with the financial policy of the early Macedonian dynasty, as sketched above, may be summarized as follows:

Firstly gold coins may have been controlled to prevent hoarding and illegal exportation: any one offered a *tetarteron* might well feel cheated and disinclined to hoard it. The relative rarity of the *tetartera* and the scant hoard evidence from the period indicates that Nicephorus' reform succeeded in meeting its aims.

Secondly the use of the *tetarteron* in transactions served to counter inflation, at the same time establishing a reduction of prices. Skylitzes reports that the introduction of the *tetarteron* and the depreciation of old *nomismata* created a dearth of goods for sale. This is probably an exaggeration but reflects that the new

1. For demonetized coins in 10th century see *DOC*, 509-10 where a law of Leo VI is *commented on*.

lighter coin led inevitably to reduced consumption, since the merchants were not willing to sell their products.

Thirdly the new denomination could be more flexible for commercial transactions with foreign people either of North or East or even West, not practically familiar with the traditional heavy Byzantine gold coin. And there would be an extra profit from these transactions paid in *tetartera*.

It is not clear whether Nicephorus' reform was the first step towards abandoning the traditional gold coin completely¹ though indeed he adopted a series of severe measures in order to impose the new lighter coin. By demonetizing the gold coins of the previous emperors, merchants were obliged to accept the new denomination in their transactions; they could not cheat their customers by demanding heavy coins of previous reigns in order to avoid payments in *tetartera*, since the value of the former had diminished. On the other hand, the Book of Prefect in sections dealing with different merchants, such as linen-merchants, perfume-sellers wax-chandlers, grocers, includes penalties for those who refused to accept the *tetarteron* bearing the authentic imperial stamp²

The description of the well-known transaction between monks in the Life of St. Lazarus the Galesiot³, dated in the first half of the eleventh century, indicates that the lighter coin was still

1. H. Ahrweiler, *op. cit.*, 9.

2. *Le Livre du Préfect* (ed. J. Nicole), 40, 42, 45, 48

3. H. Ahrweiler, *op. cit.*, 5 and n. 19.

regarded with suspicion and that suppliers, despite the attested restrictions, were unwilling to accept it.

Tetartera continued to be issued during the reigns of John Tzimisce, Basil II and the whole of the eleventh century up to Alexius' reform in 1092.

Basil II seems to have struck another coin of weight 23 carats. It has been suggested that this may be identified with the *duo tetarton* which is mentioned in the Book of the Prefect alongside the *tetarteron*. However the role and the identification of this denomination remains debatable. It has been found in large quantities in the north-eastern Balkans¹ but this merely confirms the suggestion that lighter coins than the traditional one were used for commercial transactions with this area.

The use of the *tetarteron* from 1025 onwards seems to be similar to the previous period, although with some remarkable deviations. For instance there is evidence, of special arrangements in the payment of land taxes, half in *nomismata* and half in *tetartera* in cases where monasteries were involved².

The evidence from the *Typikon* of Michael Attaleiates³ for his Monastery in Rodosto (1077) shows that at the beginning of the last quarter of the eleventh century even private payments, in the

1. D. M. Metcalf, *The Coinage of South-Eastern...*, 54, 75.

2. H. Ahrweiler, *op. cit.* 277.

3. P. Gautier, "La Diataxis de Michel Attaliat", *REB.* 39, 1981, 5-143.

form of annual donations, were made half in *nomismata* and half in *tetartera*. It is difficult to know if this was the practice during the tenth century. However it seems plausible that this is a deviation of the eleventh century, and that in the 10th century private payments might have been made only with *tetartera*.

The role of the *tetarteron*, as devised by Nicephorus, is hardly appropriate to the general economic and social climate of the major part of the eleventh century; the landed aristocracy and generally the different entrepreneurs, whose power had now greatly increased, would hardly be forced to carry out their commercial dealings with a coin which had been introduced expressly to combat their speculative tendencies. Most probably Nicephorus' regulations on the use of *tetarteron* were altered by adopting them in the private enterprises too. Thus the light coin was found very convenient for speculations in businesses: the entrepreneurs demanded the full coin for their takings and paid all their debts, except to state, half in *tetartera* and half in *nomismata*.

Zonaras, describing in the middle of the 12th century the result of Nicephorus' depreciation of his predecessors' coins, states that the merchants asked for his *nomisma* only, and that in this way, he would draw a profit from all the exchanges of *nomismata* that he effected. Moreover, while the citizens were distressed by this state of affairs there was no succour from the clerks of the market who regulated buying and selling there. Thus each merchant did whatever he liked and consequently the consumers became every day poorer. This account apparently might refer to

the practices of a later date than that of Niceporus II. It seems quite plausible that this would reflect the situation from the second quarter of the eleventh century onwards and when the coins are mentioned with individual names according to the emperor under whom they were issued or according to their own appearance and condition. And indeed it is remarkable that, while the *nomisma tetarteron* had been created during the second half of tenth century, the term *nomisma histamenon*, which was used to distinguish the coin of full weight, is first attested in an act of the year 1030 from the Athonite monastery of St. Panteleimon. Similarly, the first mention of the *nomisma tetarteron* appears in the Life of St. Lazarus the Galesiot, dated in the first half of the eleventh century. Mentions in the *Book of the Prefect* cannot be taken as evidence for even earlier usage of the term, since whatever the date of its original promulgation it has generally been regarded as containing later material. This gap of sixty five years between the introduction of the *nomisma tetarteron* and the first mention either of it or of the distinguishing epithet *histamenon* for the standard weight coin might be indicative for the function of the *tetarteron* during the eleventh century.

The variety of the terms for the gold coins used from the second half of eleventh century onwards shows indeed a curious tendency to refer precisely to the nature and quality of the coins in circulation¹. After the introduction of the *tetarteron*

¹ For the different names of the coins of the 11th century see: N. Svoronos, "Le cadastre de Thèbes", *BCH*, 83, 1959, 79-99; P. Grierson, "From solidus to hyperperon: the names of Byzantine gold coins", *NCirc*, 74, 1966, 123-4; *Id.*, *DOC*, 4-62; C. Morrisson, "Le Michaëlaton et les noms de monnaies à la fin du XIe siècle", *TM*, 3, 1968, 369-74.

and the beginning of the debasement of the gold coins, the relative values of the more plentiful types were well understood and the issues had to be referred to by name.

The old pure gold coin clearly ceased to exist at the end of eleventh century, and the various terms illustrate the heterogeneous character of its successors while, as it has been mentioned, the financial corruption had also resulted in the debasement of the gold coin. The latter probably would be anticipated, if Nicephorus had completed his reform by establishing a new gold coin more adjustable in the requirements of his period. From this point of view Ahrweiler's suggestion that Nicephorus' intention was simply to reduce the weight of the *nomisma* and consequently to abandon the Constantinian standard, seems highly likely.

THE SILVER COINAGE

A. Introduction

During the reign of Justinian II in 685, the issue of the silver *hexagram*, the important denomination of the 7th century, was resumed on a modest scale and appears to have had a purely ceremonial character.

The circumstances surrounding the disappearance of the *hexagram* remain obscure.

Grierson¹ connects it with the monetary reform of the Umayyad caliph "Abd al-Malik in the 690's. In the Islamic world this reform established a mint ratio of 1 part of silver to 14 gold, while the contemporary ratio at the same time in the Byzantine Empire was 1:18. Consequently large profits could be made by exporting silver in exchange for gold. This may explain why so much gold and so little silver was coined in Byzantium during this period.

Yannopoulos², in his turn, argues that the disappearance of the *hexagram* was due to a lack of silver, since during the last decades of the seventh century the Arab and Slavonic invasions cut Byzantium off from its mines in the East and in the Balkans.

Even if Byzantines had lost all access to mines³, they had nevertheless discovered new ways of maintaining the gold

1. P. Grierson, "Monetary reforms of Abd al-Malik", *Journal of Economic and Social History of the Orient*, III/3, 1960, 241-64, C. Morrisson, *BNF* I, 400.

2. P. Yannopoulos, *L'hexagramme, un monnayage byzantin en argent du VIIe siècle*, Louvain-la Neuve, 1978, 66-9.

3. On Byzantine mining activities generally see S. Vryonis, "The question of the Byzantine mines", *Speculum*, 37, 1962, 1-17.

supply for their *solidus*, which remained pure and stable. Consequently if silver coinage had really had a role to play in the monetary system, similar efforts would have been made to maintain the silver supply. Here, however, the Byzantines would have met with some difficulty, for as result of Abd al-Malik's reform a great number of Arab mints were producing large quantities of silver coins¹. This not only affected the price of silver generally but resulted in intense market rivalry among silver buyers.

In fact Grierson's suggestion that the disappearance of the *hexagram* was connected with al-Malik's great reform is attractive and quite plausible. However, there is unfortunately nothing, in either Byzantine or Arab contemporary sources, to support this hypothesis. Nonetheless Abd al-Malik's reform must have had repercussions beyond the Islamic frontiers especially in the Byzantine Empire, the caliphate's major rival, and the abandonment of Byzantine silver coinage may result from two main factors.

Firstly the natural decline of the *hexagram* once it had fulfilled its purpose and secondly the introduction of the new Arab silver coin, the *dirhem*.

The *hexagram* was struck in large quantities and extant specimens show that its theoretical weight, c.6gm., was attained with surprising accuracy. Thus, the coin could easily be subject of hoarding², perhaps causing the financial authorities

1. P. Grierson, *op. cit.*, 260.

2. Numerous *hexagram* hoards have been found outside the empire and particularly in Transcaucasia; see V. V. Kropotkin, *Klady vizantiiskikh monet na territorii SSSR*, Moscow, 1962.

to doubt its original function. In contrast the new Arab dirhem, a silver coin weighing only c.3gm., appeared more flexible and convenient for commercial transactions. Besides, the *hexagram* had a strong rival within the Empire itself, the gold *solidus*, for which the state traditionally showed a preference.

Leo III's introduction, during the first decades of the eighth century, of a new type of silver coin, the so-called reformed *miliaresion*, which clearly resembled the Arab Umayyad dirhem may support the above thoughts.

B. The reformed *miliaresion*.

The reformed *miliaresion* is a thin broad coin bearing, as has been already mentioned, a definite resemblance to the Arab dirhem. However its iconographical type shows the influence of contemporary Byzantine imperial seals. The obverse¹ carries the inscription with the names of the emperors and their titles, arranged in five lines, while the reverse depicts a cross potent on three steps accompanied by the legend *IHSUS XPISTUS NICA*. The main features which testify to Muslim inspiration are the thin flan, the religious character of its legend and the triple dotted border.

1. I accept the identification of obverse and reverse given in *JAC*, 62 n. 202.

Some years ago there was considerable debate among numismatists as to who really did introduce the new silver denomination. But two articles by G. Miles¹ and A. Vegley -G. Zacos² have now resolved the question and it is generally accepted that Leo III (714-41) was the creator of the new imageless *miliaresion*.

Another problem was how to distinguish between the coins with the combination of imperial names Leo/Constantine which occur three times in the 8th and 9th centuries. The above mentioned scholars pointed out that the inscription was changed during the reign of Michael I (811-3), by the addition of the word *ROMAION* next to *BASILIS*. This simplified the problem of distinguishing between the coins of Leo V (813-20) and those of Leo III (717-41) and Leo IV (775-80). It was now obvious that the silver coins of an emperor named Leo bearing the new inscription should be attributed to Leo V, Michael I's successor.

The problem of separating the coins of Leo III from those of Leo IV was much more difficult, because they differ only in minor stylistic details. Nonetheless these differences were sufficient to enable Veglery and Zacos to resolve the problem. They pointed out the following: the cross on the obverse of Leo III's coins is tall and narrow; the horizontal arms end in vertical lines which are somewhat longer than the arms; the steps are narrow and quite

1. G. Miles, "Byzantine miliaresion and Arab dirhem: some notes on their relationship", *ANSON*, 9, 1960, 189-218.

2. A. Veglery and G. Zacos, "The miliaresion of Leo III", *NCirc.* 71, 1963, 162-4; see also P. Grierson, "The miliaresion of Leo III", *NCirc.* 71, 1963, 247.

separate from each other; the top of the cross does not extend to the border of dots, and there is normally a pellet at the end of the reverse inscription, which in some rare cases is missing or is replaced by a rosette. In contrast, on the *miliaresion* of Leo IV, the cross has short bars at the end of the arms, and the steps are broader having slanting lines at their extremities.

It has been proposed that the reformed *miliaresion* may have been introduced to celebrate the coronation of Leo III's infant son, Constantine V, as co-emperor in March 720¹.

On the other hand G. Miles has suggested that the coin was issued after Leo's and Constantine's great victory over the Arabs at *Akroinos* (Afyum Qara Hisar) in 739 or 740. Alternatively, its issue might be connected with Leo's emergency taxation to raise funds for the rebuilding of the walls of Constantinople after the great earthquake, in 740².

The passage of Theophanes referring to this, although mentioning that the payment had to be made in *miliaresion*, does not supply any precise information about it³. This probably indicates that the coin was already in circulation before the introduction of this tax.

The fact that the coin was issued by all the members of the Isaurian dynasty in the name of two associated emperors perhaps favours the theory that it was firstly minted for the coronation of

1. J. Herrin, "The context of Iconoclast reform", in *ICONOCLASM* Papers given at the 9th Spring Symposium of Byzantine studies, University of Birmingham, March 1975, 19.

2. G. Miles, *op. cit.*, 208-9.

3. Theophanes (ed. Bonn) 634-5.

Constantine V as co-emperor. Consequently the new *miliaresion* might be considered as a ceremonial issue connected with distribution to high-ranking civilians and military officials on the occasions of such coronations¹.

However the abundance of extant specimens argues that it may have rapidly assumed a genuine economic role.

Veglery and Zacos² suggest that the aniconic *miliaresion* was issued by Leo III to publicize his iconoclastic ideas, under the influence of the Umayyad Caliphate. The removal of the representation of the cross from the gold *solidus* has also been interpreted as a purely iconoclastic measure. However the cross remained on the reverse of the silver coinage, and the Iconoclasts actually gave a great prominence to it elsewhere: it replaced the icon of Christ on the *Chalke Gate* of the imperial palace and was extensively used in the decoration of iconoclast churches³. Moreover it was in the tenth century, almost fifty years after the end of Iconoclasm, that the emperor Alexander changed the design of the *miliaresion* by introducing the bust of Christ.

1. The *Cletorologion of Philotheus*, of 899, states that the newly proclaimed emperor used to donate to the Holy and Great Church of God and to the Senate respectively 100 litres of gold, and thousands of *miliaresia* to each *tagma* and group in charge; the co-emperor, $\delta \mu κ ρ ο ς$, used to provide half of those sums: see N Oikonomidès, *Les listes de présence byzantines des IXe et Xe siècles*, 1972, 99 and 225.

2. G. Veglery and A. Zacos, *op. cit.*

3. For instance in St. Sophia in Thessalonica, in St. Eirene in Constantinople etc. It has been suggested that the cross is symptomatic of a return to the beliefs of Constantine the Great. see L. W. Barnard, *The Graeco-Roman and Oriental Background of the Iconoclastic Controversy*, Leiden 1979 79

This implies that Leo III's imageless silver coin was not connected with iconoclastic activities. It seems more plausible that the *miliaresion* was in several respects a response to the Arab *dirhem*. The inscriptions IHSUS XRISTUS NICA, EC ΘΕΥ ΒΑΣΙΛΙΣ¹ and the cross constituted a kind of retort to similar religious invocations of the *dirhem*.

Its creation might represent a government effort to revive the silver currency and its iconography might reflect imperial domestic and foreign propaganda. Interestingly, western documents from the twelfth century onwards apply the term *millarès* to various types of Muslim silver and this might well provide late confirmation of Leo III's intention of creating a silver coin to the rival Arab dirhem.

C. The successive centuries.

For the rest of the 8th century, the *miliaresion* remained basically unchanged except for a gradual development in its style. The only gap in its striking during this period is in the reign of Nicephorus I (802-11), but, as Grierson writes, this may be partly due to the emperor's "penurious" habits³.

1. The new *miliaresion* was the first silver coin with a Greek inscription. The *miliaresion* was also the first coin of any kind to adopt the Greek term Βασιλευς for king; C. Morriison in *BNP*, 451 writes: "introduit dans les documents officiels sous Heraclius, en 626, le terme n'a pénétré dans la domaine numismatique que près d'un siècle après, et ce seulement sur la monnaie d'argent d'un rang inférieur à la monnaie d'or..."

2 G Miles, *op cit*, 196

3 *DMC*, 352.

Under the **Amorian** dynasty (820-67) some changes were made to the coin's inscription, to the design of its cross and probably to its weight.

While examining a small hoard of *miliaresis*, which appeared on the market towards the end of 1982, S. Bendall noticed that some *miliaresis* hitherto attributed to Michael III must belong to Michael II¹. More precisely he attributes to him the *miliaresis* with the obverse inscription +MIXA/HLECΘEU/PISTOSBA/SILEUSRO/MAION. Thus, Michael II, the founder of the Amorian dynasty, was the first emperor to issue *miliaresis* in his own name and to abandon the old Isaurian tradition.

Theophilus and Michael III introduced certain other innovations, adding the expressions δούλος Χριστοῦ and μέγας βασιλεὺς respectively to the obverse inscription. Under Michael III a small dot also appeared beneath the steps of the cross, which in later reigns changed into a large globule.

Moreover Theophilus introduced two heavy series of *miliaresis* (*DMC* Classes II & III). They have been considered^e to represent an attempt by the emperor to reform the silver currency, which finally failed because of problems in revaluation as well as in its regular circulation². For instance, a small hoard of 29 heavy *miliaresis* (*DMC* Class III)

1. S. Bendall, "Miliaresis of the reign of Michael II, A.D. 820-822", *MCirc.* 90, 1983, 44; see also *DMC*, 388 where Grierson suggests that Michael III's *miliaresis* with the title of *basileus Romanorum* should perhaps be attributed to Michael II.

2. D. M. Metcalf, *Coinage in South-eastern Europe*, 1979, 29.

discovered during the German excavations on Thera in 1900- has been interpreted as implying that heavy varieties, minted for general circulation could be withdrawn very quickly for hoarding².

However these heavy series might not be considered as substantive issues but as ceremonial ones. Unfortunately the existing numismatic evidence is too little to solve the problem. A *miliaresion* of DOC Class III was discovered during the excavations of *Octagonon* at Philippi in 1976, in the high street of the Early Christian period³. It is extremely significant that this relatively rare *miliaresion* should occur in an abandoned city, at a date, when only the memory of St. Paul's visit could have induced people to journey to it.

Another specimen of the same type, probably found in Serres, is now in the Collection of the Rotunda in Thessaloniki. Again it is quite remarkable that this rare coin happened to be found far away from the commercial centres and cities of the period under consideration. Moreover the hoard was concealed on the small island of Santorini at a date when sailing across the Aegean was extremely hazardous and commercial activities consequently very much limited.

The above cases might suggest that this type of *miliaresion* was probably ceremonial and the people who hoarded or lost it were

1. F. Hiller von Gaëtringen and P. Wilski, *Stadtgeschichte von Thera*, 1904, 13, 200.

2. *DOC*, 413.

3. Σ. Πελεκανίδης, 'Ανασκαφή Φιλιππων. *ΠΑΕ*, 1976Α, 117

the recipients of imperial gifts rather than of commercial profits or of any kind of salaries.

Additionally there is no obvious reason why Theophilus should have increased the weight of the *miliaresion* to c.3.4gm. Grierson suggests that since *miliaresis* were issued on a more regular basis at this time it was felt that their intrinsic and legal values should be more closely equated¹. But 3.4g is a good deal higher than the legal weight which seems only to have been c. 2.20 or even 2.27g.

The first emperors of the **Macedonian dynasty** made only small changes to the established silver coinage.

Basil I's (867-86) *miliaresis* constitute a reformed issue since their weight increased significantly from c.2g to c.2.96g. During the whole reign *miliaresis* of only one type were issued in the names of Basil and his son Constantine. Obviously these were first struck after the latter's coronation as co-emperor at the beginning of 868. It has been suggested that Basil's delay in issuing *miliaresis* was probably due to the fact that he used, for his immediate needs, those he found in the treasury². Nevertheless the lack of *miliaresis* in Basil's name might be due to the curious circumstances under which he became emperor, after murdering Michael III.

1. *DOC*, 412.

2. *Ibidem*, 482

On the other hand the absence of *miliaresis* associating Basil with his sons Leo VI (co-emperor from January 870) and Alexander (from 879) could be interpreted in two ways. It might reflect a sudden halt in the minting of silver coins, after 879, or it might mean that the single issue lasted right until the end of the reign, despite Constantine's death at this date.

The Antalya hoard¹, composed exclusively of Basil I's *miliaresis*, provides some evidence as to the solution. The years 872 and 873, when Basil undertook his campaigns against the Paulicians of Asia Minor, would be a possible date for the concealment². Additionally the identification of eight distinct stylistic groups in the hoard indicates that *miliaresis* were minted in large quantities³. In that case it seems more likely that the production of the *miliaresis* stopped just after Constantine's death, or even earlier in order to control coined silver supply.

During the reign of Leo VI a few changes were made: eight globules were added on the triple-dotted border of the obverse, in direct imitation of the Abbasid *dirhem*; and some alterations were made to the inscription -for instance the word PISTOS was replaced by EVSEBHS

The most important change came in the reign of Alexander when for the first time in two centuries, the *miliaresis* deserted its original aniconic pattern and the bust of Christ was placed in a

1. D.M. Metcalf, "The Antalya hoard of *miliaresis* of Basil I" *NC* 17, 1977, 113-25.

2. G. Ostrogorsky, *History of the Byzantine Empire*, 237.

3. Metcalf, *op. cit.* 119-20: the author according the stylistic groups of the *miliaresis* in the hoard estimates their output at about 24 million.

medallion at the centre of the cross. Subsequently in the reigns of Romanus I, Nicephorus II and John I the bust of Christ was replaced by that of the emperor. Under Basil II the busts of the two reigning brothers were placed in the field on both sides of an elaborated cross.

The numismatic history of the reign of Constantine VII is complicated and has generated a certain amount of discussion among numismatists. The difficulty, as we have already seen, is to place Constantine's and his colleagues' coinage in a proper order.

The problem regarding the silver coinage seems to have been solved. Grierson and Morrisson proposed the same typological classification and roughly the same chronology. They infer from stylistic details that the *miliaresia* in Constantine's name only, formerly dated to 945¹, are actually the earliest silver issues (914-21)². The large lettering, the eight globules on the dotted border of the obverse, the absence of similar globules from the reverse, and the traditional type of the cross potent indeed indicate an early date³.

The same features are also shown on the two series of *miliaresia* in the names of Romanus I, Constantine VII and Christopher, which actually follow in the sequence. After 931

1. A. Bellinger, "The coins of Constantine Porphyrogennetus", *AN*, 13, 1967, 148-66.

2. *BNF*, 562-5; *DOC*, 536-7.

3. The Hermitage collection includes a unique silver coin of Constantine VII and his mother Zoe which is probably a double *miliaresion*, intended for awards and not for circulation: see J. V. Sokolova, "Serebrianyi monetyi chakan Konstantina VII", *NE*, 2, 1960, 57-60.

letter sizes are generally reduced.

Moreover the *miliaresis* in the names of Romanus I, Constantine VII, Stephen and Constantine Lecapenus (931-44) show the insertion of new details: firstly a medallion bearing Romanus' bust was placed at the intersection of the cross-arms; secondly five pellets were substituted for the globule below the steps of the traditional cross; thirdly four globules were inserted in the dotted border of the reverse, while ornaments appeared above and beneath the obverse inscription.

The *miliaresis* in the names of Constantine VII and Romanus II show further changes. The traditional cross potent is transformed into a crosslet, with an X at the intersection of the arms. The ornaments above and beneath the obverse inscription of the previous type are removed, while sixteen globules appear on the outer border of each side.

The remarkable feature of Constantine VII's silver coinage is the first appearance of ornaments above and below the inscription. The significance of these ornaments is unclear. We shall examine such problems later dealing with the copper coinage, where those ornaments became very common.

Under Basil II and Constantine VIII in addition to the type with the two busts of the reigning brothers on both sides of an elaborate cross, a new type appeared¹. It bears the representation

¹ P Grierson, "A misattributed miliaresion of Basil II", *Melanges de Ostrogorsky, I* (=Recueil des travaux de l'Institut d' études byzantines, 8 [Belgrade, 1963], 111-16

of the Virgin *Nikopoios* on the obverse and a long inscription mentioning her aid to the two emperors on the reverse

After this period the *miliaresia* show a considerable variation from those of the earlier periods. It is noticed that, despite the rarity of silver issues of this era, new types occur frequently and are given an elaborate treatment reflecting the artistic tendencies of the time. The most beautiful among the different types is the *miliaresion*, now attributed to Romanus III¹, with a standing figure of the Virgin *Hodegetria* and with a metrical invocative inscription: +ΠΑΡΘΕΝΕ ΣΟΙΠΟΛΥΑΙΝΕ on the obverse and ΟΧΛΑΠΙΚΕΠΑΝΤΑΚΑΤΟΡΘΟΙ on the reverse. Moreover at approximately the middle of the eleventh century we witness the first minting of fractional issues, such as the two-thirds of a *miliaresion* and the one-third of a *miliaresion*, whose monetary role is obscure, while during the reign of Constantine IX the first concave *miliaresion* appears.

1. DOC, 712-3

D. Miscellaneous

a. Weight and Metrological problems.

The intended weight-standard of the "reformed" *miliaresion* from the eighth century to the last decades of the eleventh is difficult to determine. However we can obtain a general idea of its development and its main fluctuations which allow the whole period to be divided as follows:

Group I: The years 740-886 take the coin from its introduction to the end of the Amorion dynasty. The theoretical weight of the *miliaresion* during this period has been estimated either at 2.27g. or at 2.24g¹. This means that 144 were struck to a pound of c. 326.83g². Unfortunately hoard evidence from this period is extremely rare and a comparative study in this direction is not at the moment feasible. The Thessaloniki hoard, now in the Museum of Warsaw, is so small that it provides no reliable information³. On the other hand a hoard of unknown provenance, which appeared on the market in October 1987, gives some controversial evidence (see Fig. 1)⁴. The mean weight of the 98 specimens of the hoard, which cover the period between the reign of Leo III and

1 *DMC*, 65 and *BNP*, 452.

2 This figure is reminiscent of the theoretical weight of the so-called "reduced" *siliqua* of the second half of the 4th century.

3 A. Szemiothowa, "Les rares monnaies antiques du Musée National de Varsovie", *Wiadomości Numizmatyczne*, 5 (1961) (=Special issue for the International Numismatic Congress in Rome, 11-16 Sept. 1961), 89. In this case there are two, inconsistent, modal values of 1.68g and 2.08g, the lightest coin weighs 1.28g and the heaviest 2.18g.

4 S. Bendall, "An Eighth-century hoard of Byzantine *miliaresis*", *Misc. 96*, 1988, 213-4

the reign of Constantine VI (720-797), is 1.91 g. In the histogram, however, the modal value, which corresponds to the intended weight-standard, is close to 2.20 g. But the coins as a whole reveal an irregular distribution of weights. This might be partly due to the fact that 14% of the coins were overstruck on Arab dirhems. Nevertheless the mode of the 59 specimens from the collections of DO and BNP, dated to the same period as the hoard, is also 2.20 g. Similarly the distribution of the weights shows a similar fluctuation.

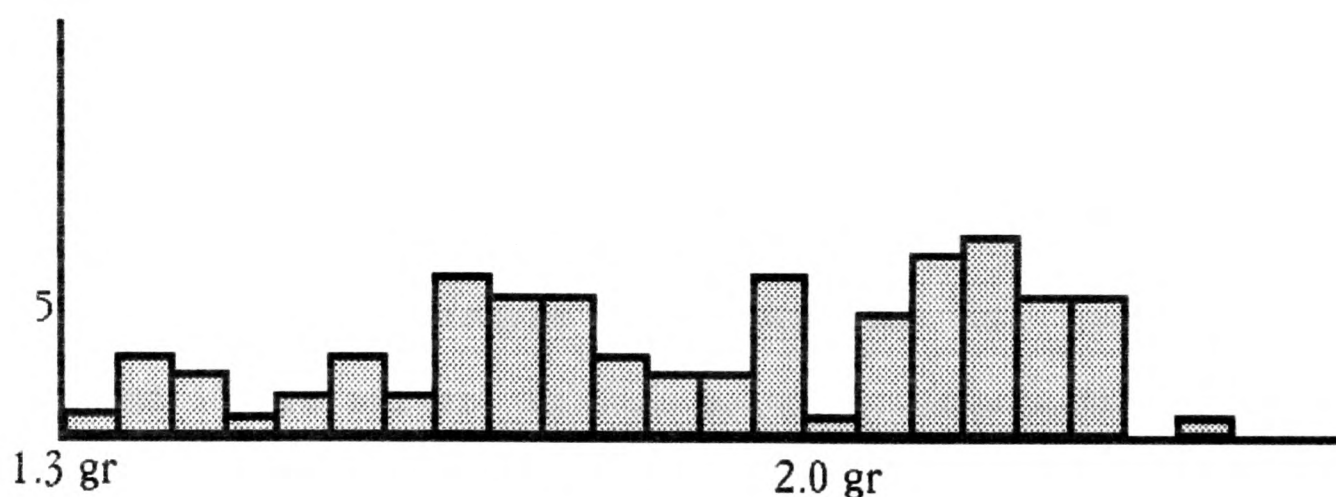


Fig. 1

The figure for the period from Michael I's up to Michael III's reigns is more^{or}less similar. The mean weight of the 73 specimens, dated in this particular period, from the two large collections mentioned above is 1.98 g. The modal value is now 2.10 g, although only one specimen falls below 1.70 g. The distribution of the weights also shows an irregular fluctuation.

The function of the silver coinage during the period in question is not very well documented. But the obvious fluctuation of the coins' weights, especially those of the hoard, hint at a token character.

Group II: This period lasts from 886 to 1025. from the accession of Basil I to the death of Basil II

Under Basil I the *miliaresion* increased in weight to the level which would prevail under his successors¹. However it is also difficult to determine this figure precisely since hoard evidence is still very rare. The mean weight of 210 specimens of this period from the collections of DO and BNP is 2.69 g., while their modal weight is 2.8 g. By contrast the Antalya hoard, consisting entirely of Basil I's *miliaresia*, has a modal value close to 2.96g., and this seems more likely to represent the weight-standard, since the recorded coins were for the most part *à fleur de coin*²

The hoard of 1914 from Tegani of Samos³ contained 24 coins, of which 9 are gold *nomismata* of Constantine VII and Romanus II (945-9) and 15 are silver *miliaresia* of Nicephorus Phocas (963-9). The mean weight of the *miliaresia* is 2.88 g. Actually their weight shows a large fluctuation. Four specimens are considerably heavier than the modal value of the *miliaresia* from the Antalya hoard⁴. There are two coins close to that weighing 2.97 g. and 2.99 g. respectively. Three specimens weigh 2.69 g.; of the rest of the coins three are between 2.80 g. and 2.90 g. and three fall below 2.65 g.

1. D. M. Metcalf, *Coinage in South-eastern Europe*... 35.

2. D. M. Metcalf, *op. cit.* "The Antalya hoard..." 114.

3. See Appendix , V.

4. 3.43g., 3.40g., 3.23g., 3.05g.

A hoard found in 1903, on the Vella farm-estate on the Baltic coast, contained 1 *miliaresion* of Nicephorus II, 1 of John Zimisces and 112 of Basil II, as well as Arab and Western European coins. The number of Byzantine coins is extraordinarily high for a Russian hoard of the 11th century. Basil II's *miliaresia* from the hoard reveal an erratic weight distribution with values ranging between 1.75 g. and 3.25 g. The mean weight is 2.61 g., the mode 2.98 g. The coins in question are of two types : *DOC* Class IIA and Class IIB (977-89). The frequency table of each class is distinctly different. The coins of Class IIA have a modal weight of 2.58 g. and a mean of 2.36 g., while the coins of Class IIB give figures of 2.98 g. and 2.88 g. respectively. The catalogued coins of the *DOC* from this period present roughly the same figure. Apparently this difference in weight between the two sub-classes is related to the different sizes of the coins. In Class IIA the coins appear to be clipped. Their mean diameter is 21.35mm and the mode 21mm, while in Class IIB these are 25.35mm and 26mm respectively. It has been suggested, as we shall see below, that the occurrence of small, badly clipped coins of the same class, weighing much less than the class weight-standard, surely implies a different workshop.

Group III : This covers the years 1025-1081, from the death of Basil II to the accession of Alexius I Comnenus. During this period the weight of the *miliaresion* seems to have remained unchanged although the frequency table of 46 coins from *DOC* and *BNP*

I. I. V. Sokolova, " Vizantiiskie moneti kladi Vella", Trudi Gosudarstvennogo Ermitazha 4, 1961, 10-22.

give a mean weight of 2.16 g and a modal of 2.53 g. Specimens heavier than the mode, from the two above sources, are rather few.

Nevertheless the Oxavre hoard (Gotland), like the Velle hoard, includes among other currencies 104 Byzantine *miliaresis* of which 98 are of Constantine IX and two of Romanus III¹. Undamaged specimens from this hoard suggest a mode of c. 2.90g. Consequently, if we add back some wear, the intended weight reaches very much to the theoretical weight of the *miliaresion* succeeding Basil I's reform (i.e. 2.96 g.).

However, the *miliaresion* of the 11th century inevitably began to decline in weight, as well as in fineness. Chemical analyses² have revealed three periods in the history of the fineness of the *miliaresion*, which roughly coincide with the three weight phases discussed above.

Period I: (740-868). The modal value of the silver contents of coins of this period is c. 88-90%, except in specimens which are restruck on Arab dirhems and are of better quality silver³.

1. P. Grierson, "Harold Hadrada and Byzantine coin types in Denmark", *Byzantinische Forschungen* 1 (1966), 130; *Id. DAC*, 65 n. 211. He gives an intended weight of 3.00g.

2. D. M. Metcalf, "Analyses of the metal contents of medieval coins", in *Methods of Chemical and Metallurgical Investigation of Ancient Coinage*, eds. E. T. Hall and D. M. Metcalf, 1972, 389; see also A. A. Gordus, D. M. Metcalf, "The alloy of the Byzantine *miliaresion* and the question of the reminting of Islamic silver", *HBN*, 24/26, 1970/72, 16.

3. The fineness of these specimens is over 90% and sometimes even as much as 99%.

Period II: (868- middle of the 11th century). Under Basil I the standard was raised to c.96% and there is evidence that newly mined metal, perhaps from Armenian sources, was now available¹.

Period III: In the middle of the eleventh century the fineness gradually began to decline from its high point of 96% falling sometimes to only half of the previous standard or even lower².

Surprisingly enough, from the time of Constantine X onwards the 1/3 *miliaresion* was of better quality silver than the 2/3 *miliaresion* and sometimes even than the *miliaresion* itself.

It has been suggested that the "silver famine", which also affected the Islamic world from c. 1025, was one of the most serious factors in the decline and debasement of the Byzantine *miliaresion*³. Probably the silver shortage played some role in it but we must not forget that at this period Byzantine gold coinage also became debased. Thus the second half of the 11th century might constitute the starting point of a new Byzantine monetary system reflecting the economic trends of the period and dictating the abandonment of the traditional denominations. This was probably the reason for the appearance of the fractional silver denominations the condition of which obviously indicates extensive circulation and they might not be ceremonial⁴.

1. A. A. Gordus, D. M. Metcalf, "The alloy ...", 16.

2. i. e. Michael VII (1071-8): 40.2% , Nicephorus III (1078-81): 39.7%... The data are from Gordus' and Metcalf's table I.

3. *ANZ* 611 for quite a different suggestion see Metcalf, "Analyses of the metal contents. ", 389. The author suggests that this silver shortage did not begin quite so early and was not so severe in the Byzantine Empire

4. *BNF* 621.

b) Valuation of the *miliaresion*.

There is great confusion about the value of the "reformed" *miliaresion* in relation to the *solidus*, due to the contradictory statements given by the sources¹.

According to a nomic gloss on the Basilics², the *miliaresion* was valued at 1/1000 of a pound of gold and fourteen *miliaresia* were equivalent to one *solidus*. Another nomic gloss on the same corpus informs us that now things have changed so that 109 *miliaresia* and nine *nummi*, are worth 9 *nomismata*, 1 *miliaresion* and 9 *nummi*. Obviously this means that now the *miliaresion* was equivalent to 1/12th of a *solidus*³. However it is unclear whether these nomic glosses of Basilics describe conditions at the time of writing or during some earlier period⁴.

Additionally George Cedrenus⁵, writing in the late 11th century of Leo III's taxation, *το δικερατον*, states that the *keration* equalled twelve *folles*. Thus, according to this

1. Similar confusion surrounds the etymology of the term *miliaresion*, as well as its role in the monetary systems of different periods; see J P Callu, "Les origines de "Miliarensis": le temoignage de Dardanius, *RN*, 22(1980), 120-30.

2. F. Hultsh, *Metrologicorum Scriptorum Reliquiae*, 1864-6, II, 307.

3. *Ibidem*, 309.

4. The Basilics were the systematic arrangement in Greek of Justinian's Codex by the emperor Leo VI between 886 and 892. They were not based on the Latin original of the *CJC*, but on Greek paraphrases of the Justinian legislation and adaptations by Greek jurists of the late 6th and 7th centuries; see I. E. Καραγιανopoulos, Πηγαι της Βυζαντινης Ιστοριας, Θεσσαλονικη, 1978, with a systematic reference to the different editions of the Basilics.

5. G. Cedrenus *Historia Compendiosa* (ed. Bonn), 801.

information, the *Quéparon*, i.e. the payment of one *miliaresion* per *nomisma*, equalled twenty-four *folles*. Given that one gold coin might be reckoned at about two hundred and eighty eight *folles* during the eighth century¹, then one *miliaresion* should represent 1/12th of a *solidus* (288:24=12). Similar figures occur in the *Book of the Prefect*², but the accounts for the Cretan expedition of 949 state a different scheme since the price of some sails is given as 28 *nomismata* and 12 *miliaresis*³. It has been assumed that the *miliaresion* at this period was worth 1/14th of the gold *nomisma*⁴.

The hoard from Tegani of Samos should provide some evidence concerning the value of the *miliaresion* in relation to the gold *nomisma*. Although it comes from an attachment it seems highly likely that this is the complete hoard containing 8 gold *nomismata* and 15 *miliaresis*. However its evidence is very intriguing for, in the case that hoard represents the total sum of a payment, then it hints at a figure where more than 15 *miliaresis* were reckoned to the *nomisma*. The 15 *miliaresis* of the hoard weigh 43.2 g. If this weight is divided by the weight - standard of the *miliaresion*⁵ this gives 14 3/5 specimens. One wonders whether the reckoning was based on the weight of the *miliaresis* and consequently the figure varied accordingly. Besides, the *Book of the Prefect* states that if the *miliaresion*.

1. DOC. 17-8

2. *Le Livre du Prefet* (ed. J. Nicole), 16.

3. *De Ceremoniis* (ed. Bonn), 675.

4. DOC. 67 n. 215.

5. i.e. 3.96g

was not intact, then the money changers must estimate it proportionately. More hoard evidence will shed further light on this crucial problem.

c) Mint organisation.

There is little literary evidence concerning mint organisation and minting in general, so we must make deductions from the coins themselves.

For instance, the striking of some *miliaresia* over Arab *dirhems*, during the 8th and early 9th centuries may provide some information about mint procedures. However, the suggestion that the *miliaresia* of Constantine VI without a symbol at the end of the obverse legend, which are the most frequent overstruck on Arab dirhems, were possibly issued in the East and not in Constantinople¹ seems rather unlikely. True the reign of Constantine VI and Irene shows a strong concentration on the reminting of Islamic silver currency, but this practice, dates back to the reign of Constantine V (741-55). In that case an eastern mint ought to have been in operation earlier than Constantine VI's reign, something which does not fit into the constitution of the empire during a period characterized by a decline in monetary affairs

¹ S. Bendall, "An Eighth-century hoard..." 213.

Undoubtedly the introduction by Leo III of the *dikeraton* presupposes use of the *miliaresion* in state payments. The existing evidence does not permit us, at the moment, to estimate how extensive this supply was, during the 8th century, but a portion of the military salaries might have been paid in this currency. The imperative need for payments while at war would push the mint authorities to an emergency production of *miliaresia* using ready flans. Consequently the abundance in eastern areas of overstricken *miliaresia* on Arab *dirhems* might be the result of the Byzantine military expeditions against the Arabs in Asia Minor and Syria.

Additionally some *miliaresia* of the eighth and early ninth centuries may have been struck over Arab dirhems carelessly and hastily because of the uneasy domestic political climate under which the coronation of a co-emperor would sometimes take place¹.

Actually the lack of any information as to how the Byzantines obtained Arab *dirhems* raises a series of questions, which, at the moment, cannot be answered satisfactorily. It is possible that Byzantines acquired Arab *dirhems* in the form of tribute². However neither documentary evidence nor a specific historical event, supports this case. Nevertheless a series of victorious operations against the Arabs from the reign of Leo III up to the reign of Constantine VI and Irene (717-790), could have provided the

1. *i.e.* The case of Constantine VI as co-emperor. Theophanes informs us that Constantine's father, Leo V, in order to win supremacy against his five brothers in favour of himself and his infant son, distributed generous sum of money to the soldiers as well as to the populace; Theophanes (ed. Bonn)

2 Miles. *op. cit*

Byzantines with *dirhems*. Indicatively we mention the following cases: 740 the victory at Acroinon; 746 the capture of Germaniceia by Constantine V and the transplantation of the Christian population to Thrace, 752 the capture of Theodosiopolis and Melitene, two important fortresses at the frontiers of Armenia and Mesopotamia; 778 new siege of Germaniceia by Leo IV and a great victory in a battle nearby, which was celebrated by the Byzantines with a magnificent triumph in the capital. The emperor carried out a new transplantation of the Christian population to Thrace. Finally in 780, at the beginning of Constantine VI's reign, the Byzantines won another victory over Arabs at Melou in Asia Minor.

A glance at the legible Arab overtypes shows that in most cases they are dated before the year 780 when actually the Byzantines had gained supremacy against the Arabs. In the hoard mentioned above the legible Arab undertypes have been struck as far back as 714-744 and as recently as 763-776. Bendall also gives us the information that the Arab undertypes of some of Constantine VI's *miliaresis*, examined in Lebanon, cover the period from 720 to 780+. 13 overstricken *miliaresis* published by Miles give a similar figure although the 5 specimens of Constantine VI and Irene overstruck on Abbasid dirhems cannot be dated more closely than 750-797.

However the possibility that Arab *dirhems* reached Byzantium through trade affairs cannot be excluded, despite the belligerency between the two worlds.

Nevertheless the phenomenon of overstriking Arab *dirhems* by the Byzantines must not be exaggerated. Chemical analyses suggest that

the reminting of Islamic silver was unimportant, except in the second half of the 8th century and the early 9th, with a strong concentration during the reign of Constantine VI and Irene. But even in these cases this procedure does not seem to have been on a large scale. Few specimens show clear traces of overstriking while chemical analyses have also shown that newly mined metal was available to the Byzantines at this early period too¹. This supports Vryonis's argument that the Byzantines were able to obtain newly mined silver as well as gold and other metals on their own soil in mines operated continuously from the antiquity onwards².

If we come now to the eleventh century, the Yella hoard provides substantial evidence of minting during the reign of Basil II and Constantine VIII.

As already mentioned, coins of the same class different in their size and weight hint at the existence of two distinct workshops (*officinae*). This seems to be the case for DOC Classes IIA and IIB of the above emperors' *miliaresis*.

However Hendy³ has suggested that Class IIA, which is characterized by clipping, bear the same relation to the normal Class IIB, as the *tetarteron* to the *histamenon nomisma*.

1. See A. Gordus, D. M. Metcalf, *op. cit.*

2. *Ibidem*, 20; see also S. Vryonis, "The question of the Byzantine mines", *Speculum* 37, 1962, 1-17.

3. M. Hendy, "Light weight solidi, Tetartera and the Book of the Prefect", *BS* 1972, 68-70.

Without entirely rejecting this proposal, Grierson¹ suggests that the clipping may have taken place during circulation and have been due to economic pressures which had diminished by the time that Class IIB was issued.

However the fact that both types coexist in the Vella hoard favours the idea of two different *officinae*. So too does chemical analysis of some of Basil II's *miliaresis*². It reveals that the specimens of Class IIA have very regular gold traces of 0.7-0.8 %, while those of Class IIB, as also all the other Classes of *miliaresis*, contain lesser amounts. The source of this metal is unknown but old stocks of silver may have been melted down to provide it. The different alloy clearly implies two workshops for the two Classes. Moreover Class IIA shows technical peculiarities in its minting which might be explained as an effort of the second *officina* to increase or hasten production and reduce its cost³.

However the suggestion that clipping was practised in an imperial *officina* seems dubious and in contradiction to the documentary evidence that the *miliaresis* should be "genuine and unadulterated"⁴. Nevertheless the second workshop probably was commissioned in an effort to increase the

1 P. Grierson, "The gold and silver coinage of Basil II, *ANSON*, 13, 1967, 187; *id. DOC*, 610-1.

2 A. Gordus, D. M. Metcalf, *op. cit.*

3 I. Sokolova, "O Teknike izgotovleniia shtempelei dlia chekanki vizantiiskikh monet", *Sobshcheniia Gosudarstvennogo Ermitaze*, No 15, 1959, 46-9.

4 *Le Livre de Préfect* (ed. Nicole), 16.

production of *miliaresis* for export or transactions with Northern states, where there was a preference to silver denominations.

A historical event, which is probably reflected by the Vella hoard, cannot be overlooked. At the beginning of the year 968, the usurper Bardas Phocas reached Constantinople with his army. At this crucial moment Basil II negotiated with Vladimir, Prince of Kiev, and received from him military help amounting to 6.000 men¹. Probably, under these circumstances the mint authorities having the imperial consent, put in operation a second, temporary *officina* in order to confront payments and special expenses resulted by this negotiation. Peculiarities of this *officina*, which have been mentioned above, as well as the Vella hoard itself could reinforce this suggestion.

The ornaments above and below the reverse inscription of the *miliaresis*, which appeared from the reign of Constantine VII onwards also have been considered as evidence for the organisation of the mint during the period in discussion. Similar ornaments have appeared also on contemporary gold and especially on copper coins where this topic will be discussed.

1. G. Ostrogorsky, *History of the Byzantine State*, ... 304.

d) The chronology of Theophilus' *miliasia*

As is well known, the chronology of Theophilus' coinage remains uncertain mainly due to the patchy evidence concerning the emperor's family history. Theophilus' *miliasia* fall into five Classes which according to their obverse inscriptions may be described as follows:

Class I: +ΘEO/FILOSEC/ΘEUBASI/LEUSRO/MAION.

Class II: +ΘEOFI/LOSSCONST/ANTINOSΔU/LUXRISTUS/PISTUSBASILs/ROMAIOS

Class III: +ΘEOFI/LOSΔULOS/XRISTUSPIS/TOSENAVTO/BASILEUS' RO/MAION.

Class IV: +ΘEOFI/LOSECΘEU/PISTOSBA/SILEUSRO/MAION

Class V: +ΘEO/FILOSSMI/XAHLECΘE' /BASILISRO/MAION.

The various chronological schemes of Theophilus' gold coinage proposed by a number of scholars, as well as the contribution of the numismatic evidence in solving the controversies, have been discussed in detail in the relevant chapter. In this section we shall refer only to the chronologies suggested by Grierson and Morrison, since most other scholars have focussed their attention mainly on the emperor's gold currency.

The new arrangement by Bendall of Michael II's silver coinage, gives indeed some useful clues for the chronological classification of Theophilus' *miliasia*. Class IV might belong to the early years of Theophilus' reign, since it was most probably influenced by the type established by Michael II for his sole reign¹.

¹ Bendall "Miliarsia of the reign of Michael II. . ."

Apparently there are two possible solutions for the chronology of Class IV. It might move forwards to the very beginning of Theophilus' reign as a substantive issue parallel to the ceremonial Class III or might follow Class II, after Constantine's death.

The date of Class III has been discussed already¹, while dealing with Theophilus' gold coinage. This, as well as Class II, might be ceremonial, the former on Theophilus' proclamation in 929 and the latter on Constantine's coronation as co-ruler in 829/30².

Hoard evidence may eventually provide a definite answer but at the moment one can only suggest provisionally that the second solution is more likely for the following reasons:

Firstly the period between Theophilus' accession to the throne

1. See above, 35-6. The Thera hoard of 1900 contradicts the suggested date for Class III. Among the *miliaresia* of Class III was a *solidus* attributed by the excavators to Michael III and dated 856-867: F. Hiller von Gaertringen, P. Wilski, *Stadtgeschichte von Thera...*, 13, 200. Nevertheless Metcalf's suggestion that it might belong to Michael II seems more plausible. He writes: "...One cannot, however, altogether rule out the possibility of a date of deposit c. 830": see D. M. Metcalf, *Coinage in the Balkans, 820-1355*, Thessalonica 1965, 28. His reasons for suspecting the account are: firstly, that all the silver is of the same type, in the name of Theophilus alone; secondly that the description of the *solidus* as "a gold coin of Michael Basileus" is not clear; thirdly, that the stray finds from the same excavation were a *folles* of Michael II and Theophilus, and another of an unidentified Michael; see also his review of Dikigoropoulos' article in *HBN*, 20, 1966, 680-2.

2. For the problems concerning Constantine's birth and coronation as co-ruler see above, 30 n. 2 and 31, 1, 2.

in 829 and his son Constantine's coronation as co-emperor in 830 or even 831 seems too brief for the issue of two different types (IV & III) even if the one was of a ceremonial character. True the term "ceremonial" for this series must not be taken literally¹. It would be more precise if this sort of issue was called "special", the term determining an elaborate issue on an imperial accession.

Secondly Theophilus, after the death of his beloved son Constantine, maintained the Isaurian tradition for his gold coinage by depicting on the reverse the two dead members of his family, his father Michael II and his son Constantine. Similarly he might have adopted for his silver coinage the traditional type of *miliaresion* as developed by his father. It is true that the wording of both Class II and III inscriptions, bears a series of innovations; they would fit well for an inaugural silver coinage reflecting the emperor's romantic personality and his tendency for artistic brilliance and renovations.

Finally Class IV should be earlier than Class I. The inscription is distributed in a slightly different fashion across the flans of the two types, even though they have the same diameter. In Class IV, five letters from Theophilus' name constitute the first line of the inscription while in the case of Class I, it consists of only three. This is not perhaps surprising, since the first inscription has a total of thirty-four letters and the second only twenty-eight. However, the

1. Pure ceremonial issues could be considered Theophilus' gold Class IV, Basil I's gold Class I and some gold coins of Constantine VII (i.e. Classes V, VI, VIII, X); see above, 39, 50, 60, 62-3, 65-7

inscription of the latest Class V (840-2): ΘEO/FILOSSMI/XAHLECOE'/BASILISRO/MAION, also has a three letter first line, like *DOC* Class I despite containing thirty-three letters (counting an abbreviation for the letter U of the word ΘEU). Thus the issue with the name of Michael III (Class V) is closer to Class I than to Class IV.

The dropping of the word *PISTOS* in Class I might well occur during the new persecution of the iconodules in 837. The new type of the inscription could serve as imperial propaganda, at the time, giving greater emphasis to its assertion that Theophilus is king "by the Grace of God".

Although further evidence is needed, we may propose the following provisional chronological scheme for Theophilus' *miliaresia*:

<i>DOC</i> Classes	Description	Proposed dates.	DOC	BNP
III	Theophilus alone (<i>dULOS...PISTOS</i>)	829	830/1-38	835-42
II	Theophilus+Constantine	830 or 831	830 or 831	829-835
IV	Theophilus alone (<i>PISTOS</i>)	830/1-37	838-40	—
I	Theophilus alone	837-40	829-30/1	835-42
V	Theophilus+Michael III	840-2	840-2	842

COPPER COINAGE.

A. From Leo III to Michael II (717-820): the decline of the traditional *folles*.

The copper coinage of this period continues the tradition of the last representatives of the Heracleian dynasty, although there are indications that Leo III had attempted some changes either in minting or in the monetary policy.

The reverse continues to bear the mark of value of the denomination while the fractional issues gradually disappeared so that by the end of the eighth and the first quarter of the ninth century the only copper denomination was that of the *folles*. Moreover the indication of the date, which at the beginningⁿ of Leo III's reign was mechanically copied from the *folles* of Justinian II's second reign¹ (705-11), was replaced sometime at the end of the first half of the eighth century by the letters NNN. Similarly the word ANNO to the left of the mark of value was replaced by the letters XXX².

1. See *DOC* Classes 1, 2 & 3 of Leo III's copper coinage (date XX).

2. Grierson suggests that the letters XXX and NNN are purely decorative. Wroth had interpreted them as an abbreviation for X(ριστός) N(ικα) thrice repeated; see *BMC*, 383 and n. 1, 400 and n. 2). For a similar interpretation see P. Lambros, *AN*, 4, 1859, 210. See also H. Weller, 'X-N on the iconoclasts' copper coinage', *MIRC*, 84, 1976, 144, who believes that the IHSUS XRISTUS NIKA of the iconoclasts' silver coinage was abbreviated to X-N on their copper issues.

A survey, necessarily brief, with some comments and suggestions on the chronology of problematic issues will give a more precise picture of the monetary history of the period under discussion:

Leo III (717-41).

(Table VI)

The copper coinage of Leo III has only recently been identified¹ by Philip Grierson. It is today divided into five main types, the third and the fifth of which are subdivided into three and two types respectively. They may be summarized as follows:

Class 1: The obverse type has been influenced by some types of Constantine VI's *folles* bearing the armoured bust of Leo III, facing, with a spear in his right hand held transversely across his shoulder. This iconography suggests that Leo III wished to promote himself as a natural successor of the Heraclean dynasty, and to emphasize his abilities as a soldier promising victories against the enemies of the empire and especially against the Arabs. Specimens of *folles*, *half-folles*, *decanummia* and a rare *pentanummium*² are recorded of this type. It has been considered as the earliest issue of Leo III and consequently it is dated between 717 and 720.

1. P. Grierson, "The copper coinage of Leo III (717-41) and Constantine V (720-5), *NC*, 1965, 183-96; id. "A new early follis type of Leo III (718), *NC*, 1974, 75-7; id. "A follis of Leo III from officina Γ", *NCirc.*, 76, 1968, 260; see also *DOC*, 232-4.

2. *MIB*, III, no. 29.

Class 2: On the obverse of this class Leo is depicted standing and wearing the *loros*. The emperor holds in his left hand a long cross and in his raised right hand the *akakia*. Specimens of *folles* and half *folles* are recorded. The emperor's wearing of the *loros* has been connected with his tenure of the consulship, which he had assumed in January 718¹. The type is very rare but its discovery in excavations² indicates that the issue was substantial rather than ceremonial and presumably of very short duration.

Class 3: The coins of this type bear the imperial busts on both sides, that of Leo III on the obverse and that of his son Constantine on the reverse. The latter is depicted above a balustrade, below which is engraved the mark of value. *Folles*, half-*folles* and *decanummia* are recorded. The *folles* of this type are represented by issues of three different weight standards, the medium and light ones bearing depictions of an older Constantine than the heavy series, which is obviously the earliest. The *terminus ante quem* of the type is secure, since it is known that Constantine was proclaimed co-emperor in 720. Thus the suggested date of class 3 is 720-c.732.

Class 4: The obverse bears the two frontal busts of Leo III and Constantine holding a cross potent between them. Leo wears the chlamys and Constantine the *loros*. The reverse again bears only the mark of value, while the immobilized date XX, which occur on the

1. Grierson, "A new early follis...", 76.

2. Coins of this class are recorded to have been found in the Athenian Agora excavations of June 1972 and in the excavations at the Kalenderhane camii at Istanbul.

previous classes, has been replaced on the left by the letters *XXX* and on the right by *NNN*. Only *folles* and half-*folles* are recorded. The class is dated by Grierson to 732. Its attribution is, however, still problematic and, as we shall see below, it may belong to Artavasdus and his son Nicephorus.

Class 5: Similar to the previous class with some remarkable *variations* on the obverse: the two frontal busts are named by an inscription; both busts are depicted cloaked; they hold the *akakia* in front of their breasts. This type may belong to the sole reign of Constantine V as we shall see below. Only *folles* and half-*folles* are known so far.

Grierson divides class 5 into two sub-classes: on the first (5a) Constantine's bust is beardless while on the second (5b) he is depicted bearded. The suggested date for the former is c. 732-c. 735 and for the latter c. 735-741.

Actually the copper coinage of Leo III is quite obscure and still raises questions since the numismatic evidence is too patchy to provide any definite solutions to the problems of chronology and attribution. These may be summarized as follows:

a. - Two *folles* of Class 5a in DOC¹ are very abnormal. They are only the size of *decannummium* and their weights are consequently as low as 1.95g. and 0.86g. But whether these two coins represent a separate sub-class of a lighter weight-standard *folles* or, as Grierson suggests, were prepared either for half-*folles* or for some smaller denomination, they apparently imply anomalies in minting

1. DOC, Pl. IV, nos. 38b.1 & 38b.2.

procedures. Probably they represent issues just after Leo III's death parallel to those of Class IIIb of gold *solidi*.

b. - Similarly class 5b is quite problematic. Here Constantine, who is the same size as his father on the left, is depicted bearded and the general impression is that of an adult. The treatment of his face is more reminiscent of issues of his sole reign than of Class 5a.

Some of the recorded specimens are struck over Class 4. Although overstriking is very frequent during the first half of the eighth century², in this case it may perhaps represent a *damnatio memoriae*.

If so, Leo III's Class 4 may be attributed to Artavasdus (742-743) and the fact that the co-ruler is dressed in the *loros*, which Artavasdus' son Nicephorus also wears on some gold issues of the usurpation, may confirm this attribution. Henceforward Leo III's Class 5b could be attributed to the reign of Constantine V after his final victory over the usurpers on 2 November 743.

1. See above, 16-7 and esp. n. 1: we have suggested there that all the gold issues of Leo III with an *officina* letter on Leo's side (Class IIIb) may be dated to the very beginning of Constantine V's reign and we have interpreted this unusual practice as a reflection of Constantine V's miserable financial activities.

2. The overstriking of coins during this period may hint at a thorough re-coinage introduced by Leo III in order to increase circulation of petty currency. The *Ecloga*, compiled by this emperor early in his reign, refer to small amounts of money suggesting that by the beginning of the eighth century, there was a shortage of it. By the end of Leo's reign the situation appears to have changed, see M Thompson, "Some unpublished bronze money of the early eighth century", *Hesperia*, 9, 1940, 370-3.

Constantine V (741-775):

(Table VI)

Some of Constantine V's copper coinage raises further difficulties. It is usually divided into four classes¹ as follows:

Class 1: The obverse depicts the cloaked bust of Constantine V holding in his right hand the *globus cruciger* and in his left the *akakia*. On the reverse there is the mark of value flanked by the letters XXX and NNN. Specimens of *folles*, *half-folles* and *decannumia* are recorded.

This series is very problematic indeed. Constantine appears to be beardless and generally his effigy seems more childlike than on Leo III's class 5b¹.

The issue should belong to Constantine V's reign: but, if so, to which period? Following the suggestion that Leo III's class 5b is actually an issue of Constantine V's sole reign after 743, it may belong to the period from Leo's death in June 741 until Artavasdus' revolt in July 742².

Here a problem arises as to why the two bust type, Leo and Constantine, returned when a type representing the new emperor alone had already been introduced after Leo's death. The explanation must lie in imperial propaganda. After Artavasdus'

1. See *DOC*, 294 where Grierson refers to a suggestion by Mr. Veglery that this type could belong early in the reign of Constantine VI. But this emperor is always represented on coins with his mother Irene while as Grierson has pointed out some stylistic details of the type can hardly belong to the 780s.

2. There are also two *solidi* of Constantine V's reign, dated most probably in this period, similarly showing the emperor beardless; see above, 17.n.2

usurpation. Constantine had to adopt a dynastic type for his coinage to emphasise that he was the legal successor. On the gold coinage this was easily done since one side was available to carry the effigy of the dead founder of the dynasty. The copper coinage posed more of a problem. The reverse ought to bear the mark of value, and the only possible solution was to return to an old type depicting both emperors side by side.

Class 2: This issue is known only from half-*folles* and an unique *pentanummium*. Its attribution to Constantine V is dubious¹ since the inscriptions on the recorded specimens are too worn to be read with certainty². On its obverse, it bears a bearded bust holding a cross potent in his right hand. The type may therefore be attributed to Artavasdus during his period of sole rule since the same symbol is held by the two co-rulers on Leo III's class 4 which, as has been mentioned above, could belong to Artavasdus' usurpation.

Class 3: The obverse depicts the cloaked busts of Constantine V and his son Leo IV, who was proclaimed co-emperor in 751. On the reverse is the bust of Leo III, dressed with the *loros*, above a balustrade, and holding a cross potent. Below the bar is the mark of value flanked by the letter X left and the letter N, right. Only *Folles* and half-*folles* of this class are recorded. The latter adhere to the scheme of the traditional type, with only the mark of value occupying the flan.

1. *DOC* 295, 305 nos 9-10 and *BNF* 470

2. The only distinguishable letters in *DOC pentanummium* are TA which might equally belong to the names CONSTANTINUS or ARTAVASDUS

Class 4: The two co-emperors are seated on a lyre-backed throne and wearing the chlamys. The reverse is similar to the previous class. Only *folles* and half-*folles* of this type are recorded. These half-*folles* are the last to carry an appropriate value letter. From now on they bear the value mark of the *folles* and are distinguishable from them only by their smaller size.

The chronology of the two last classes of Constantine V's copper coinage does not raise any great problems since it is determined by documentary evidence. Class 3 obviously started in 751, and it may have continued to be issued until 763 when it was replaced by class 4. The two seated imperial figures on the latter most probably allude to the celebrations, held in the capital during this year, after Constantine's great victory against the Bulgars.¹ However Grierson and Morrisson², date the beginning of class 4 in 768/9, the occasion of some other splendid ceremonies when Constantine's third wife Eudocia was crowned Augusta and his younger sons Nicephorus and Christopher were designated as Caesars and *nobilissimi*.

Leo IV (775-80):

It seems that Leo IV did not issue any coinage during the seven months of his sole rule. His copper coinage after the coronation of his son Constantine VI as co-emperor falls into two classes:

1. Oetrogersky, *History of the Byzantine State*, 168-9 and esp. n. 1
2. *DOC*, 295 *BNF*, 466

Class 1: The obverse bears the cloaked busts of Leo IV and Constantine VI while the reverse the busts of the two ancestors Leo III and Constantine V above a balustrade, flanked by the letters B A. Below the bar is the mark of value and to left and right the letters KN. *Folles* and half-*folles* are recorded. The latter no bear longer the K as their mark of value. They are identical to the *folles* but smaller in size and without the letters BA.

Class 2: The two co-emperors are depicted seated on a lyre-backed throne. The reverse is similar to the previous class but lacks the letters BA.

The suggested date for class 1 is 776-8 and that of class 2 778-80. The seated figures may allude to the celebrations for a major victory over the Arabs in 778².

Constantine VI (780-97):

The copper coinage of this emperor does not raise difficulties and follows the pattern and chronology of his gold coinage. It is divided into two classes, the first being subdivided into two sub-classes.

Class 1a: The obverse depicts the cloaked bust of Constantine VI holding the *globus cruciger* on the left and on the right the queen mother wearing the *loros*. In her right hand she holds a *globus cruciger*. On the reverse Constantine's three ancestors, Leo III,

1 Grierson interprets the letters BA as abbreviations for βασιλεύς; see *DOC*, 326.

2 *DOC* 6

Constantine V and Leo IV are represented above a balustrade. The mark of value below it is flanked by the letters X and N.

Class 1b: The only difference from the previous class is that Irene does not bear the *globus cruciger*.

Class 2: The obverse now bears only the bust of Irene dressed ⁱⁿ the *loros*, while the reverse that of Constantine, above a balustrade holding in his right hand a *globus cruciger*.

The relationship between the different dates proposed and the historical events of the period have been discussed in the chapter on gold coinage¹. Following the proposed dates for Constantine's gold coinage the chronology of his copper is as follows: Class 1b: 780-7; Class II: 787-792; Class 1a: 792-7.

Two abnormal copper specimens ^{are} illustrated in *DOC*². On them Constantine appears clearly holding the *skakia* in his left hand, while on other specimens this is entirely hidden under the chlamys. The former examples should be early issues, following the original design as it is represented on the corresponding gold issue (=Class II). It seems quite plausible that the latter examples ^{were} issued between February and September of 790 when Irene had actually *claimed* superiority over his son³. Indeed the removal of the *skakia*, an important imperial *insignium*, might reflect Irene's claims to have precedence in the imperial hierarchy.

1 See above, 21-4.

2 *DOC* Pl. XIV, 7. 6 & 7. 15.

3 See above, 21 and esp n 1.

In fact, the specimens showing Constantine without the *akakia* can only be fitted in this period that consequently confirms the chronology of gold Class II and of copper Class 2 to the proposed date (787-92).

Irene (797-802): Irene's copper coinage, though very simple, is highly innovative. The *folles* resumes its traditional size for the first time since the end of the seventh century and its flan carries a large traditional M, flanked by the letters XXX and MNN.

The iconography of the obverse is that of the *solidus*, depicting the empress wearing the *loros* and crown with cross, pinnacles and pendilia. In her right hand she holds the *globus cruciger*, in her left the cross sceptre.

Nicephorus I (802-11): The copper coinage of this emperor falls into two classes. **Class 1** belongs to the period of the emperor's sole rule (802-3) and **Class 2** to the period of his reign with his son Stauracius (803-11). No inscription names them and thus there was some controversy over the attribution of the type. Wroth had ascribed the coins to Leo V and his son Constantine, although there is a similar type from their reign with an inscription naming them. Today, however, Grierson's attribution of the type to Nicephorus' reign has been generally accepted. Moreover these anepigraphic

1. *Num. 353* See also D M Metcalf, "The folles of Michael II and of Theophilus before his reform", *HBN*, 21, 1967, 23; *id.* "How extensive was the issue of folles during the years 775-820?", *Syriaca*, 37, 1967, 279

folles are of a heavier weight-standard than the copper issues of the previous period and this would indeed suit Nicephorus' economic reforms, since the emperor himself was a former high official in the financial administration. One wonders whether the introduction of the anepigraphic *folles* by the emperor Nicephorus, could be a further step in order to reform the fiscal administration and coin production. Nicephorus' anepigraphic *folles* would aim at a more flexible petty currency which could circulate regularly without being affected by the change of an emperor.

Michael I (811-3):

The problem raised by Michael I's copper coinage has been discussed often and there are two types which may belong to him: **Class 1** bears on the obverse the bust of an emperor named by an inscription as MIXAHL BASILES. He wears the *loros* and holds a *globus cruciger* in his right hand and a cross sceptre in his left. **Class 2** bears on the obverse the busts of two co-rulers named by the inscription MIXA HL SOEOF'. The reverse of both classes retains the customary large M.

Hoard evidence and the more detailed description of newly discovered material may shed further light on the problem, but at the moment Metcalf's and Grierson's attributions¹ of both types to

1. Metcalf, "The folles of Michael II...", 22-3; *DOC* 364. Morrisson attributes both types to Michael I; see in *BNF*, 504 and esp. note for no. AE/01. For previous attributions see F. de Saulcy, *Essai de classification des suites monétaires byzantines*, Metz, 1836: he attributes class I to Michael I and class 2 to Michael II; Wroth in *BMC*, 406, n. 2 attributes both series to Michael I.

Michael II, the founder of the Amorian dynasty, seem quite probable for the following reasons:

a. -Coins of Class 1 are the only ones of this period depicting the emperor on the obverse wearing the *loros* and holding a *globus cruciger* and a cross sceptre while Michael II's bust on the reverse of his early *solidi* is identically accoutred. Moreover Michael II had his own reasons for adopting a coin type first introduced by Irene¹. Similarly the depiction of the one ruler in the chlamys and the other in the *loros* on class 2 is an innovation which, since it is not followed by Leo V, could belong to Michael II's reign.

b. - Specimens of Class 1 appear to be of exceptional workmanship compared with the bronze coins of preceding reigns. Moreover the treatment of their design is closely similar to gold coinage of Michael II's period of sole rule. Indeed, some details, such as the circlet base for the cross on the crown, the number of jewels in the top row of the *loros*, and the dotted style of the crown, the *loros* and the outlines, are matched on Michael II's early *solidi*. In addition the reverse shows a narrow tall M while on specimens dated in the first decade of the century it is rather squat and broad². There are, however, transitional specimens in an inferior style and with an M reminiscent of those of the previous period³, which may be early in the sequence.

1. Metcalf, *op. cit.*, 22: he connects the issue with events in the civil war at the very beginning of Michael I's reign, and contends that it was struck as hostile propaganda against the rebel Thomas, who claimed to be Constantine VI in order to gain popular support as heir of the Isaurian dynasty.

2. *DC*, 364.

3. i. e. the specimen from Oxford illustrated in *ABN*, 21, Taf. 2, A.

Furthermore, the style and execution of some specimens of Class 2, hardly seem in keeping with that of the end of the eighth and beginning of the ninth century. On some specimens the general appearance of both co-rulers is actually highly reminiscent of the reformed *folles*, which might have been introduced after the end of the civil war in the spring of 824.

c. - a specimen in DOC¹ and another in the Numismatic Museum of Athens², have the inscription ΘEOFΙ instead ΘEOF'.

The copper coinage of Leo V (813-20), the successor of Michael I, no longer raises difficulties³ and is divided into two classes: **Class 1** belongs to the short period of his sole reign (813) and depicts on the obverse the cloaked bust of Leo V holding the cross potent in his right hand and the *akakia* in the left. **Class 2** belongs to the period after Constantine, Leo V's son, was crowned co-ruler at the same year and consequently depicts on the obverse the cloaked busts of the two co-emperors.

1. DOC, 364 and n. 6, 397 no. 8. 6.

2. Athens, Numismatic Museum (=Postolakas 12339a); W=4.79g.; D=20mm.

3. It used to be among the most awkward to identify since the name Leo and Constantine occurs three times in the 8th and early 9th centuries. For detailed stylistic descriptions of specimens of copper coins from the reign of Leo IV, Nicephorus I and Leo V see D.M. Metcalf, "How extensive was the issue...", 281-301.

B. Michael II's copper coinage.

The date 824 marks the end of a chapter in the history of the Byzantine copper coinage. In this year, soon after the end of the civil war, Michael II most probably introduced a larger and heavier *folles*. Moreover on the reverse of the reformed *folles* the immobilized *officina* letter A was replaced by the Θ, so that the initials of the two co-rulers, Michael and Theophilus, dominated the reverse of their copper coinage.

Metcalf has suggested on the basis of metrological details as well as of a detailed stylistic analysis of fifty coins¹ which allowed him to divide the material into three stylistic groups, that two or three mints were at work during Michael II's reign. His groups 1 & 3 are of a weight-standard of about 7.64g, while group 2^{arc} of 8.12g. Metcalf connects the latter with Theophilus' group Γ, and suggests that they may belong to the same small provincial mint. Concerning his groups 1 & 3, although they are of the same weight-standard, he suggests that they may have been issued at different mints, since group 3 is in a very crude style. He writes: "the argument for giving group 3 to a separate mint from group 1 however, is essentially that it would be difficult to imagine nos 1, 14 and 30 as having been produced in the same mint during a reign of nine years...²"

1. Metcalf, "The folles of Michael II...", 24-5. Metcalf's criteria are clearly stylistic - based on the execution- rather than iconographic

2. *Ibidem*, 30-1

Today, however, extra material allows the copper coinage of Michael II to be divided into the following classes¹:

Class 1a: (Appendix I: nos 1-26, Pl.1,2)

The main feature of this class is the rounded portrait of Theophilus. The busts of the two co-emperors are depicted in almost three quarter view and the crosses of their crowns stand on circlets. The three strings hanging from the fibula that fastens Michael's chlamys at his right shoulder are long and each ends in a dot. The accompanying inscription reads MIXAHL SΘ EOFILOS.

A specimen in BMC² appears to represent an early die of the type, where Theophilus' expression is very childish with his lips denoted by two dots and third dot denoting his chin. Its obverse shows very careful and neat workmanship and the style of the portraits should be compared with those on some *solidi*.

In this study, class 1a contains 26 specimens but only two obverse die-links nos.4-5 and 16-17 and only one reverse die-link nos.10-11. Close examination, however, reveals many die-similarities which help to differentiate small connected groups(see Appendix I).

Class 1b (Appendix I: nos 27-42; Pl 2).

This class also depicts the crosses on the crowns standing on circlets. Its main feature, however, is the triangularity of Theophilus' face, which wears a very similar expression to his father, although it is depicted beardless.

1.I am extremely indebted to my supervisor Dr.D.M.Metcalf for allowing me to study his private collection of plaster casts.

2.See Appendix I, no.1.

In addition, Michael's chin is pointed, while on class 1a it is rounded. The busts are shorter than those of class 1a and consequently so are the strings hanging from Michael's fibula.

There are neither obverse nor reverse die-links among the 16 specimens described here. However, stylistic similarities, as well as strong reverse die-connections between the specimens of class 1b reveal small sequences (see Appendix I). A consistent feature of the reverse type appears to be the letter Θ , which is always large and lemon-shaped.

There is, so far, no corroborating hoard evidence to shed some light on the problem as to whether classes 1a and 1b represent successive issues or issues of the same mint made concurrently by two different groups of die-sinkers. True, the portraiture of Class 1a indicates that it could be earlier in the sequence, since Theophilus' effigy appears to be more childlike on it. Moreover the size and weight of the specimen no. 1 of class 1a in our appendix shows that it could be "experimental" and transitional between the *folles* of the end of the eighth and the beginning of the ninth centuries and the version reformed by Michael II. However, the striking of specimens nos 27-29 of class 1b on small flans by even smaller dies suggest that they may also be early experimental issues, strongly interconnected with no. 1 of class 1a by the following reverse die-similarities: a. - the slightly lop-sided short and broad M; b. - the very large Θ , which in nos. 1, 28 and 29 falls below the serifs of the M; c. - the narrow NNN; the fat seriffed cross above the M.

It seems, therefore, highly likely that each of these classes might represent early and concurrent issues of the metropolitan

mint. Some more reverse die-similarities confirm this scheme (see Appendix I)

The portraiture alone allows small closely interconnected sequences to be distinguished within both classes 1a and 1b. However it is difficult to tell whether differences among coins of the same class represent a process of evolution or merely represent different styles produced concurrently. Since there is no hoard evidence, exact sequences of dies of each class cannot be established. Nonetheless sequences linked by similar obverse dies are also linked by similar reverse dies perhaps indicating that each of these small sequences represents issues struck at particular moments.

Class 2:(Appendix I:nos 43-64; Pl. 3).

The main feature of this group is the lack of circlets on the emperor's crowns. The strings of Michael's fibula are longer than on class 1b, but shorter than on 1a; and on some specimens, perhaps late issues of the class, they form a deep triangle, each string ending in a rather large dot.

Class 2 is characterized by a greater variation in its artistic styles.

The execution of nos. 43-48 is quite different from the other coins of the class; they are of the same neat and careful workmanship as the previous class indicating that they could be early issues of class 2, still influenced by class 1. Specimen no. 43 is unique as far as the arrangement of its inscription is concerned and might represent an experimental and transitional issue between class 1 and class 2.

Sometimes the execution is rather stylized, with strong dotted outlines and heavily serifed reverse details (i.e nos 50-54, 57-61), though the expression of the portraiture is very close to the previous run.

Finally there are examples of class 2 in a cruder artistic style (i.e nos 55-56 and 62-64), showing a linear treatment of the locks of the hair, which are designated at the side by a dotted line ending in a schematic tuft. These specimens differ from those of the "crude" class 4 (see below) in the following features: a. - the busts still have rounded outlines and shoulders, while on classes 4a and 4b they are angular and the treatment of the reduced bodies is very flat and linear treatment; b. - the faces are short and triangular with characteristic short triangular noses, while on class 4 the faces are extremely long with long rounded and bulbous noses.

There are neither obverse nor reverse die-links among the catalogued coins of class 2, although some details, on both obverse and reverse, suggest small strongly related sequences (see Appendix I).

Class 3: (Appendix I nos. 65-71; Pl. 4).

This class appears to be quite rare and only 7 specimens of it have been isolated so far. The figures are tall, so that the cross between the emperors' heads has been pushed higher and interrupts the letters SO. The strings of the fibula are very long

1 This is equivalent to Metcalf's group 2; see Metcalf, "The folles of Michael II" " 26

and the crowns lack circlets. Another distinctive feature of the class is the final S of the obverse inscription; it is not parallel with the other letters but its axis points to a position somewhere between 11 and 12 o'clock. The well preserved coins of this group have a mean weight of 8.12g.

Class 4:

Class 4a (Appendix I: nos. 72-89) .

Class 4b (Appendix I: nos 90-104). (Pl. 4, 5).

Class 4c(Appendix I: nos. 105-6).

This class is of the "crude style", the main features of which have already been described. In class 4b the crosses on the crowns are substantially taller than in class 4a, while in class 4c Theophilus appears bearded.

On the present evidence, as in the case of classes 1a and 1b, it is difficult to define the relation between class 4a and 4b. In Class 4b, however, the treatment of the emperor's portraiture with the extremely long faces and the long crosses on their crowns is very similar to class 4c, which undoubtedly represents late issues of Michael's reign. This probably indicates that class 4b constitutes a process of routinery evolution of class 4a.

Though the reverse types of 4a and 4b are in the same heavily seriffed style and in both cases the letters XXX and NNN are broad with fat strokes, they still differ significantly. In class 4a the M is usually very narrow and tall, while in class 4b it varies in form and size. Specimens of class 4c are very rare indeed but the two recorded specimens show a very tall and rather broad M

Class 4c arises also difficulties in fitting into the problem

of Theophilus' age. Treadgold argues¹ that the bearded face of Theophilus confirms his suggestion that he was born around 815, in which case would have been sixteen in 829. However, the general impression from the coins themselves is that Theophilus' bust cannot correspond to a boy of sixteen years old and the beard likewise might indicate an older age for him. Actually the crude style of this group is of very little help in solving an extremely complicated problem.

In conclusion, the iconographic and stylistic study of the available material gives the following evidence concerning the problem of the provincial mints:

Classes 1a and 1b are of a very careful and neat workmanship and were undoubtedly struck at the same mint. The engraving of their dies appears to be homogeneously executed, so that each class may not have lasted long enough to become routinery.

Class 2 is the most problematic. Some specimens are artistically superior to others and we have argued that they may be earlier in the sequence influenced by class 1. The expression and modelling of the portraiture on these coins is also very reminiscent of certain examples of class 1a (i.e. of nos. 14-19). Moreover there are specimens, which show reverse die-similarities to class 1 and especially to class 1a (see Appendix I). All those features indicate that class 2 was a continuation of 1a and consequently issued at the same mint, most probably at a later date. Variation in the style of class 2 may indicate that it was produced for longer than classes 1a &

¹ Treadgold, *The Byzantine Revival*, p. 238 and esp. fig. 38

1b. If so the stylisation apparent on some specimens may be due to routine production.

The evidence for the rare **class 3**, which on present evidence seems to be of a heavier weight-standard, is still very limited and thus no conclusions may be drawn up. Nevertheless obvious reverse die-similarities of class 3 with a number of class 2 specimens (see Appendix I) indicate that both classes were, most probably, produced at the same mint and at very close dates. Moreover specimen no. 65 appears to have been issued by a repaired die of class 2. The possibility that class 3 could be a short and a "special" issue of the metropolitan mint on an important occasion, such as Theophilus' marriage in 821/22, should be viewed, at the moment, with great scepticism¹.

There appear to be obvious reverse die-links between the crude **class 4a** and class 2 (see Appendix I), which suggests that the former was the routine continuation of the latter, probably when the mint met increased demand for copper coinage. Classes **4b** and **4c**, as we have already argued, could represent a process of further evolution of class 4a.

These observations in connection with the fact that the extremely rare specimens of class 4c, depicting Theophilus bearded, are only of the crude style, cast considerable doubts on the existence of a second provincial mint.

1. For the marriage of Theophilus see E. W. Brooks, "The marriage of the emperor Theophilus". *SE* 10, 1901, 540. He dates it in 821/22. However Treadgold dates the marriage in 830; see "The problem of the marriage", 340.

Given the lack of hoard evidence, supplementary way of resolving uncertainties about the provincial mints is to map out the recorded specimens, though an insufficient number are of known provenance (see Fig. 1).

Fig. 1

Classes	1a	1b: Total	2	3	4a	4b	4c: Total
Corinth	1	1			1		1
Athens	1	1					
Thessaloniki			1				
Istanbul	4	5	9	5	3	5	8
Pergamum	2	2					
Sardis	2(?)	2					
Izmir	2	2			1	1	2
Antalya					3		3
Trebizond	1	1			1		1

The details of their provenance may be summarized as follows.

The specimens from **Athens** and **Corinth** come from the American excavations there.

The specimen from **Thessaloniki** was purchased from a private

1. Ap. I. nos. 26, 101, 22.

2. Ap. I. no. 51.

individual there together with a pre-reform *folles* of Theophilus' sole rule. We do not know exactly where they came from or whether they were found together. However the *folles* of Theophilus shows a neat and careful workmanship suggesting that it may have been minted at the metropolitan mint. If so, once again a coin of Michael II's reign of class 2 appears closely related to the Constantinopolitan mint and coins minted there were evidently circulating in the vicinity of Thessaloniki by 829.

The 22 specimens from **Istanbul**¹ come from the bazaar and only the provenance of two of them, which come from Istanbul itself², is known, though others may have been brought from Asia Minor. There are also 18 identifiable coins from the excavation of the church of St. Polyeuctus, and all belong to the "group of neat style and careful execution..."³. Unfortunately neither detailed descriptions nor some illustrations of the coins themselves are available and it is not possible to classify them in their appropriate class.

The specimens from **Pergamum**⁴ and **Sardis**⁵ were discovered during the excavations there.

Three specimens are said to come from the vicinity of **Izmir**⁶ while

1 *HEW* no. 13 and *Ap. I.* nos. 10, 11, 18, 28, 33, 36, 38, 40, 44, 57, 60, 62, 64, 71, 77, 82, 86, 90, 97, 98, 99, 100).

2. *Ap. I.* no. 71 and *HEW* no. 13.

3 Hendy, *Studies in the Byzantine Monetary Economy*, 424, n. 234, 425, id "The coins" in *Excavations at Sarcophane*, 339

4 Metcalf, "The Folles of Michael II...", 31.

5 G. E. Bates, *Byzantine Coins, Sardis M1*, Harvard, 1971, 122 nos. 1107 & 1108. Unfortunately they are not illustrated and though they are described as being of Wroth's type 6 (= *Ap. I.* no. 1), one wonders whether they really are of a similar die and have the same "experimental" character.

6 Metcalf, *op. cit.* The coins are from the H. P. Berrell collection.

fourth specimen¹ in the Numismatic Museum of Athens may come from the same area since it was donated by a Greek diplomat stationed there.

Three coins, also in the Athens Museum, may come from the area of **Antalya**², since they were donated by the Greek vice-consul there

One specimen surely was found in **Trebizond**³, while another one from Professor Bryer's collection may come from here or from the neighbouring area⁴.

The evidence from the geographical distribution of the classes is still fragmentary and gives few solid clues. One's first impression, however, is that the different classes and styles are rather intermingled except at the excavation of the church of St. Polyeuctus. Nonetheless coins of the crude style make up a higher proportion of the finds in Asia than in Europe. This, however, does not constitute evidence for an attribution of a provincial mint to the Asia Minor coast. Eventually class 4 of the "crude" style might reflect a massive minting in the course of Michael's reign, and its higher occurrence in Asia Minor might be due to the war enterprises undertaken in this area around the year 825⁵.

The issue of coins in unequal styles at the same mint, the one in the capital, could simply mean an innovation in the administration of coinage production in order either to confront or encourage the increased demand for the petty currency

1. Ap. I. no. 80.

2. Ap. I. nos. 78, 79, 88.

3. *HEB* no. 36.

4. Ap. I. no. 41.

5. Treadgold, *The Byzantine Revival*, 248 and n. 345.

Certainly among the 106 *folles* of Michael II examined in the present study, there is only one obverse die-duplicate and this indicates that the reformed *folles* of Michael II were struck in large quantities.

In conclusion, on the present evidence drawn from both numismatic criteria and geographical distribution the identification of a provincial mint during Michael II's reign is still very dubious. Nevertheless, the whole problem of provincial mints will be the focus of a similar study for Theophilus' copper coinage.

C. Theophilus' copper coinage.

The copper coinage of Theophilus is of three classes. One shows the bust of Theophilus alone (**Class 1**), another shows Theophilus with his son Constantine (**Class 2**) and, finally, there is a reformed type on which the traditional mark of value on the reverse is replaced by an inscription several lines long, as on the silver coinage (**Class 3**).

Following the suggested chronology of Theophilus' gold coinage, Class 1 might be the first issue of the reign covering the period from the emperor's accession to the throne, at the end of 829, until Constantine's proclamation as co-emperor sometime in 830. The reformed *folles* have been connected with the triumph of 831 and appear to have been issued up to the end of the reign, since there is no copper coinage with Theophilus and his son Michael III from 840 onwards. Consequently Class 2 may cover the period from 830 to 831, when Constantine died.

Class 1 (Appendix II: nos. 1-45; Pl. 6).

On its obverse this depicts the cloaked bust of Theophilus holding the patriarchal cross in his right hand and the *akakia* in his left. The inscription begins with an asterisk, located below the patriarchal cross, and a dot. This initial dot is found either beside the cross, near top of the cross or above it.

The iconography of the type is fairly uniform, although there are slight variations in detail. For example, on some specimens the left sleeve of the emperor's *divitision* protrudes from under the

chlamys, and is elaborately decorated (i.e nos.1,2,15), while on others it is concealed by folds of drapery with only its cuff in view. Similarly the patriarchal cross sometimes lacks its stem (i.e nos.7,16,17,24-43), while on others the emperor's right arm, holding the cross, is more extended making the rosette on the upper part of its sleeve longer and more oblique (i.e.no.21).

In addition, the style of portraiture, the artistic execution and the fabric of a group of coins described in our catalogue as class 1b (nos.24-43) distinguish them from the rest of class 1a (nos.1-23).

Specimens of 1b are apparently stylistically inferior to 1a, though by no means as crudely executed as Michael II's class 4 or Theophilus' class 2. The size of the emperor's body is reduced, with the drapery of the chlamys contracted though arranged similarly to that of class 1a. Moreover Theophilus' face on some specimens of 1b, is broad, with a bulbous nose (nos.24-27) or spade-shaped (nos.28-30) Additionally all the specimens of class 1b have a compact reverse type with a narrow, often lop-sided M in a heavily seriffed style. Their flans are generally small¹ and they are most probably of a lighter weight-standard than class 1a: the 17 specimens of 1a have an average weight of 7.30g.², while the average weight of the 16 specimens of 1b is 6.42g³.

1.The average diameter of the 20 specimens of class 1b is 28mm, while that of the 23 of class 1a is 30mm.

2.This weight is some 0.30g. less than the catalogued *folles* of Michael II.

3.Class 1b shows considerable inconsistencies: for example nos.28 and 37 weight 8.0g. and no.35 8.29g., but these high values are probably aberrations without significance.

The different metrology of the two subclasses as well as the difference in style, again provoke the question as to whether a second provincial mint was in operation at the beginning of Theophilus' reign. However, information about the provenance of the coins is so scant that a geographical survey is of no help in shedding some light on the problem. The two stylistic groups of class 1 appear intermingled, as in the case of the previous reign: there is one coin of class 1a from Thessaloniki¹ and one from Sardis², while three specimens of this class were purchased at Istanbul, though their exact origin is unknown³. Two folles most probably of 1a are reported also from the Corinth excavations⁴. Three coins of 1b come from Asia Minor⁵ while eight come from the bazaar of Istanbul⁶, though again they are of unknown origin.

At the moment the available material itself may afford clues to some features of Byzantine mint-organization and practice. Since class 1 may only have been issued for about a year, the differences among its specimens might indicate that the production of copper coinage had already started to increase, necessitating extra recruitment of mint labour. Moreover the different weight-standards hint at a more flexible use of the *folles* in different

1. Appendix II no. 14.

2. Appendix II no. 16.

3. Appendix II nos. 6, 19, 23.

4. D. M. Metcalf, "Corinth in the ninth century: the numismatic evidence", *Hesperia*, 42, 1973, 216; these *folles* are described as of the same type as Wroth 15-16, which suggests that both belong to class 1a.

5. Appendix II nos. 25, 41, 43.

6. Appendix II nos. 24, 27, 30, 31, 32, 34, 38, 39.

geographical areas and for different purposes. For instance, Theophilus' class 1b might represent issues for the payment of the troops campaigning in Asia Minor, where prices for every day transactions might have been lower than in the metropolitan territory.

A specimen of class 1b from Turkey (no. 43) also raises doubts as to the existence of provincial mints. It shows Theophilus' face with rather bushy locks of hair and is very reminiscent of Metcalf's groups S' or Z' of Theophilus' reformed class 3. Its provenance from Asia Minor excludes it to be viewed as an early issue of a Greek mint in the Peloponnese and Hellas, to which Metcalf attributes his groups S' and Z' respectively. Most probably it represents a further stylistic variation of class 1b executed by a new group of die-sinkers added later to the imperial mint.

Both subclasses are very compact and without hoard evidence the chronology of their dies is unclear. However, Class 1a, should be earlier in the sequence than 1b, not only because of its more elaborate style but also because specimens of this series show signs of restriking on *folles* of Michael II¹.

A specimen, formerly in Goodacre collection, shows an interesting variation of 1a² (no. 44). The inscription reads ΘEO FIL instead of the normal ΘE OFIL and the emperor's long face is quite different from that on the other specimens. The patriarchal cross has a foot, and the strings of the fibula are very long and in the dotted style. The drapery of Theophilus' chlamys covers the arm holding the *akakia*. There is also a

1. See Ap. II:nos 1 & 2.

2. *HBN* 67.

very irregular specimen of class 1 in an extremely barbarous style with faulty outlines, nonetheless connected it with the above specimen by some iconographical details: the inscription is broken ΘEO FIL; the cross has a similar foot of which the ex-Goodacre specimen provides an otherwise unique example. The coin may be a contemporary forgery by an unskilled, not necessarily Byzantine workman, who had in front of him a specimen similar to Goodacre's, or it may be a pattern coin. If so, Goodacre's specimen, which may be characterized as an experimental type, represents the earliest issue of class 1 and was probably a special issue on Theophilus' coronation.

Class 2 (Appendix. II: nos. 46-49; Pl. 6).

This rare class depicts Constantine smaller than his father, but generally reproduces the type used by Michael II with his son Theophilus. However the size of the figures has been reduced recalling the "miniature" style of some specimens of Michael II's class 1a. The exaggeratedly tall crosses on both emperor's crowns and the style of execution generally is highly reminiscent of Michael's class 4b in the "crude" style, although the outlines of the bodies are not so linear. The reverse has a broad and tall M with a large Θ below it. A similar M occurs on some specimens of Michael's class 4b but the large Θ is very similar to specimens of class 1b.

Class 3: (Appendix III:nos. 1-378).

The reformed copper coinage of Theophilus raises even more complicated problems with regard to the existence of provincial mints. The emperor seems to have reformed the copper coinage not only by introducing a new type, but also by furthering his father's innovations. Stylistic and metrological differences between the various issues have once again raised the problem of provincial mints. There is no literary evidence for this, however, and the different criteria upon which scholars have based their stylistic groupings have led to disagreement on the subject. Nonetheless, controversy is restricted to the number of provincial mints which may have been in operation, since almost all scholars agree that some of Theophilus' *folles* in "bolder and rougher workmanship" should be assigned to a mint outside the capital.

The possible operation of provincial mints under Theophilus was first suggested by M. Metcalf¹. He divides Theophilus' copper coinage into eight stylistic groups, A-H, which he assigns to eight different mints as follows:

Group A, which is divided into four subgroups, is assigned to Constantinople.

Group B, which is divided into two subgroups is assigned to the metropolitan region, perhaps on the Asian coast of the Propontis.

1. D. M. Metcalf, "The new bronze coinage of Theophilus and the growth of the Balkan themes", *ANSMN*, 10, 81-98; *id.* "The reformed folles of Theophilus: their styles and localization", *ANSMN*, 14, 1968, 121-53; *id.* "Corinth in the ninth century: the numismatic evidence", *Hesperia*, 42, 1973, 180-251; *id.* *Coinage in South-eastern Europe...*, 29-31.

Group Γ, is attributed to the metropolitan region of western Asia Minor.

Group Δ, which is of a lighter weight-standard than the other groups, was originally assigned to Thessaloniki on the grounds that its coins are numerous and must have been minted at an important city some distance from the capital, while the mint of Thessaloniki often showed a curious preference for smaller standard-weighted copper coinage. New evidence and the present lack of group Δ coins from the Thessaloniki region caused Metcalf to abandon this attribution. He suggested instead that it might represent reduced-weight (military?) issues circulating within the frontiers of modern Turkey¹. Whatever the true provenance of group Δ, he remains adamant that coins of this group should not be regarded as half-*folles*, since they have not been found at the Corinth excavations, where the number of *folles* demonstrates a remarkable recovery of the petty-currency during Theophilus' reign.

Group E, which is very rare, is assigned to a small, unidentified provincial mint, possibly in Greece.

Group S', which is divided into two subgroups, was originally attributed to central or southern Greece, most probably Corinth, while **group Z**, which is also divided into two subgroups, was originally attributed to a roughly similar region, most probably Thebes. However, though coins from both groups were plentiful at Corinth, the evidence from Thebes seemed negative. Moreover, a series of so-called "mule" specimens of groups S' and Z were discovered: 1 at Corinth and 4 in the Istanbul bazaar¹. Thus

1. D.M.Metcalf, "Links between stylistic groups among the reformed folles of Theophilus", *NCirc*, 84, 1976, 6-7.

Metcalf argued that S/Z "mules" provide evidence that both groups were produced by the same mint; and yet stressing the problems raised by such a theory, not least as regards the different weight-standards of the two groups, he concludes that "to describe the S/Z coins as mules is probably misleading".

Group H. which shares the weight-standard of group S, was originally ascribed to an uncertain small provincial mint or to the same mint as group S. Metcalf does, however, now call for investigation of a possible link between group H and Δ in view of certain stylistic resemblances.

The variations in design, which Metcalf used as criteria for his classification of the coinage into eight stylistic groups, may be summarized as follows: a.- the shape of the emperor's *tufa* and the number of dots which decorate it; b.-the treatment of the free end of the *loros*, as well as its transverse and skirt panel; c.- the proportions of the emperor's figure; d.- the position and number of fingers within the circle of the *globus cruciger*. Other, minor, details permit further classification into subgroups. These include: the treatment of the drapery over the emperor's left hip and right arm; the presence or absence of pendants on the banner of the *labarum*; the decoration of the *labarum* with a linear or dotted cross; the placing of its staff behind or in front of the emperor's arm; the treatment of the emperor's locks of hair. Additionally, he lists the following factors which might supplement the stylistic evidence in helping to identify different mints: the metrology; the regional distribution of the different groups; and finally the existence of the so-called "mule" coins, which are especially useful in tracing links between or among stylistic groups.

Other scholars, concentrating on other details, have arrived at other arrangements. For instance, Bellinger¹ emphasises the treatment of the *globus cruciger* held by the emperor, which is sometimes depicted as a well-defined circle but on occasions has a convex bulge. According to Bellinger, variations only in design could be attributed to the operations of provincial mints on the assumption that the mint-authorities would prefer noticeable alterations in order to control the output of each provincial mint.

Marx², on the other hand, has proposed groupings based on the presence or absence of streamers on the banner of the *labarum*.

In his classification of the DOC, Grierson divides the reformed *folles* of Theophilus into four subgroups (= Class 3a-3d): a "normal" type; a type with a squat figure of the emperor; a type without a free end of the *loros*; and finally a type without streamers on the banner of the *labarum*. He treats Metcalf's group Δ as half-*folles* and consequently divides it into three subgroups: a type with a normal *loros*; a type with a reversed *loros*; and finally a type with a small cross in the right of the obverse field.

New material collected since Metcalf's studies, tends to confirm his stylistic groups, although their attribution to certain provincial mints still remains problematic. 378 coins are described in the present work, though of course not all are previously

1. A.R. Bellinger, " Byzantine notes, 4. Metcalf's arrangement of the copper of Theophilus", *ANSMN*, 13, 1967, 136-41.

2. M. Marx, " The stylistic varieties of the reformed folles of Theophilus", *The Voice of the Turtle* (North American Journal of Numismatics), 5, 1966, 47-51.

unpublished. Coins illustrated in *DNC*, *DM* 10, *DM* 14, *MCirc* 84, *BNF* and various Sale Catalogues have been included in an effort to gather as much material as possible, while an attempt has been made to illustrate as many specimens as possible especially those not illustrated elsewhere. The result is as complete a picture of the period's coinage as is at present possible. The catalogue of Theophilus' reformed *folles* adopts Metcalf's scheme, and it appears to work very well indeed. Significant details occur together so consistently as to rule out coincidence. Whatever the interpretation placed upon the resultant stylistic groups, classification of material by style of execution and points of detail is an accepted archaeological technique.

Group A (Appendix III: nos.1-65), Table VII, Pl.7-9.

A/1 (Appendix III: nos. 1- 22).

The main features of this group may be summarized as follows

The drapery is invariably elaborate: two slightly curved lines are usually depicted between the emperor's right arm and the inside fold of his *loros*, presumably denoting the crease of the *divitision*. However, sometimes, most probably in later issues, there is either only one line or none. The drapery of the *divitision* over the emperor's left hip is represented by a thick oblique line forming the outline, and a thick curved line which meet to create a mirror image of the Greek letter λ. Thinner shading lines fill the intervening spaces. On some specimens the drapery is simpler, with less shading and a less pronounced curve to the main fold.

The *tufa* is usually decorated with six dots and is generally shaped like a fully opened fan. It may sometimes, however, be narrower or lop-sided and dots may be added or omitted.

The *labarum* is roughly rectangular though variants may have a slightly larger banner with pronounced dots at its corners (nos. 14, 15, 19).

The neckline is usually round, though in some cases it may be "boat-shaped" and there is sometimes a dot at emperor's throat (nos. 14, 15, 17, 19, 20). According to Metcalf's classification of group A the "boat-shaped" neckline is a feature of subgroup A/2 while the dot at the emperor's throat a feature of subgroup A/4.

The transverse and skirt panel of the *loros* usually bear $7 \frac{1}{2}$ or $6 \frac{1}{2}$ and 5 or 4 dots respectively, though the execution is sometimes imperfect. The dots are usually small but larger dots do occur (nos. 12, 13).

The free end of the *loros* is normally rectangular with dotted or undotted (nos. 4, 5, 16) square panels. On some "good" examples its outer edge also carries a row of dots (nos. 1, 2). In one case the free end of the *loros* also has dotted intersections (no. 19), while in three others it inclines to the triangular (nos. 14, 15, 20).

The treatment of the emperor's portrait may be used as a basis for dividing the specimens of subgroup A/1 listed in this catalogue into six smaller runs (See Appendix III).

The first three runs (a, b, c) exhibit no real stylistic peculiarities. The obverses of each run are either die-duplicates

or very close copies of each other indicating that they may represent early and limited issues which would clearly have a low survival ratio.

The other three runs (d,e,f) show a gradual stylization especially in the treatment of the drapery, although the emperor's portraits differ only slightly from each other.

Specimen no.19 of run f, has been catalogued in Metcalf's scheme under subgroup A/2 as "a careful early die". The existence of two similar dies (nos.20,21), showing further stylization, merely in the execution of the drapery, suggests that this run probably simply represents late examples of sub-group A/1.

Finally there is a strange specimen (no.22) of which the attribution to A/1 is based on the following observations: the emperor's portrait is very similar to that of run b; the *tufa* is scallop-shaped and very similar to that on no.8, though slightly larger and decorated with seven dots (table.1); it depicts a small rectangular *labarum* with small parallel pendants; the drapery of the emperor's *divitision* is very similar to that on runs e & f, and the free end of the *loros* is rectangular.

The coin deviates in one important respect from those of group A/1: the transverse panel of the *loros*, which is decorated with 7 pairs of dots, is curved- a detail which normally occurs in group Γ, but also on specimens of group A/4. Further, one may recognise some other minor deviations: the skirt panel of the *loros* has only 3 1/2 pairs of dots; the word BASIL bears an Δ , which according to Metcalf's provisional classification is a feature of subgroups A/3 & A/4, but a similar small Δ occurs on the specimens

of runs e & f(nos.17-21); the fingers of the emperor's left hand appear to be slightly oblique, which is also a feature attributed by Metcalf to group Γ; but oblique fingers also occur on some specimens of group A/1 catalogued here (i.e nos.4,5,19). Finally, the reverse of no.22, although resembling reverses of A/1 (i.e.no.12) that, has an S instead of a in AVG, and also bears an opened C in NICAS, reminiscent of some examples of Group A/3 or S.

Coin no.22 may represent a late issue of subgroup A/1 made by a die-sinker, who modelled it on run b but added his own stylistic touches. Since its treatment is still not far removed from the original, it may simply presage the development of a new style.

Group A/2

(Appendix III: nos.23-32).

The imperial portraits of group A/2 are more uniform than those of A/1. The emperor is depicted with a rather broad and spade-shaped head. His nose is round-tipped and his beard is depicted by a thick, rather clumsy line around the jaw. The locks of the wavy hair have less body than on A/1 and the shading is achieved by straight oblique lines showing a rather hasty execution. The locks on the right sometimes appear to be curlier and fuller than those on the left.

The treatment of the other details is also homogeneous. The drapery of the *divitision* over the emperor's left hip does not show any undulations. It is denoted by a thick slanting line, which also outlines itself and the *loros*, being shaped like the "mirror-image" of an N. The internal folds are shaded with thinner vertical lines. The neckline may be a shallow or a

deeper semicircle. The free end of the *loros* is short and may be rectangular (nos. 28, 29, 32) or triangular (nos. 23, 27, 31) dotted, (nos. 23, 28) or undotted (nos. 27, 29, 31, 32).

The only major variable in the pattern of our A/2 specimens, apart from the number of dots on the panels of the *loros*, is the form and decoration of the *tufa*.

On A/2 coins the cross on the *globus* is either placed underneath the right half of the inscription or is moved slightly to the left, so that its upper limb is squeezed between the two last letters or touches the L.

One of the ten A/2 examples listed here, carries a portrait which is very different from the other examples although its main features conform with those of the subgroup. Significantly its reverse links it closely to no. 23, but the emperor's face, expression and hair style, and the slightly lop-sided neckline, are extremely similar to nos. 1-3 of A/1, although the shape of its *tufa* is very peculiar (see Appendix III, no. 32). This specimen may well provide a clue as to the relationship between the two subgroups: group A/2 might initially represent the mechanical copy of run A/1a. Indeed A/2 should be considered as a variant of A/1 in a more extreme style.

Group A/3 (Appendix III nos. 33-45).

Subgroup A/3 exhibits considerable variety, both in the treatment of the emperor's portrait and in its general workmanship. This may suggest that, like the subgroup A/1, it was produced by several die-sinkers who developed their own styles independently.

Nevertheless some common features are distinguishable which may be summarized as follows:

The drapery of the *divitision* over the emperor's left hip is simple and linear. It is denoted by slightly curved, parallel lines which vary in number and so affect the whole structure of the emperor's body. The right of the body is almost entirely obliterated under the wide *divitision*, and the transverse panel of the *loros* which passes beneath the emperor's right arm (nos. 40-45). A more naturalistic treatment is achieved on other specimens where there are fewer shading lines (nos. 33-39).

The treatment of the emperor's left cuff is so schematic as to mar the whole design. On some specimens, for example, it consists merely of two cramped lines, so that the *globus cruciger* touches the emperor's left shoulder and only the four fingers shown on the *globus*, represent the emperor's left arm (nos. 33, 36-41, 43, 44). A rather more satisfactory treatment is found on the other four specimens (nos. 34, 35, 42, 45); at least there is a gap between the *globus cruciger* and emperor's body, though the depiction of the cuff is still very linear and on no. 34 it overlaps part of the right edge of the transverse panel of the *loros*.

The design of the *globus cruciger* and its disposition relative to the inscription also seems to have caused the die-sinker(s), some difficulty. For example, the cross is placed asymmetrically on the *globus* on nos. 36, 40, 41, 44 and obliquely on nos. 42 and 44, while a mis-shapen cross surmounts an ill-defined *globus* on nos. 37-39. Only four coins show a better arrangement: on nos. 33 and 45 the *globus* bears a tall, narrow cross which fits comfortably

between the inscription and the emperor's head, while nos. 34 and 35 depict the *globus cruciger* beneath the inscription.

The free end of the *loros* is generally shown as a long, sometimes very narrow (nos. 40 and 41) triangle, divided into four or five pairs of undotted squares. It is true that the *loros* on no. 45 is almost rectangular, but this specimen, as we shall see later, appears to be an "experimental" issue. The free end is normally oblique to the emperor's body, so that it no longer seems to hang from the emperor's left wrist. A more naturalistic treatment occurs on nos. 33, 34 and 45, where it is depicted parallel with the emperor's body.

The *labarum* normally has a tall, square banner with a pendant at an oblique angle on each side of the staff. There are some deviations, however. For example, although the *labarum* of nos. 37-39 has a typical A/3 banner, this carries two parallel pendants at its lower corners. The banner of no. 35 has a left pendant running obliquely away from the staff and a right pendant sprouting at a slight slant from the lower side of the banner.

The portraiture of group A/3 enables the identification of four main runs of coins (see Appendix III).

Specimen no. 45 is the most intriguing of the thirteen A/3 specimens listed here. At first sight its attribution to group A seems rather dubious for it has a half-moon shape which is one of the main features of group B/2 (see below). In addition, two other elements suggest an attribution to group B: the squat *labarum* carries two very short pendants, and the obverse inscription reads BASILE instead of BASIL with a contraction mark joined to the E.

Moreover the contraction mark after ΘEOFIL has been omitted. A similar obverse inscription is also found on some specimens of group B.

Despite all these new features, however, no.45 should still be attributed to group A/3 for several reasons: firstly, the drapery over the emperor's left hip is more elaborate than is normally the case on group B, where the *divitision* appears very narrow; secondly, the emperor's portrait, as well as the treatment of the hair, is more closely related to group A/3, especially to no.44, than to group B; thirdly, on no.45 the free end of the *loros* is divided into panels, while specimens of group B are unique in representing it by three parallel lines.

Similarities between the reverse die of no.45 and other A/3 specimens also suggest an attribution to group A/3. The specimens which seem closest in style to its reverse die are nos. 43 and 44. No. 45, therefore, may be represent "transitional" specimen between the two groups A/3 and B.

Stylistic analysis and the comparison of reverse dies also allow us to determine the relation of subgroup A/3 to A/1 . There appear to be definite affinities with A/1, which suggests that A/3 may have developed from it (see Appendix III).

The A/3 specimens with reverse dies suggesting a link with A/1, have obverse portraits in a linear style quite different from the portraits of A/1. However, deviations from the initial design on some A/1 specimens appear to presage the style of A/3: runs A/1d and A/1e, for example, show a tendency towards stylization and simplification of the *divitision* with

the replacement of its curved main folds by a straight one. In addition, minor details of their treatment of the *labarum*, the *globus cruciger* and the lettering of the obverse are faintly reminiscent of A/3.

Group A/4. (Appendix III nos. 46-65).

This group is divided into two main categories: the first depicting the staff of the *labarum* behind the emperor's right arm; the second in front of it.

Both categories are extremely similar as regards the emperor's portraiture and the main features which characterize the group. Nevertheless later examples of the second category, which appears to be the more common, show a gradual process of linear stylization.

The chief feature of group A/4 is the treatment of the emperor's *tufa* which is normally scallop-shaped and decorated with four bold dots. Of the twenty specimens described here, only three (nos. 48, 49 and 51) show a differently shaped *tufa*, which is six-dotted and rather elongated and narrow.

The treatment of the free end of the *loros* also constitutes a distinguishing feature. It is normally a short rectangle divided into three pairs of undotted panels and ending in a three dotted fringe, though on some, apparently late examples, it may be narrow and triangular or lack the fringe (nos. 59, 60, 65, 66).

The drapery of the *divitision* over the emperor's left hip is simply denoted by three parallel shading lines.

The emperor's portrait is a very distinctive feature of the group under consideration. The rather broad head is almost

invariably well-rounded with a round jaw. Some late examples, however, depict a long triangular face with a slightly different expression. The features described above enable three runs to be distinguished (see Appendix III).

Group A/4 shows close links to group A/1. More precisely the specimen no. 22 of group A/1 depicts a *tufa*, which has exactly the same shape as group A/4 (scallop-shaped). It depicts also a slightly curved transverse panel of the *loros*, such as occurs on A/4 coins, while the emperor's portrait differs from other A/1 examples. It seems probable that coin no. 22 could be considered as transitional, but nonetheless still appears to belong to A/1 because of its artistic execution and distinguishing features. In addition there is a considerable number of reverse-die similarities between the two groups (see Appendix III). This suggests that they could represent issues of a close date, or even contemporary, made by two different groups of die-sinkers. On the contrary, group A/3 probably constitute the evolution of group A/1, though a certain number of die-sinkers were responsible for their production. Finally group A/2, as already mentioned, may represent a variant of group A/1.

Group B (Appendix III nos. 66-114). Table VIII, Pl. 11, 12.

In Metcalf's scheme, Group B is divided into two subgroups on the basis of the treatment of the drapery over the emperor's left hip and the shape and decoration of the *tufa*. The two subgroups are linked by common features of design, similar workmanship and

close affinities between their reverse dies. One distinctive common feature is that the free end of the *loros* is not divided into panels but merely depicted by three parallel lines generally terminating in a four-dotted fringe. Moreover, the transverse panel of the *loros* itself has diamond-shaped panels. Both subgroups show considerable internal consistency regarding their treatment of the emperor's portrait, the details of the drapery, the *leberum*, the *globus cruciger*, the free end of the *loros* and the lettering of the obverse inscription. Minor differences between the two subgroups and among individual specimens, however, do exist and deserve brief mention.

B/1 (Appendix III: nos. 66-96).

Two main runs of coins may easily be distinguished on the basis of their execution, since the portraits vary little.

There are specimens in a more elaborate style than others (i.e. nos. 66-68). Three curved lines represent the drapery of the *divitision* over the emperor's right arm, while the free end of the *loros* has a wind-blown appearance.

Other specimens show a progressive stylization involving a gradual reduction in the number of shading lines over the emperor's right arm, until they finally disappear altogether.

The *tufa* is almost always lop-sided, and normally six-dotted, although these are quite often asymmetrically or faultily disposed. There are, however, deviations (see Appendix III).

B/2

Although group B/2 carries a quite similar portrait of the emperor, it appears to be simpler than B/1.

The emperor is depicted with a narrower body resulting in a shorter transverse panel to the *loros*, while no drapery is indicated over his arm.

The *tufa* is always half-moon shaped but the number of its decorative dots varies (see Appendix III).

In the absence of hoard evidence, the chronological sequence of the two subgroups remains obscure. Some unusual specimens, however, may provide useful clues, not only as to the relationship between the subgroups themselves, but also as to their relations with other groups, especially group A.

Specimens of both B/1 and B/2 show very close reverse affinities with specimens of A subgroups (see Appendix III) indicating that Group B might have been the output of the same mint as group A, which plausibly continued to be issued concurrently.

More precisely, as has been already mentioned, there is evidence that B/2 may have originated from A/3 and in particular from the very unusual specimen no. 45 with a half-moon shaped *tufa*. Significantly the obverse inscription of this transitional coin reads ΘΕΟΦΙΛ ΒΑΣΙΛΕ, which may imply that examples of B/2 with a similar inscription belong early in their group. The reverse of no. 45 also bears certain resemblances to some B/2 specimens (i.e. no. 104).

In addition, reverse similarities connect early coins of A/4 very closely with some specimens of B/1 in which the closest to group A reverse dies also appears to be concentrated (see Appendix III). It seems, therefore, quite probable that B/1 antedates B/2.

This confirms our suggestion that subgroup A/4 might have been a concurrent issue of A/1 and consequently might be earlier than A/3, from which group B/2 has been evolved.

The development of a new style probably indicates an increase in coin production during the issuing of group A. As a matter of fact Group B shows a compact character and its features are not found elsewhere (*tufa*, three-line free end of *loros*). Furthermore, although it is of rather neat workmanship, the lop-sidedness of the *tufa* (B/1) and the quite frequent asymmetry assumed by its dots betray hasty execution. Finally, the three-line treatment of the free end of the *loros* may be not a stylistic idiosyncrasy of the group's die-sinker(s). It could represent a deliberate simplification of the original design to speed up minting or to make the issue more distinctive in order to send it to a particular or to different geographical areas. The latter might seem to be a very primitive method of control, but one should not forget that standards of minting during the first half of the ninth century may well have been inadequate to meet the new demands imposed by Theophilus' reform. Nevertheless, arguments based only on stylistic details are inconclusive regarding the mint administration.

Coin no. 94 apparently belongs to group B, but differs from most other specimens in certain unusual respects. It has been included in group B/1 because of the shape of its *tufa*, and the three-line form of the free end of the *loros*. Moreover its reverse, with the small and rather widely-spaced lettering, with a T having its bar dropped, strongly recalls some B/1 reverses (i.e. no 93). It deviates from other coins of both B subgroups in some important

details, however, and these deviations may be summarized as follows:

First, the emperor's portrait is larger and longer than on B specimens and the hairstyle is more elaborate, with delicately curled locks of hair.

Second the skirt panel of the *loros* is broad and its sides converge rather than run parallel, as on group B specimens, while the entire obverse design is in the dotted style.

This is a very intriguing and seemingly unique specimen, and the only example which might be compared with it is no. 95. Unfortunately, this is in such poor condition that its attribution to group B is rather tenuous. Nevertheless the right part of the inscription (BASIL) includes a contraction mark typical of group B and the letters are of the same distinctive type as those on no. 94, though smaller. In addition details such as the treatment of the emperor's left arm and the orb, the representation of the *labarum* and its staff as leaning slightly to the left, and the dotted style, closely link the two coins.

The reverse letterings of both specimens under consideration (nos. 94 and 95) are in a crude style and cut in semicircular furrows very much reminiscent of three A/1 reverses (nos. 8, 15, 20). One wonders whether it could be a mere coincidence or one more indication that group B/1 started to be issued at a time when A/1 was still being issued.

Finally, nos. 94 and 95 may well be distant forerunners of group ζ' (see below), and especially subgroup $\zeta'/1$, with its long portraits, dotted style, leaning *labarum* and crude reverses.

One more problematic coin from a private collection has also been included in group B (no. 96).

The dies of both sides were unusually lightly engraved and several details of the obverse design, notably the emperor's left arm holding the *globus cruciger* and the outlines of the emperor's figure, are treated clumsily and in the dotted style. Metcalf has, therefore, classified the specimen very early in the history of the reformed *folles*. The technical defects in the obverse design, however, argue against this, although the reverse shows a calligraphic influence.

Actually its reverse type is very similar to some A/3 examples (nos. 43-45). This is particularly significant, since no. 45, as has been already mentioned, may be a transitional type between A/3 and B/2. If so, specimen no. 96 could be considered as an experimental issue of a new series, which being started issued at the mint at a date very close to group B/2.

Finally, the obverse die of the coin under discussion, may have actually been modelled on nos. 94 and 95, which it strongly resembles in its dotted style and the emperor's portrait and hair.

Group F. (Appendix III: nos. 115-134; Pl. 11, 12).

The obverse types of this group seem to be extremely uniform although they differ slightly as regards the size of the emperor's face and in certain minor details such as the number of pairs of dots on the panel of the *loros*. The main features of the group may be summarized as follows:

The emperor's face is long and broad and dominates the entire

design. It has a bulbous nose and is flanked by serrated locks of hair.

The transverse panel of the *loros* is slightly curved and is normally decorated with 5 1/2 pairs of dotted panels, though some examples have either 5 or 4 1/2.

On some apparently early examples, the free end of the *loros* receives a rather elaborate treatment; it is long and rectangular and is divided into 4 (no.115) or 5 (no.116) pairs of panels, with a row of dots along the outer edge. Two other specimens (nos. 117 and 118) have 3 pairs of panels, while all the rest carry only 2 pairs of dotted panels on a short and almost square free end to the *loros*.

The skirt panel is rather short and generally divided into 2 1/2 pairs of squares, but again there are exceptions (see Appendix III nos.115 and 116). The *tufa* is elongated and always six-dotted.

A distinctive feature of the group, apart from the sardonic imperial portrait, is the drapery of the *divitision* over the emperor's left hip, which is very reminiscent of subgroup A/2, forming a mirror image of an N.

On some examples the reverse lettering is deep and rounded in section, while on others it is heavily seriffed and occasionally shows a calligraphic influence (i.e the T on nos. 127 and 132). The Θ's and O's are generally lemon-shaped, the n has an angular junction, and the C is very open. Apparently there are technical similarities between the reverses of Γ and some specimens of A/2 (i.e compare no.30 {A/2} to nos.115 and 116 {Γ}). Moreover

a number of Group Γ reverses show close affinities with Groups A and B (see Appendix III), while the emperor's bust on the obverses of some specimens of group A/3 (run c) might be considered as a forerunner of that on Group Γ .

Nevertheless the lack of hoard evidence does not permit us to reach any definite conclusion as regards the relationship between groups A and Γ , though the discovery of coin no.128 together with an A/2 specimen (no.27) may be indicative.

Group Δ . (Appendix III nos.135-219) Pl.12,13.

The coins of group Δ may be divided into four subgroups on the basis of their iconography:

Δa (nos.135-175): it is very reminiscent of subgroup A/3 and especially run A/3b.

The drapery of the emperor's *divitision* over his left hip is generally denoted by four slightly curved shading lines, though their number appears to be reduced on coins in a cruder style.

The *tufa* is small and normally decorated with three dots. On coins in a very linear style, however, it is ill-defined and poor execution makes the number of decorative dots uncertain. Moreover, other specimens have a scallop-shaped four-dotted *tufa* (see Appendix III).

The free end of the *loros* is triangular, but on nos.167 and 168 it is denoted by three simple lines. No.133 bears the most elaborate free end of *loros* of any of the Δ specimens listed here, with a three-dotted fringe at the bottom.

The *labarum* bears a small square banner decorated either with a linear or dotted cross but there are also deviations (see Appendix III)

Δb (nos. 176-187): the only iconographical feature which distinguishes this subgroup from the previous one is the arrangement of the drapery. This is treated as a mirror-image of the drapery of group A/2, but without the emphatic main fold.

Δc (nos. 188-219): the transverse panel of the *loros* is reversed, running between the emperor's right shoulder and his left hip. The other main features of the subgroup are very similar to those of the previous ones, though from an artistic point of view its closest resemblances are to their more linear and cruder specimens.

The subgroup may be divided into smaller runs on the basis of the emperor's drapery over his right hip and a small cross that sometimes appears in the lower right-hand part of the obverse field (nos. 214-219).

Despite the iconographical discrepancies and minor variations, the workmanship of group Δ appears to be quite consistent. Most of the coins are poorly executed in a dotted style. The locks of the emperor's hair are treated schematically and the general design is sometimes clumsily organised. There are, of course, a few exceptions in both subgroups Δa and Δb, which exhibit very neat workmanship.

On the contrary most of the group Δ coins described here, have very neat reverse lettering, although it varies in size and is sometimes rather lightly engraved. The main features of this

lettering are the wide E's, the narrow V' and well-defined, rather closed C's.

Almost all scholars but Metcalf consider the group Δ coins to be half-*folles*. The latter has recently argued that they may be reduced-weight military issues, which only circulated in Asia Minor. The weight-standard of the group, however, has been determined to be about 4.00g. This is exactly half the weight-standard of groups A, B, and Γ , which, as argued above, may have been struck at Constantinople.

In fact, group Δ appears also to have been minted at the metropolitan mint for the lettering on the regular reverses of the group closely matches that on some A/3 examples (see Appendix III). The only objection to the above view is the rather poor artistic treatment of the obverse on a considerable number of group Δ coins. This is inconclusive, however, since some specimens are of a very neat workmanship reminiscent of A/3; the poor execution of the others may simply be due to a routine production, the difficulty of engraving small dies or to the recruitment of relatively unskilled workmen in the rush to ensure money supply.

Allowing for these considerations, group Δ could be considered as a fractional denomination of the normal *folles* issued at the metropolitan mint. However, their extreme scarcity at Corinth, where there is clear evidence of a dramatic increase in monetary activity at this time, *contradict* this theory. Nevertheless, demand for half-*folles* might well have been confined to areas closer to the capital, where there was probably a greater variety of commodities and prices were more liable to fluctuate.

A piece of circumstantial evidence against the view that half-*folles* were issued under Theophilus is the absence of any similar small denomination from the coinage of later reigns. They may, however, have disappeared because price rises had made other copper issues in a higher weight standard than the half-*folles* circulate alongside the normal *folles* for every day transactions.

Group E (Appendix III nos. 220-227).

Pl. 13

The examples of this rare group may be divided into two runs depending upon how they represent the drapery of the *divitision*, and the emperor's arm holding the labarum.

On specimens nos. 223-227 the folds of the drapery are denoted by four parallel straight lines, while the emperor's body is treated so clumsily that it gives no form to his garments, which are shaped like a rectangle with its corners rounded off at shoulder level. In addition, the emperor's right arm is markedly unnatural since its position is not related to the rest of the body.

In contrast, on nos. 220-222 the representation of the arm is more realistic while a more natural relationship between the emperor's body and the drapery is achieved by interrupting the outline of the right half of the body at waist level, where the *loros* floats free.

Despite these technical differences, however, the two above runs display a substantial number of obverse affinities, which form the basis for their attribution to the same group.

The most distinctive common features are the round, squat face given to the emperor and the linear treatment of the four-dotted, scallop-shaped *tufa*, which is made almost to resemble a triangle.

There are some reverse die-similarities between specimens of group E and A or B (Appendix III), which might constitute additional evidence that both groups were produced at the same mint, where group E was also minted, at a time.

Group ς' (Appendix III nos. 228-303)

Pl. 14, 15

Group ς has been divided into two main subgroups on the basis of the emperor's hairstyle or more precisely, the disposition of the shading lines used to depict the locks of his hair: on group $\varsigma/1$, the shading lines of the emperor's hair run parallel with the curve of his jaw; on group $\varsigma/2$ they are approximately at right angles to the jaw.

Nevertheless, the unusual technical treatment of the nose, which has a triangular tip creating pronounced nostrils, suggests that both subgroups were produced by a single craftsman, or by a group of craftsmen working very closely in the same workshop.

Further characteristics of the group are the flared skirt given to the emperor's clothing, the long free end of the *loros* and its wind-blown appearance.

Each subgroup may be divided into smaller runs: subgroup $\varsigma/1$ into four, subgroup $\varsigma/2$ into two. The differences among these runs

appear to be quite substantial, in particular, with regards to the emperor's portrait, but other details are also involved (see Appendix III).

In conclusion, one may say that group S displays two different types of imperial portraiture: on subgroups S/1a, S/1b, S/2a the head is rather long with a characteristic bushy hairstyle, while on S/1c, S/1d and S/2b it is shorter and has sparser locks.

At present it is not possible to use the variations between specimens to place them firmly in chronological order. Certain features, however, provide some useful clues to the mint attribution of the entire group.

First, some examples of group S/1a and both specimens of S/1b have been described in the Appendix as S/Z "mules" on the assumption that their reverses were struck with reverse dies of group Z. These so-called "mules" indubitably link the two groups and suggest that despite their different weight-standards, they should still be attributed to the same mint.

Second, some reverses of subgroup S/2b show close affinities to some A/3 reverses (see Appendix III). In addition, some apparently late specimens of A/3, show four of the emperor's fingers, instead of three, inside the circle of the orb. This detail has been regarded by Metcalf as one of the chief features which distinguishes coins of group S from those of A.

Third, as already has been mentioned, the treatment of the emperor's feature and hairstyle on coins 94 and 95, classified under group B/1, is highly reminiscent of that on some coins of group S (i.e. no. 234 {S/1a}, no. 264 {S/1d}), despite their greater

refinement. Moreover, it has been suggested that both these unusual group B/1 specimens may be related to an unique coin in the Campell collection (no. 96), which has been regarded as "experimental".

It seems, therefore, quite probable, that the early issues of group ζ were based on this "experimental" coin, created by a die-sinker initially influenced by group B/1. He and his team of workers very quickly developed the distinctive style of group ζ , which at a certain time continued to be issued concurrently with group Z. Other groups, however, for instance A/3, were still in production, having adopted a more linear style as well as deviations from the original A design concerning the drapery, the depiction of the free end of the *loros*, the type of banner etc (see Appendix III: A/3, runs a-b), features matched in an extreme way on some S specimens.

Group Z

If group ζ is attributed to the mint of the capital, this automatically raises the question of the attribution of group Z. The group Z coins are clearly cruder in style than any of Theophilus' other reformed *folles*, and hence have been attributed by almost all scholars to an unidentified provincial mint.

The emperor's face is broad and sometimes extremely long. There is a very bushy clump of hair at each side of the head and the wavy locks at the temples are depicted in a characteristic linear way

Group Z is divided into two main subgroups Z/1 and Z/2 on the basis of the way in which the banner of the labarum is placed on the staff: in Z/1 the banner is squarely placed with reference to the vertical axis of the design, while in Z/2 the banner leans to the left. Subgroup Z/1 is then itself divided into two runs (Z/1 and Z/2).

On coins Z/1a the labarum is depicted with pendants; on those of Z/1b, which are more numerous, the labarum is without pendants.

The reverse inscription of both subgroups is again in a crude style, with large lettering and a T with a dropped bar. There is, however, a considerable number of Z/Ϸ "mules", which once more suggests that the two groups are closely related. All but three of the Z/Ϸ coins listed in the present study belong to the variety Ϸ/1a, though similar reverse dies occur on some Ϸ/2a specimens, suggesting that Ϸ/1a and Ϸ/2a may be late issues of group Ϸ.

It is true that group Z coins in a crude style can hardly be attributed to the same mint as the previous groups, especially groups A and B. But group Z is undoubtedly linked to group Ϸ which we have suggested, may have been minted at the capital. Moreover, a specimen illustrated in DOC (Appendix III no. 332) and described by Grierson as "anomalous" is actually a Z/A "mule" about which Metcalf makes the following remarks: "Perhaps, its reverse die was cut in Constantinople and sent as a model to the provincial mint..." A second Z/A "mule" has now appeared (no. 327) and this indeed makes once more the attribution of group Z to a provincial mint highly dubious.

Group H

The emperor's portrait and the reverse lettering vary little on coins of this group. The emperor is depicted with a rather broad head and pointed jaw, and there is normally a gap between his face and his hair, which is depicted in an extremely linear fashion. The *curia* always has three dots and sometimes stands on a stalk. The whole labarum leans to the left as on some specimens of group Δ.

There are close reverse affinities between group H and ζ. This led Metcalf to suggest that both groups should be assigned to the same provincial mint¹. It has been shown, however, that group ζ is also closely linked to group Z, although they share a different weight-standard, while stylistic resemblances appear again between both obverses and reverses of groups Δ and H. This scheme, in connection with the various links among the seven groups, as they have been described in this study, makes the attribution of the new bronze coinage of Theophilus to several different mints very implausible.

As a matter of fact the present stylistic analysis of the 378 Theophilus' *folles* indicates that there was a radical reform of the currency and mint administration at this time.

First, the different attested styles, not only among the eight main groups but among specimens of the same group, indicate the recruitment of a considerable number of die-sinkers

1. According to Metcalf's estimations group H shares the same weight-standard as group ζ. Nevertheless on the relevant histogram of this study, group H on the evidence of 15 coins, peaks at 6.50g. - 5.50g. as does group Z.

and consequently a monetary policy aiming at an increase of petty-currency supply. Apparently the very small occurrence of die-duplicates, among the specimens listed here, hints at a remarkably high output of the mint.

Second, it seems quite probable that the metropolitan mint itself was involved in giving the *folles* more than one official weight-standard(see Appendix III). In all probability, *folles* of all weight standards circulated in the capital, though in different quantities.

Due to the lack of hoard evidence, apart from the stylistic analysis of the material, a second way of resolving uncertainties about the existence or otherwise of provincial mints is, to map out the geographical distribution of the recorded coins, which are still very few.

The details of this procedure may be summarized as follows:

Theme of Peloponnese:

Corinth:

148 specimens of Theophilus' reformed *folles* have been discovered at Corinth during the American excavations from 1896 to 1939. The number and proportion of the 139 identifiable coins, belonging to each of the eight stylistic groups, are listed in fig.1¹. Rather surprisingly only 9 more specimens have been found since then². They have not been published according to Metcalf's scheme and therefore they are not included in the present estimation;

1. D.M.Metcalf, "Corinth in the ninth century...", 216-30.

2 See J.E.Fischer, *Hesperia*, 40, 1971, 47; id., *Hesperia*, 43, 1974, 74; id., *Hesperia*, 44, 1975, 47; O.Zervos, *Hesperia*, 51, 1982, 158; J.E.Fisher, *Hesperia*, 53, 1984, 246; O.Zervos, *Hesperia*, 55, 1986, 199; J.D.MacIsaac, *Hesperia*, 56, 1987, 137.

among them, however, two have been described as half-*folles* and therefore should be of group Δ.

Sparta:

1 *folles* of group E has been found on the ancient Acropolis during the British excavations¹ (1907-8). 2 more specimens have been found during the excavations of 1926-9 in the theatre area: one is of group S; the second is most probably of group A/2².

Psophis (Arcadia):

1 group Z specimen has been found there by Bendal (Appendix III no. 311).

Patras:

1 specimen of class Γ was given to the local Archaeological Service by an individual who said that the coin was found in his field.

FIG. 1:

Theme of Peloponnese: distribution of Theophilus' reformed folles.

	Corinth	Patra	Psophis	Sparta	%
Group A	20			1	14.38%
Group B	9				6.16%
Group Γ	4	+	1		3.43%
Group Δ	7				4.80%
Group E	2			+1	2.05%
Group S	55			+1	38.36%
Group Z	40		+1		28.08%
Group H	4				2.74%

1. The coins from the British excavations of Sparta are stored in the Numismatic Museum of Athens; they are going to be published very soon by Dr. M. Price of the British Museum.

2. The obverse of the second specimen is quite worn but its reverse is extremely similar to no. 117 of our catalogue (group Γ), as well as to *MN* 13 (group A/2); [for links between the two groups see above, 51].

Theme of Hellas

Athens:

Unfortunately, the 21 reformed *folles* from the American excavations of the Athenian Agora are not published in detail. However, it has been recorded that four of these coins are of Groups A, $\zeta(2)$, and Σ .

Thebes:

1 specimen of group ζ and one of group Z are said to have been found here¹.

Amfissa:

There are two relevant coins here, belonging to a private collection. Unfortunately, they are not illustrated but 1 is said almost certainly to belong to group A. The other is said to be similar but its light weight makes its attribution to group A unlikely².

Theme of Cephalonia⁴

Naupaktos:

1 coin of group ζ (no. 303) and 1 of group H (no. 373) were found here during a rescue excavation⁵.

1. D. M. Metcalf, *Coinage in South-Eastern Europe*... 31.

2. *Ibidem*.

3. Δ. Κραβαρτογιαννος, Καταλογος Βυζαντινών νομισματων (491-1203 μ.Χ.) μεμονωμενων εθρηματων Αμφισσης. *Τετραμηνια*, 2, 1974, 7; group A coin: D= 29mm, W=8.54g, the other: D=28mm, W=5.43g. The light weight of this coin suggests that it could be of group Δ. The diameter, however, does not suit a group Δ issue.

4. For the geographical determination of the *themes* during the ninth century (c. 842) see W. Treadgold, *The Byzantine Revival*... 336.

5. Δ. Κωνσταντιος, 8η Έφορευα Βυζαντινών Αρχαιοτητων. *AD*, 36, 1981, B' 2, 293 p1 192

Giannena:

1 coin of group A (no.27) and 1 of group Γ (no.130) were donated to the local Archaeological Museum by a private individual and were probably found together by the donator.

Theme of Dyrrhachium.

1 coin of group B is recorded from the territory of Albania, now in the Numismatic Collection of the Academy of Sciences. 1 more reformed *folles* of Theophilus was found in Dyrrhachium (Durres), but unfortunately is not illustrated¹.

FIG. 2

The *themes* of Hellas, Cephalonia, and Dyrrhachium: distribution of Theophilus' reformed *folles*.

=====

	Athens	Thebes	Anfissa	Naupaktos	Giannena	Albania	%
Group A	1		1		1		25.00%
Group B						1	8.33%
Group Γ					1		8.33%
Group Δ							—
Group E							—
Group Ϛ	2	1		1			33.34%
Group Z	1	1					16.67%
Group Η				1			8.33%
	4	2	1	2	2	1 = 12	

The sample is of course small but the contrast with the statistics from Corinth is interesting especially where group A is concerned; it appears to equal group Z, which, together with group Ϛ, predominates in the currency of Corinth.

¹H. Spâhiu, "Monnaies byzantines des Ve-XIIIe siècles découvertes sur le territoire de l'Albanie", *Iliria*, 9-10, 1979-80, 385, pl. V, 5. e

Theme of Thessaloniki

Thessaloniki:

5 coins have been found during excavations in the city: 1 of group A (no.15), 1 of group B (no.94), 1 of group Γ (no.121), 1 of group Σ and 1 of H¹. A sixth specimen, again of group Γ was purchased in the city by Bendall (no.120), which as already mentioned is a duplicate of the specimen found during excavations at the church of *Hagios Nikolaos Tranos* (=no.121). Finally, a *follis* of group A was included in Thessaloniki hoard 1933/B².

Theme of Macedonia.

Philippi:

2 coins of group B (nos.81 and 100) were found during the excavations of the Octagonon.

Kavala:

1 group Σ coin (no.246) was donated to the local Archaeological Museum by a farmer, who found it in the village of Paradisos, on the bank of the river Nestos.

Komotine:

1 specimen of group Z (no.307) and 1 of group H (no.375) were discovered at the coastal city of Maronia. Another group H (no.359) was given to the local Archaeological Museum by a farmer. It is said to have been found at a place called Kyperia with three

1. D. M. Metcalf. *Coinage in South-Eastern...*, 31 and esp. n. 6.

2. I. Τουράτοουγλου, Η. Τσούρτη-Κούλη, Μ. Κρίκου-Γαλάνη, " Ο θησαυρός "Κομοτηνής" /1979(:): Συμβολή στην κυκλοφορία των τεταρτηρών του ΙΒ ' αι. μ.Χ", First International Symposium for Thracian Studies : "Byzantine Thrace": Image and Character. Komotini, May 28-31st 1987, *Amsterdam*, 1989. 396; the hoard was buried during the reign of Alexius I Comnenus.

miliaresis of Michael II, of which two were in fragmentary condition, and a half of a *miliaresion* of Basil I.

FIG. 3:

The Themes of Thessaloniki and Macedonia: distribution of Theophilus' reformed *folles*.

=====

	Thessaloniki	Philippi	Kavala	Komotine	%
Group A	2				15.38%
Group B	1	2			23.08%
Group Γ	2				15.38%
Group Δ					
Group E					
Group Ϛ	1		1		15.38%
Group Z				1	7.69%
Group H	1			2	23.08%
	7	2	1	3 = 13	

=====

The sample material from this area is still very limited but since Figures 2 and 3 involve an equal number of specimens it is interesting to compare them. The results which they give are quite different: the highest proportion in Fig. 2, as also in Fig. 1, is concentrated under group Ϛ, while in Fig. 3 under groups B and H. Remarkable also is the representation of group Γ, that shares an equal proportion with groups A and Ϛ which are very dominant in Fig. 1 and 2.

Turning to the capital we obtain the following results: of the 36 Theophilus reformed *folles* from the excavations at Sarachane 8 appear to belong to group Δ, while 4 most probably belong to group Z. Unfortunately, the other 24 coins cannot be classified since they have not been published in accordance with Metcalf's

scheme¹.

A considerable proportion of the other coins studied here come from the Istanbul bazaar. Of course the provenance of the coins from the bazaar is uncertain, but, even if they were not found at Istanbul, they probably come from the immediate neighbouring area. Indeed Mr. Weller, who has collected coins from the bazaar and travelled widely in the interior of Asia Minor, does not seem to have found many Theophilus' reformed *folles* there. On the contrary, the late doctor Stavrides from Samos, had bought the coins of his collection mainly in the Turkish coastal cities; there the locals easily can find purchasers for their copper Byzantine coins among the masses of foreigner tourists, without taking the trouble to travel up to Istanbul. The numbers and proportions of coins bought in Istanbul bazaar, as well as the 12 from the excavations at Sarachane, belonging to the various typological groups are recorded in Fig.4:

Fig. 4

Istanbul:

Group A	26	16.05%
Group B	17	10.50%
Group Γ	6	3.70%
Group Δ	44	27.16%
Group E		
Group S	31	19.14%
Group Z	31	19.14%
Group H	7	4.32%

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1. M. Hendy, *The Excavations at Sarachane...: The coins*, 340-2.

The results are rather surprising, since the highest proportions of specimens belong to groups Δ , ζ , and Z; the proportion belonging to group Z is slightly greater than that belonging to group A. The values for groups Γ and H are surprisingly low in comparison with those in Fig. 3 and even in Fig. 2.

Asia Minor and the islands of the Aegean Sea.

Trebizond:

1 coin of group ζ (no. 255), a so-called ζ/Z "mule", in Bryer's collection, may come from there or from its vicinity.

Izmir:

1 coin of group Δ donated to the Numismatic Museum of Athens by a Greek diplomat stationed at Izmir in the 1900s (no. 184) may come from this area. 1 specimen of group B (no. 105) and 1 of group ζ (no. 230) are said to have been bought in Izmir.

Antalya:

2 group A coins (nos. 58 and 59), now also in Athens, may come from this area, since they were donated to the Numismatic Museum by the Greek Vice-Consul at Antalya. 1 coin (no. 236) belonging to group ζ also comes from this vicinity.

Adana:

1 coin of group B (no. 80) originated here.

Mersin:

1 group B coin was seen there and a rubbing was taken of it.

Agin (upper Euphrates):

1 group H coin was seen there¹.

¹ D. M. Metcalf, "The reformed folles of Theophilus...", 148, no. 27.

Asia Minor coastlands:

15 specimens from Stavrides's collection in Athens have been certainly bought from cities of the Asia Minor coastlands: 1 is of group A (no. 63), 1 of B (no. 83), 2 of Γ (nos. 123, 129), 2 of Δ (nos. 136, 199), 6 of ς, and 3 of Z.

Aegean Islands:

Lesbos:

There is 1 coin of group A and 1 of group ς in the Archaeological Museum of Mytilene; they were found by individuals on the island of Lesbos.

Chios:

1 specimen of group H was found by a young pupil in the area of Kampos near the capital of the island (no. 379).

Samos:

1 group Z coin was found during the German excavations in Tiganí¹.

Fig. 5

Asia Minor and Aegean islands:

Groups	Trebizond	Izmir	Antalya	Adana	Mersin	Agin	Coast	Islands	%
A			2				1	1	13.79%
B		1		1	1		1		13.79%
Γ							2		6.90%
Δ		1					2		10.35%
E									
ς	1	1	1				6	1	34.48%
Z							3	1	13.79%
H						1		1	6.90%
	1	3	3	1	1	1	15	4 = 29	

¹ U. Jantzen. *Samos XIV: Das Kastro Tiganí: Die Münzen*, 186.

Fig.5 gives roughly the same information as fig.1 from Corinth, although the groups A,B,and Z are now represented by an equal number of coins.

Summarizing the results of the geographical distribution of Theophilus' reformed *folles* the following remarks may be stressed:

First, group ζ is dominant in figures 1,2 and 5, which represent provincial areas quite distant from the capital. It is rather striking, however, that the areas of fig.1 and 2 belong to a different geographical unit from that of fig.5; they are not only far away from each other, their role in the empire's political and military structure was also different during the ninth century. Moreover, direct relations with those areas might have been extremely difficult since the Aegean was no longer a safe sea for Byzantine shipping. In addition fig.4 shows that in the capital itself the proportion of group ζ is higher than of group A and B, which, according to Metcalf's estimations, might be issues of the metropolitan mint and of the metropolitan region respectively. The attribution of group ζ to a central or southern Greek mint appears highly dubious. Similar observations obtain for group Z in the "crude style".

Second, the frequent occurrence of group Δ coins at the bazaar, as well as its rather high survival ratio at Sarachane excavations, argues against the theory that this is a reduced-weight military issue which chiefly circulated in Asia Minor. Moreover, were this so, one would expect these coins to be common in Asia Minor; and yet they are not (see Fig.5). It is probable, therefore, that

group Δ coins should be regarded as half-*folles* despite their low proportions in the statistics from Corinth. As has been already mentioned, this fractional denomination would probably not be needed there because the prevalence of subsistence farming in the surrounding area meant that agricultural produce for every day consumption was not generally put on the market. Instead, selling was probably confined to manufactured items such as pottery¹ or to processed comestibles such as wine, olive oil or sultanas.

Third, groups B and H have a rather low survival ratio in all areas except that represented on fig.3. The material is far too limited from this geographical unit to draw any kind of conclusions but, the appearance of Theophilus' coins here might have been partly influenced by different factors than in other provincial areas. For instance the two group B specimens from Philippi do not necessarily imply that there was a revival of the Early Christian city accompanied by some growth in its monetary economy ; they might simply represent losses of travellers along the *Egnatia* road.

Fourth, group E, which seems to be a very limited issue, is represented only in fig.1. Its attribution, however, to a small provincial mint in Greece is on present evidence very much doubtful since, as already has been observed, it shows close reverse die-similarities with groups A and B.

In conclusion, comparison of the five figures shows that the different stylistic groups of Theophilus' reformed *folles* do not

1.D.M.Metcalf, " Corinth in the ninth century... ",203-13.

appear to be associated with specific areas, but to be intermingled geographically.

Finally, the statistics from the capital appear to support our contention that coins of different weights were circulated throughout the empire. Furthermore, the histograms of groups A, B, ζ show secondary peak(s) below or above their intended weight-standards¹ (see Appendix III). Presumably this is another indication that all were minted at the same mint and at a certain date concurrently. For instance, the secondary peaks of groups A and B could be influenced by the lighter weight-standard of the new group ζ . Similarly, by the time that groups H and Z started to be issued group ζ appears to be still in production.

More precisely group ζ demonstrates a less decisive figure of weights. It peaks at 6.50-7.50 grammes representing 29.03% of the group ζ coins, but there are also two secondary peaks: one above it (7.50-8.50 grammes) representing the 22.58% and one below (5.50-6.50 grammes) representing the 27.42%. Apparently these high values of the secondary peaks of weight indicate that group ζ was experimental and transitional between the heavy groups A, B and perhaps Γ and the light groups H and Z.

What new monetary policy lies behind these different weight-standards and gradual deviations in the weight of Theophilus'

1. For the intended weight-standard of Theophilus' various groups of copper coinage see D.M. Metcalf, *Coinage in South-eastern Europe*... 30, Table 1; A=8g; B=8g.; Γ =8g.; Δ =4g.; E=?; ζ =7g.; Z=6g.; H=7g.

reformed *folles* is as yet unclear. Nevertheless it calls to mind the information that the emperor himself had to oversee the prices of commodities in the market of Constantinople. This, of course, suggests that the Byzantines were beginning to be troubled by inflation, but it also hints at something like a consumer boom, and both conditions might require measures to make the single copper denomination more flexible in transactions. Furthermore a boom causing an increased demand for money might put pressure on the exchequer to debase some of the coinage. It is uncertain, however, whether the mint authorities deliberately used craftsmen of different skill levels for issues of different weight-standards to emphasise their different values, at least as far as groups S, Z and H are concerned.

D. The copper coinage of the Macedonian dynasty.

1. The period from Basil I to the reign of John I Zimisces (868-969).

The Theophilan reformed *folles* remained in circulation throughout the reign of his son Michael III, since the latter struck no copper coins in the East until the very end of his reign. when Basil I was crowned co-emperor on 28 May of 866. The underlying reasons for this are not clear but it may be indicative of a loosening in the economy¹. It is true, however, that during the reign of Theophilus there was an obvious and dramatic increase in the volume of petty currency in circulation and indeed the mint-output of copper coins appears very high. The prolonged circulation of Theophilus' *folles* may therefore represent a period of adjustment to the new perspectives of the monetary sector, mainly in the provinces.

It seems quite probable that this transitional period in Byzantine monetary history lasted in most parts of the empire throughout the reign of Basil I. Indeed, the recorded stray finds from different areas, except Corinth, are less numerous than during Theophilus' reign despite the fact that Basil I undertook a recoinage early in his reign and indeed many of his *folles* are restruck on those of Theophilus².

1. D. M. Metcalf, *Coinage in South-eastern Europe* . . . , 33.

2. *Id.* 33 and esp. n. 25; the same impression is given by the excavation reports: i.e. the excavation at Sarachane where 16 specimens of Basil I are reported in contrast to 36 from Theophilus' reign; see also Appendix V with the stray-finds from Sparta.

The copper coinage of Basil I presents more or less the same problems as that of Theophilus concerning the identification of provincial mints. There is still some difficulty and dispute as to the chronological order of the five main types of *folles*. They may be summarized as follows¹:

Class 1: Busts of Basil and his son Constantine holding a *labarum* between them. The type displays some variety in the reverse inscription. There are for instance, specimens ending in ROMAON instead of ROMAION while Basil's name reads either BASILIO or BASILO or BASIL or BASIL/. Furthermore Metcalf has divided the *folles* of this class into small and large.

Class 2: Seated figures of Basil and his son Constantine on a double throne. There is likewise a variety in the reverse inscription where the name of Basil reads either BASILIO or BASILO. A more substantial variety, however, is that which entitles the two co-rulers as *augustoi* instead of the normal *basileis*.

Class 3: Half-figures of Basil and his sons Constantine and Leo; Basil's left hand is not depicted. There are specimens which bear no symbol beneath the reverse inscription while on others there is either a cross (+) or an asterisk (*).

Class 4: The same three half-figures but Basil's left hand is raised to his breast. Beneath the reverse inscription there is always an asterisk.

Class 5: The seated figure of Basil I on a lyre-backed throne, holding a *labarum* in his right hand.

1. This summary description follows the scheme held in DOC. For the types of Basil I's copper coinage see also D.M. Metcalf, *Razba foliu Basilia I. A organizace jejich mincoven*, *Numismaticky Sbornik*, 9, 1966, 95-127 and BNP, 538 and 544-7.

In addition there is a very scarce type in the names of Basil, Leo and Alexander, while an enigmatic *foliis* in the names of Basil, Constantine and Alexander, has been published¹.

Class 5 has now been considered to be the latest issue of Basil I although some scholars adhere to the traditional scheme which places them at the very beginning of the reign². It has been suggested that they were minted in 872 on the occasion of a triumph after the destruction of the Paulician centre of Tephrike³ but an alternative chronology, after Constantine's death in 879, seems more plausible⁴. In fact the commencement of class 5 may be dated in 880, when Basil I, having completed and dedicated the *Nea Ekklesia*, received the imperial crown from the Patriarch, so establishing a new beginning for his reign⁵.

Class 1 should be the earliest, although there is a chronological gap between Basil I's accession to the throne in September 867 and his son Constantine's coronation as co-ruler either in November 867 or February 868. It seems, therefore, highly likely that no copper coins were issued during this period of Basil I's sole reign⁶.

1. D. M. Metcalf, "Basile, Constantine, and Alexander: an enigmatic Byzantine *foliis* of the ninth century", *Situla*, 14/15, 1974, 269-73.

2. i. e. C. Morrisson in BNP, 538.

3. D. M. Metcalf, *op. cit.*, 270.

4. DOC, 482.

5. See above, 50 and n. 3.

6. No silver *miliaresia* were minted during the period of Basil I's sole reign either.

It is difficult to define the exact date of the replacement of class 1 by class 2, but it may be connected with the Council held in Constantinople under the emperor's direction in 869-70¹.

Classes 3 and 4 are dated from 870, when Basil's second son Leo was crowned co-emperor, until Constantine's death either in 877 or 879². It has been shown on the evidence of some "mules" that class 3 preceded class 4³ but again it is difficult to determine the exact date of the latter's introduction. Actually both these types are very problematic as far as their differentiation is concerned. This is based solely on iconographic details though sufficiently distinctive for the two classes to be considered as separate issues. It is difficult to determine the reasons for this change but it might be the result of a mint policy, most probably aiming at the control of its output in fixed periods. Similarly the variety in class 3, in the depiction of the emperor's *loros* on the one hand, which runs either normally from his left hip to his right shoulder or with the directions reversed, and on the other the addition of a cross or an asterisk below the reverse inscription, may be due to the same policy. Nevertheless a more precise definition of the mint administration during the period in question seems very difficult, without sufficient hoard evidence.

1. The Council was convened in order to re-examine relations with Rome; for the Council itself as well as for Basil I's ecclesiastic policy see G. Ostrogorsky, *History of the Byzantine State...* 234.

2. For the date of Constantine's death see *DOC*, 475 and *BNF* 537 where the whole bibliography on Basil I's history is noted.

3. *DOC*, 484.

Morrisson considers class 1 as an independent issue of provincial mint, where, according to her scheme, the rare *folles* in the names of Basil, Leo and Alexander were also minted¹. The latter, however, should be ceremonial issues of the metropolitan mint, on the occasion of Alexander's coronation in 879². It is true that the style of this rare series is very crude and linear but there are also a gold *semissis* and a *tremissis* in a similar peculiar and puzzling style which were undoubtedly minted in the metropolitan mint.

The existence of provincial mint(s) during Basil I's reign was first suggested by Metcalf on the basis of a detailed stylistic study³. According to his initial attribution there were, in addition to the mint of the capital, one provincial mint in Asia Minor and three in the Greek peninsula: one in Corinth, one in Central Greece and one, responsible for the small-module "two busts" coins, in Thessaloniki. The latter has now been excluded from the list of provincial mints due to the extreme scarcity of Basil I's coins from there⁴.

The lack of further material with recorded provenance since Metcalf's studies on the copper coinage of the reign, does not permit a study based on the geographical distribution of the various types at the moment.

1. *BNP*, 540, 547. The same scheme is followed by M. Hendy in his publication of the coins found in the excavation at St. Polyeuctus (Sarachane); see also M. Hendy, *Studies in the Byzantine Monetary Economy* . . . , 425 and esp. n. 238 and 239.

2. *DOC*, 479, 481, 485.

3. D. M. Metcalf, "Razba follu . . ."; Id. "Corinth in the ninth century: the numismatic evidence", *Hesperia*, 42, 1973, 232-49.

4. *Id. Coinage in South-eastern* . . . , 33.

There is, however, some hoard evidence which may be summarized as follows:

a.- The **Taranto** hoard¹ includes: 2 specimens of Metcalf's group aII (=Constantinople); 1 small module of group b (Thessaloniki?); 2 of dI (Constantinople), 1 of dII (Central Greece?), 4 of dIII (Corinth); 1 of eI (Constantinople) and 1 of eII (Central Greece?).

b.- The **Irsina** hoard² includes: 2 specimens of Metcalf's group cI (Constantinople), 4 of group cIII (Corinth); 1 of group dI (Constantinople), 2 of dIII (Corinth); 3 of group eII (Central Greece?), and 2 of eIII (Corinth);.

c.- The **Cleja** hoard³ includes: 1 specimen of aI (Asia Minor?), 1 of aII (Constantinople); 1 specimen of the small variety of group b (Thessaloniki?), and 1 of the large (Corinth); 1 of cI (Constantinople), 2 of cII (Asia Minor?), 1 of cIII (Corinth);.

The quantitative representation of each of the mints proposed by Metcalf may be summarized as follows:

	Taranto	Irsina	Cleja
Asia Minor :			3
Constantinople:	5	3	2
Thessaloniki(?):	1		1
Central Greece(?):	2	3	
Corinth:	4	8	2
Total	12	15	8

1. E. Leuthold, Tesoretto di monete bizantine dei secoli IX e X nel Museo Nazionale di Taranto, *RIN*, 58, 1956, 31-5.

2. A. Siciliano, Cruzzolo di monete bizantine da Irsina, *Annali dell'Università di Lecce*, 8-10, 1977-80, (= *Studi in onore di Mario Marti*, vol. I) 293-304.

3. E. I. Dimian, Citeva descoperiri monetare pe teritoriul R.P.R., *SCN*, 1, 1957, 189-216.

It is true that the three hoards are very small and have an extended age-structure. Their evidence should, therefore, be considered with some scepticism, although they come from areas where the circulation of Byzantine coins was not predominant: in Italy, for instance, the majority of circulated coins in areas under the Byzantine dominion were issues of the local provincial mints, while the circulation of the Byzantine coins in Moldavia was rather limited among the local populations. Thus the coins of the hoards may be considered as the remainder of a payment or of an exchange at a certain time(s) and consequently indicative for the problem of the provincial mints.

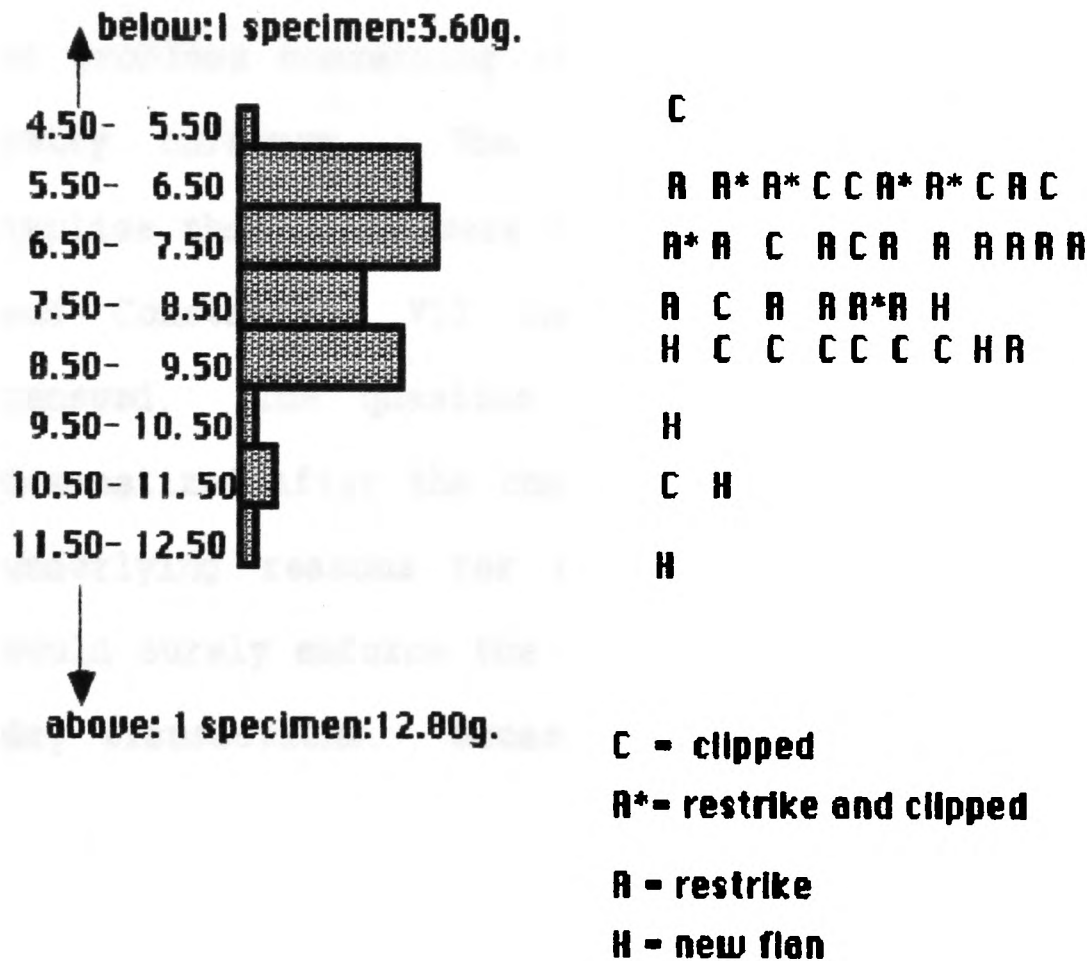
Actually the distribution of the mints in the above hoards appears rather intremingled. Moreover the equal representation of the metropolitan mint and that of Corinth in the Cleja hoard seems very peculiar since the Byzantine coins found in Moldavia should be connected with restricted commercial activities between the locals and the capital.

In conclusion and in the light of our study on Theophilus' copper coinage, the existence of provincial mint(s) during Basil I's reign, seems extremely dubious. As we have already pointed out, the different stylistic groups of the copper coinage of the period under discussion might simply imply a massive production of money and consequently the employment in the mint of unequally skilled die-engravers.

The Argos/ 1984 hoard, dated to \pm 959 indicates that a similar policy was implemented during the greater part of the 10th century:

the 44 specimens of Constantine VII demonstrate a great variety as far as concerns the general style of execution and the depiction of the emperor's bust and face (see table 17)

The following histogram shows also that the Argos hoard hints at a variety of weight-standards among the circulated coins of a reign



in a certain area, something that has already been, noticed during previous reigns. However, the metrology of the coins under discussion might have been influenced by the many restrikes of coins of Romanus I and actually the heavier coins (8.50-9.50g.) are all of new flans. Nevertheless it seems highly possible that the reduction of the weight due to the restriking, coincided with the intentions of the mint authorities.

Moreover about 20 of the coins of the hoard, the majority of which have been struck on new flans, bear obvious traces of clipping while other pieces may well have undergone a more careful reduction of their diameter. The purpose of this clipping, however, is obscure.

In fact during the early Macedonian dynasty there is a series of problems concerning the official policy for the circulation of petty currency. The evidence of overstriking for instance implies that there were thorough recoinages under Basil I, Leo VI, and Constantine VII and that the currency was substantially renewed. The question now is whether the copper coins were demonetized after the change of each ruler and if so what were the underlying reasons for such a policy. The frequent recoinages would surely enforce the continuous circulation of *folles* in every day transactions. Occasional interruptions in the issue of gold and silver coins during the reigns of Basil I, Leo VI and Romanus I might also have resulted in establishing the role of the copper denomination in the monetary system.

The lack of sufficient hoard evidence leaves open, certain problems concerning the chronology of Leo VI's copper coinage¹.

On the contrary, the six groups of the copper coinage of Constantine VII have been easily put into chronological order merely on the basis of recorded overstriking. It does not seem to have followed the historical events of the period as the complicated gold coinage. The earliest class in the names of

1. *DOC*, 510; *BNF*, 554. *BMC* 447.

Constantine VII and his mother Zoe, undoubtedly represents the period of Zoe's regency (914-9). Nevertheless there is some dispute regarding the duration of the subsequent classes.

For instance, according to Grierson's scheme, the only substantial series for the period of Romanus I's gradual assumption of supremacy of the throne (919-931) is that bearing on the obverse the youthful bust of the legal emperor Constantine VII (Class 2). An unique specimen of Romanus I's son, Christopher, has been considered ceremonial on the occasion of his coronation in 921 (Class 3). The very common series in the name of Romanus I (Class 4) is dated in the period after Christopher's death in 931 up to the ruler's final deposition in 944. According to the above scheme the coins with a bearded bust of Constantine VII on the obverse (Class 5) might cover the period from 945 to 950, while those in the names of Constantine VII and his son Romanus II (Class 6) the period from 950 to 959. The chronology of the two latter classes is rather conjectural and is based more on the numismatic evidence than on the historical events of the period: Class 5 is very common to cover only the short period from Constantine VII's single reign up to his son's coronation as co-ruler (27 January 945- 6 April).

Morrisson's scheme is slightly different; it may be summarized as follows: Class 1: 913-9; Class 2: 919-20; Class 3: 921-31; Class 4: 920-44; Class 5: 945; Class 6: 945-59.

The Taranto hoard¹ confirms Grierson's proposed date for

1. E. Leuthold, *op. cit.*

class 2. The deposit of the hoard has been connected with the conquest of the city by the Arabs in 926¹ and consequently the date of class 2, which represents the latest issues of the hoard, should be extended at least up to that year. Moreover, the absence from the hoard of the very common class 4 raises considerable doubts as whether it could have been issued from 920 onwards.

The unusual number of hoards consisting mainly of *folles* of Romanus I (Class 4), found in the Peloponnese, has been connected with the Bulgarian incursions there². The exact date of the invasion, however, has been disputed: normally it is placed in the year 918³ although there is an attractive suggestion that it took place later, between the years 923 and 925⁴. Apparently both alternatives should be excluded as the possible dates of the concealment of the hoards under discussion: the year 918 is self-evidently too early for the issue of Class 4; and the existence of a *follis* of Constantine VII (Class 5) in one of the above hoards rules out the second possibility⁵.

These hoards may reflect the troubles which afflicted Greece later in Romanus I's reign, due to the Hungarians incursions in 943⁶. According to the *Life of St. Luke the Younger*

1. A. Siciliano, *op. cit.*, 304.

2. D. M. Metcalf, *Coinage in South-eastern Europe*... 47

3. G. Ostrogorsky, *History of the Byzantine State*... 264 and esp. n. 1.

4. D. M. Metcalf, *op. cit.*, n. 4.

5. Corinth hoard/1934 (Appendix V, 7)

6. G. Ostrogorsky, *op. cit.*, 282; see also *The Life of St. Luke the Younger*, (Migne, PG 111, 442-80).

the Hungarians remained in the theme of Hellas (Central Greece) for about three years and although there is no evidence that the Peloponnese suffered directly from this attack, this may have created considerable fear among the population on the farther side. Besides, it seems quite plausible that some of the recorded hoards might have originally belonged to the inhabitants of Hellas who sought refuge in the safer Peloponnese, during the three-year occupation (943-6). The deposit of the Argos hoard/1983, may also date from this period, although it includes only issues after Romanus' exile: 44 specimens are of Class 5 (Constantine VII alone) and 9 of Class 6 (Constantine VII and Romanus II). Its concealment might be placed ± in 945/6. If so, the proposed date by Morrisson for Class 6 seems very likely. In this case abundance of Constantine VII's class 5 could be explained as a thorough and very hasty recoinage effected during the first months of the emperor's sole reign, due mainly to imperial propaganda and dynastic rivalry.

During the reign of Romanus II (959-63) no *folles* were struck in the metropolitan mint and obviously the needs in petty-currency must have been covered by the considerable quantities of Constantine VII's *folles*.

The copper coinage of Nicephorus II raises no problem, though there are two classes: Class 1 shows the emperor wearing a peculiar costume very much reminiscent of a cuirass and holding in his right hand a cross sceptre and in his left a *globus* surmounted by a trefoil: on Class 2 the emperor wears the modified *loros* with collar-piece, and holds a *labarum* in his right hand and a *globus*

cruciger in the left. The chronological order of these classes is difficult to establish and both appear to have been struck over *folles* of the previous reign, on Constantine VII's class 5.

During the next reign, of John Zimisces, a new chapter opens for the Byzantine *folles*. The end of the 10th century and the beginning of the 11th marks a turning point in the history of Byzantine copper coinage. A series of innovations reflect not only the completion of the Empire's economic revival, but also social, political and artistic changes.

The most obvious innovation was that the *folles* were no longer struck bearing the name of particular emperors. The traditional bust of the emperor on the obverse, and his name and titles on the reverse were replaced correspondingly by the effigy of Jesus Christ and a religious inscription. During the second half of the 11th century the inscription was replaced by either the bust of the Virgin or by a variety of decorated crosses. This practice was continued until the reign of Constantine X (1059-67), when signed *folles* started to be issued again alongside the so-called "*anonymous*" *folles*.

2. The Anonymous *folles*¹

I. Introduction

The literary sources ascribe the introduction of the anonymous coinage to John I Zimisces (969-76)². This date has been accepted by most modern scholars, though in some respects the passage of Scylitzes referring to it is problematic³. Scylitzes attributes this innovation to the emperor's deeply religious nature.

The origin of the design on the early anonymous *folles* is not documented. On the obverse there is the depiction of Christ's bust holding the Gospel with the one hand and raising the other in benediction. Some detailing of the design such as the depiction of Christ's right arm in the folds of his cloak suggests that it might have been influenced by monumental painting. A possible source is the Christ of Chalke, greatly venerated by John Zimisces⁴.

On the reverse is a four-line religious inscription reading: IHSUS/XRISTUS/BASILEU/BASILE'. It is highly likely that this type of inscription is the Greek form of *Rex Regnantium* that accompanies the enthroned Christ on Basil I's gold coinage⁵. It is attested

1. The term anonymous *folles* has been suggested by Grierson; see *DOC*, 634 where and other proposals are mentioned.

2. John Scylitzes (*Synopsis Historiarum* XIX; ed. Thurn, 311). The passage is repeated almost word for word by Cedrenus (ed. Bonn, 414).

3. A. Bellinger, *The Anonymous Byzantine Bronze Coinage*, NNM 35, New York, 1928 where there is a detailed summary on the chronological problem of the introduction of the anonymous coinage; i.e. Wroth dated it to 972 after John's great victory against the Bulgars. See also M. Metcalf, *Coinage in South-eastern Europe*... 55 and esp. n. 1

4. *DOC*, 636.

5. D. M. Metcalf, *Coinage in South-eastern Europe*... 56 and esp. n. 2; Grierson however in *DOC*, 634 suggests that the reverse inscription might be analysed in *Βασιλεὺς Βασιλέων* (*Rex Regum*).

that Basil I, the founder of the so-called "Macedonian" dynasty, showed great devotion to this type of Christ for raising his house to the imperial throne. Considering the obscure circumstances of his accession to the throne, John Zimisces most probably adopted a well known slogan in order to invoke the High protection of his throne¹.

Nevertheless, the change might well have been prompted by economic and monetary factors. As we have seen already, the last decades of the 10th century are marked by an increase in the circulation of copper coinage and probably a more sophisticated monetary policy was needed. The gold *tetarteron* was introduced in 965, only a few years before the introduction of the anonymous coinage, and although its function remains obscure its introduction suggests that the Macedonian emperors had a conscious monetary policy.

The intention of Zimisces' innovation may be described as follows:

By the closing decades of the 10th century a flexible petty-currency was required in order to circulate easily throughout the territory under Byzantine supervision and influence, and even beyond the confines of the Empire. In accordance with the political aim of the period it is possible that the anonymous coinage was designed for use even in areas of indirect

1. For the iconography of the *Rex Regnantium* and the theocratic political philosophy of the period under discussion see J. D. Breckenridge, *The Iconography of Justinian II (685-695, 705-711 A. D.)*, NNM, 144, N. York, 1959.

influence. The strong religious iconography would have been warmly received by the people of the reconquered provinces in the East and of the areas with which the Empire had opened new commercial and artistic relations. Eventually the new anonymous coinage could be used as an "international" currency by the Christian populations of South-east Europe and Asia Minor, emphasising the unity of a Byzantine-led Christendom against the threat of Arab expansion.

Around the time of John's death there was a dramatic improvement in the both appearance and circulation of the anonymous issues. A more elaborate heavier version was introduced and widely distributed: large quantities of them have been found in Greece, the Balkans, Asia Minor and Russia, while they were counterfeited by the Arabs. The new type was struck for over sixty years.

Later emperors varied the design of the anonymous *folles*, so that a dozen types were issued successively in the course of the eleventh century¹. Today these are referred to by the letters of the alphabet (A,B,C,...)². The change was not very sudden. For instance, Class B which succeeded Class A had a similar design: the obverse features the same figure of Christ, while on the reverse the same religious inscription is arranged in the angles of a cross potent, by abbreviating the first two syllables IHSUS XRISTUS into IS XS. This form of the reverse inscription was maintained until the end of Constantine X's reign c.1065 (Class F).

1. For a convenient survey of the different classes of the anonymous *folles* see in *BNP*, 586.

2. The system of alphabetical references to the various classes of the anonymous coinage was first introduced by M. Thompson in her study of the coins found in the Athenian Agora.

addition it is reminiscent in size and fabric of the earlier issues of the Macedonian dynasty, while it is frequently struck over *folles* of Constantine VII and Nicephorus II. Its intended weight-standard was about 7g. Coins of this class are not found very common and *very frequently* their issuing appears to have been quite limited.

Class A2 is generally of a much larger size and a more elaborate style characterized by a great variety of ornaments above and below the reverse inscription as well as on Christ's nimbus and on the cover of the Gospel. Sixty-one combinations are listed by Grierson¹ while a few others have been discovered since. There is also considerable variation in size and weight-standard, as a result of which Metcalf has suggested a further subdivision. According to his scheme specimens of Class A2 in an intermediate size and with a reduced weight-standard might be classified separately as Class A3².

Class A still raises a number of questions concerning chronology, classification of the varieties, and mint attribution. These may be summarized as follows:

a.- Concerns the sequence and the duration of the two, or according to others three subdivisions of Class A.

Class A1 is generally now considered to be the earliest issue of the series and is attributed to John Zimisces, since its size, weight-standard, general appearance and lettering are very close to the coinage of John's predecessors. Furthermore coins of Class A1 are frequently struck over coins of these emperors.

1. *DC*, 645-7; some new varieties are occasionally reported, which unfortunately are not illustrated.

2. D. M. Metcalf, *Coinage in South-eastern Europe* . . . 56 and esp. n. 4.

Some scholars, however, have interpreted the above features as either being indicative of a provincial mint¹, or of a stylistically debased form of Class A2 due to the length of its issue². In the first case Classes A1 and A2 are considered concurrent issues while in the second A1 is dated after A2. According to these scholars the new design described by Scylitzes as an innovation would have involved an improvement in the execution and fabric of the coins.

This was also Wroth's impression of the new coinage, who attributed to the reign of Zimisces all the varieties of Class A bearing dots on Christ's nimbus, since similar marks appeared on the *solidi* of the period. He then assigned the remaining varieties as follows: all *folles* with a star-like ornament or a cross on the nimbus to the joint reign of Basil II and Constantine VIII (976-1025) and those with a crescent to Constantine VIII's sole reign; finally the varieties with a rectangular ornament to Romanus III (1028-34).

Bellinger in his turn by attributing to John's reign only class A1 dated Class A2 to the reigns of Basil II, Constantine VIII and Romanus III (976-1034). He suggested, however, that the large varieties might have been introduced after the defeat of the usurper Bardas Phocas at Abydos in 989; he reserved the coins of what he called "intermediate" size for the period from Basil II's accession (976) up to 989. On the contrary, Metcalf proposed that these issues, which actually constitute part of his Class A3,

1. W. E. Metcalf, "Early Anonymous folles from Antioch and the chronology of class A", *ANSIN*, 21, 1976, 128.

2. E. I. Dimian, "Cu privire la cronologia si atribuirea monedelor anonime bizantine de bronz", *SCN*, 3, 1969, 197-221.

might be the latest of the series and dated them from 1020 to 1028, following Thompson's proposal for the final date of Class A.

b. - The meaning of the various ornaments remains obscure although it is widely believed these may conceal some purpose. Grierson, for instance, has suggested that they could be sequence marks while Metcalf views them as an indication of the existence of provincial mints.

More precisely Metcalf has classified the different varieties into eight groups on the grounds of style, execution, weight-standard and provenance¹. According to the above scheme the varieties of group (ii) could be issues of the metropolitan mint while those of group (iii) of a provincial Greek mint. Moreover a couple of other groups, (v) and (vii), have been considered as certain works of provincial mints, with a possible attribution for the first to a mint in south-west Asia Minor². Finally groups (iv) and (vi) constitute his Class A3, during the issuing of which he has suggested that the various provincial mints apparently ceased operation, although group (viii) could be of a contemporary provincial mint.

It is obvious that a comparative study of a considerable number of coin hoards and stray-finds with known provenance could shed light on the above problems. Some new material is now available which may add new information, but this is still only meagre

1. D. M. Metcalf, " Interpretation of the Byzantine 'Rex Regnantium' folles of class 'A', c. 970-1030, *NC*⁷, 1970, 199-219.

2. *Id.* "Bronze coinage and city life in Central Greece circa A. D. 1000", *BSA*, 60, 1965, 1-17; *id.* "Byzantine coins minted in Central Greece under Basil II", *Nomismatika Chronika*, 3, 1974, 21-5;

the only exception being class C, which bore on the reverse a jewelled cross and the inscription IS-XC/NI-KA arranged in its angles. From 1065 onwards the inscription was replaced by either the bust of the Virgin or by a variety of decorated crosses.

Changes occurred also in the obverse types: on Class D Christ is depicted seated on a square-backed throne and on Class F on a backless one; a standing figure of Christ, most probably of the type of *Antiphonetes*, is depicted on class C.

The chronological order of the various types of the anonymous *folles* was extremely puzzling and had attracted the attention of a number of scholars for a long time. Their classification on the basis of overstrikes, either in collections¹ or from excavations², has, however, resolved the problem and today their chronological sequence, as it has been developed by Grierson³, seems certain.

II. The Anonymous *folles* of classes A1 and A2.

Class A is generally divided into the following two sub classes:

Class A1 is quite homogeneous and characterized by the absence of ornaments above or below the reverse inscription. In

1. There is a series of reports by P.D. Whitting and C.H. Piper concerning overstrikes from their collections; they were published in *Seaby's Coin and Medal Bulletin* between the years 1949 and 1952. For exact reference to them see *DC*, 636, n. 10.

2. *i. e.* from the Corinth excavations: A.R. Bellinger, *The Anonymous Byzantine Bronze Coinage...*; or from the Athenian Agora excavations: M. Thompson, *Coins from the Roman through the Venetian Period* (The Athenian Agora, vol. II), Princeton, 1954.

3. *DC*, 638.

evidence since its provenance is restricted to the boundaries of the modern state of Greece. The lack of detailed publications of hoards from Bulgaria, Albania and South or South-west Yugoslavia obstructs thorough research. The study of material from those areas in connection with the historical events of the period could contribute appreciably either to the chronology of the varieties or the identification of provincial mint(s).

The coin-hoards we shall refer to, could be divided into three main runs on the grounds of their composition. This division might be of some help to our study, resulting in a comprehensive understanding of the available evidence. Stray-finds will be examined also when dealing with the geographical distribution of the various groups. Finally, the classification of the different varieties will be based on Metcalf's grouping system. The runs of the hoards under consideration may be briefly described as follows:

Run I. [Hoards I.1-I.16]¹

It contains in total 16 small hoards or deposits² covering a limited time span. Their character is compact and they contain coins of only one of Metcalf's groups. All but two come from either Athens or Corinth; one was found, however, during excavations in *Kato* Basilica Aetolias and another near the village Hornyia in Chalkidiki. Finally a small hoard from Srpska Mitrovica is included.

1. For a detailed commentary and bibliography of the hoards included in this study see in Appendix IV and V.

2. The hoards I.7-I.11 are actually small deposits definitely associated while deposits I.12-I.14 are possibly associated: see D.M. Metcalf, "Bronze coinage and city life...", 9.;

Run II [Hoards II.1-II.12].

This run includes twelve hoards from over a longer period of time, containing different groups of varieties. They are of particular interest for the chronology of the groups. They can also provide useful information for circulation trends in a particular area and consequently may contribute to solving the problem of the provincial mints.

There are 4 hoards from Corinth, 1 from Athens, 1 from Macvanska Mitrovica, 1 from Turkey, 1 from Bulgaria and 1 of an unknown provenance, held in the Numismatic Museum of Athens. Four small deposits from Athens are also included.

Run III [Hoards III.1-III.11].

In this run eleven hoards have been included, which were accumulated during an even longer period of time. Their concealment varies, the earliest dated at the end of the 11th century, before Alexius I's monetary reform in 1091, the latest during the reign of Manuel I (1143-1180). The coexistence of class A anonymous *folles* with later issues can confirm the late date of some groups or varieties.

Eight hoards come from Greece: one from Sparta, one from Drosaton in Central Greece, four from Corinth, two from the city of Thessaloniki, where the numismatic evidence is otherwise extremely scanty, and one with uncertain provenance. The latter is kept at the Numismatic Museum of Athens and is said to come from a private collection of an inhabitant of Chalkis in Euboea, named Marketes.

The Plopeni hoard from Dobrogea in Rumania includes a good number of Class A anonymous *folles* and from this point of view differs from the Greek hoards. Undoubtedly the hoard provides useful information. It was assembled in an area without a continuous circulation of Byzantine issues, unlike active urban centres of the empire. The Byzantine influence there was connected with military expansion or a long-distance trade. Similarities with hoards found at Corinth, Athens and other areas of Central Greece therefore might be of great interest and might assist in solving the problem of the provincial mint(s). A small hoard from Nufarul in North Dobrogea is also included.

The so-called Mardin hoard¹, found some years ago in south-east Asia Minor is also included in this run. It contained about 13.000 copper coins of which 2,204 bore Islamic countermarks. All were Byzantine issues with an exception of three Islamic coins dated to the 12th and 13th centuries. The Byzantine specimens covered a wide period of time from the reign of Anastasius I (491-518) until the reign of Alexius I (1081-1118). From those only 146 were dated prior of the introduction of the anonymous coinage. Class A is represented with 1,797 coins of which 170 bore Arab countermarks; 1,192 legible specimens are included in this study.

Despite the various questions concerning the interpretation of this kind of hoard², the Mardin hoard provides some piece

1. N. M. Lowick, S. Bendall, P. D. Whitting, *The Mardin Hoard. Islamic Countermarks on Byzantine Folles*, 1977.

2. For a similar hoard see W. Weiser, "Ein neuer Fund spätbyzantischer folles mit islamischen Gegenstempeln, *SM*, 29, 1979, 86-9.

of evidence for the circulation of Byzantine currency in East Asia Minor. Most probably its composition, regardless of its date and the reasons behind its concealment¹, was based on issues that used to be widely circulated in this part of the Empire.

The information provided by the study of the above material, as far as the distribution of the various groups is concerned (see Appendix IV and table IX) may be summarized as follows:

Group i (Cl. A1): The figures of the geographical distribution of group (i) do not support the suggestion that it might be the output of a Greek provincial mint². Its low representation among the anonymous *folles* of Class A at Antioch may simply imply that the monetary activity in the city might have started long after its recovery from the Arabs in 969. It provokes, however, a re-examination of the chronology of some varieties of Class A2 (see below).

Group iii. Hoards and stray finds raise serious doubts as to the attribution of group (iii) to a provincial mint in Central Greece or Corinth³ for three main reasons:

First the composition of the new hoard I,15 from the vicinity of

1. The phenomenon of this kind of counterfeiting is quite intriguing and there is some debate on the interpretation of these hoards. See Lowick's abstract in *NZ*, 110, September 1983, no. 23; see also Bendal's abstract in *NZ*, 109, March 1983, no. 278 and I. C. G. Campbell, "Arabic counterstamps of the anonymous folles series, *NZ*, 14, 1980, 88-90.

2. W. E. Metcalf, "Early anonymous folles from Antioch", 128.

3. D. M. Metcalf, "Interpretation of the Byzantine 'Rex Regnantium'.

Thessaloniki and hoard II,9 from Turkey¹ harmonizes with the evidence from Corinth and Aetolia.

Second, the statistics based on new material of stray finds suggest that the circulation of group (iii) was wide and predominant throughout the Byzantine empire. The total absence of the group from the themes of Nicopolis and Dyrrachium cannot at the moment be indicative since the available material from there is too scanty to provide certain clues². Nevertheless the hoard I,1 from the south coastal area of the theme of Nicopolis, not far away from the west frontiers of Hellas, contains only specimens of group (iii) and consequently demonstrates the typical figure.

Third the quantities of group (iii) ^{that} circulated outside the frontiers of the Empire, especially in Serbia³ and South Dobrogea, appear noteworthy. It seems quite implausible that issues of a provincial mint in Central Greece should reach far-off areas during time of war.

1. The qualification of the hoard as "traveller's hoard", in the light of the material from the Thracasian theme or even from Antioch contains ambiguities; see D.M. Metcalf, "Byzantine coins minted in Central Greece under Basil II", *Nomismatika Chronika*, 3, 1974, 23.

2. The detailed publication of the anonymous *folles* of class A recorded in Museum collections from Albania would, however, change the figures for the theme of Dyrrachium. Moreover, distinguished monetary activity in urban centres of Nicopolis on the side of the Ionian sea is attested from a later period and therefore the predominance of group (ii) would have been influenced by factors other than the current circulation trends in other sites.

3. The high portion of group (iii) from Serbia might be due to the appearance of a Byzantine army in the area and the final capture of Sirmium by Basil II, in 1019.

Fourth the absence of group (iii) from the Corinthian hoards III.1- III.4, consisting mainly of later issues, indicates that its predominance in hoards of run I and II from the same city might be simply due to the earlier date of their concealment. Hoards III.5 and III.6 from Sparta and Drosaton respectively confirm the pattern.

Groups (iv), (vi) {A3}: Their frequent appearance in late hoards, deposited at the end of the eleventh century or even later, in the twelfth, suggests that they should represent the last phase of Class A.

Hoard III.9 from Chalkis is, however, very intriguing. It contains a high ^{pro-}portion of group (iii) but only one specimen of group (iv). Eventually this might be due to a regional difference in the circulation of petty-currency. The slow frequency of additions to the hoard after group (iii), indeed, may hint at a prolonged circulation of the early groups of Class A in areas where monetary activity was less developed than in Corinth or on the coasts of Central Greece. Besides, the statistics from Corinth, Athens and their themes show that the late groups of Class A would not have circulated widely in this part of the empire and there may have been a reduction in the money supply to Greece which was more pronounced in the periphery. The underlying reasons for this reduction are not clear but it might be due to the government's concern to strengthen the monetary sector in certain themes -see for instance the statistics from the themes of Thessaloniki, Strymon and Macedonia as well as from Antioch- or even to stimulate it in the newly captured northern areas.

Indeed, the available figures for both groups from the areas within the empire's boundaries demonstrate a fluctuation implying different tendencies in the circulation of the petty currency. Nevertheless their portion levels are remarkably lower than group (iii). The contrast is less pronounced in the figures from the theme of Thessaloniki and Antioch mainly, as far as group (iv) is concerned.

On the contrary, groups (iv) and (vi) appear to occur in much greater quantities in newly captured areas¹ or even outside the boundaries of the empire.

The predominant occurrence of group (iv) in Serbia, North Bulgaria, or even in Dobrogea² apparently reflects the monetary activity in these areas as a result of the new expansion of the Byzantine empire. Group (iv) might therefore represent the phase of class A after the final defeat of the Bulgars in 1019. There is a rather sharp contrast in the quantities of groups (iv) and (vi) from the

1. Much more evidence is needed for final conclusions and the publication of the Bulgarian hoards is crucial. The comparison of the statistics from the southern or central areas of the country, where hostilities and battles took place, with those from northern areas which were included within the new theme of Paristrion, should be of great importance.

2. The contrast between group (iv) on the one side and the earlier groups (i-iii) on the other is less pronounced in South Dobrogea indicating that the military station in Capidava and the naval base of Pacuil-lui-Soare continue to be active in the last decades of the tenth and at the beginning of the eleventh century. The rather high proportion of group (iii) from Serbia has been already explained.

above areas which might be due to the Pecheneg incursions (1028-36)¹.

Both groups are overrepresented in finds recorded from southeastern Turkey². Unfortunately their provenance is not certain and the statement that they have been collected in and around Antioch does not seem reliable when comparing them with the excavated coins from there. Since their statistics tally with those of the Mardin hoard, a provenance further east seems more possible. It is difficult, however, to explain the predominance of late issues of Class A in this part of the empire although they might represent a massive supply of money after 1019. The statistics from Antioch hint at a consignment of money there much higher than that made to Greece or to the old themes of Asia Minor during the last phase of Class A but it is difficult to trace out the degree and the geographic extent of this policy, especially at a period when the empire's attention was devoted to its European possession³. Nevertheless more material from the area is needed.

Group (ii): On the assumption that group (iii) is not a provincial but a metropolitan issue its distinction as a separate group is limited to its higher weight-standard and in some

1. The twenty-four specimens of Class B in the Plopeni hoard suggests that Byzantine currency had a normal circulation in Dobrogea at the end of Class A.

2. The figures from South-eastern Turkey are taken from D.M. Metcalf, *Coinage in South-eastern Europe...* 59; for detailed description of the coins and their provenance see *ib.* "Interpretation of the Byzantine 'Rex Regnantium' folles...", 215.

3. See G. Ostrogorsky, *History of the Byzantine State...* 313 and n. 1.

cases to its better artistic execution. Obviously the statistics from the capital and the Thracasian theme supplement the evidence provided by the distribution tables of group (iii).

Groups (v. vii,ix {A2}---viii {A3}). The rather muddled distribution of these groups shows that they were similarly not localized in circulation although they are absent from Constantinople.

To summarize, it seems very plausible that the nine stylistic groups of Class A were issued by the metropolitan mint. Differences in the style, the execution and the weight-standard, which are attested from the previous period as well, might reflect a hasty supply for currency connected with extra military expenses during the war as well as a period of gradual readjustment^d after the new expansion of the empire.

The *information available* about the chronological sequence of the various groups, especially of those belonging to Class A2, is still very patchy¹. It can be described as follows:

1. The internal arrangement of the varieties of Class A, although an attractive exercise, still cannot be elucidate and will probably constitute the subject of a future study. For a provisional internal scheme see Appendix IV.

Class A2 {groups (ii), (iii), (v), (vii), (ix)}.

Undoubtedly group (ii) with its large heavy specimens, averaging about 15g., in a rather elaborate style, stands at the beginning of Class A2. Coins of this group are not common among excavation finds and their circulation appears limited, probably due to domestic *rivalry* between 977 and 989. About 17 main varieties sufficiently close to each other in their style can be counted.

Metrology, similarities of ornamentation and close reverse affinities with varieties 48/49 suggest that group (v) might be incorporated into group (ii) thus increasing the total number of its substantive varieties to 20.

Although the meaning of the various ornaments remains uncertain I tend to agree with Grierson's tentative solution that, at least at the beginning, they could have been changed at yearly or even shorter intervals. If so group (ii) would cover the period 976-996.

Hoard I,1 from ~~Kesto~~ Basilika Aetolias, however, contradicts the above suggested scheme¹. Its deposit could be connected with the Bulgarian incursions into Hellas of 997² giving a *terminus ante quem* for varieties 2-3-5 of group (iii). Besides varieties 8, and possibly 4 of this group, which are . . .

1. It consisted of eleven coins stuck together in a form of a *rouleau* keeping probably the original shape of its leather or fabric container. It was found in a tomb together with a point of a spear.

2. G. Ostrogorsky, *History of the Byzantine State* . . . , 308.

not included in the hoard, could be earlier than 2-3-5¹. If so, the introduction of group (iii) could be dated at least five years earlier than the deposit of the hoard, that is to ±992, and consequently the introduction of group (ii) to ±972.

Thus, Class A1, undoubtedly the earliest issue of Class A, could represent the first phase of John Zimisces' innovation covering the period from the emperor's accession to throne up to 972. That year, according to Scylitzes testimony, the emperor inaugurated the rebuilding of the church of Chalkitis in the capital, celebrating at the same time some important military successes. Probably, the improved version of the anonymous coinage -perhaps varieties 1, 50, 6, and 11- could be also part of those celebrations.

A written source supports the above suggestion for the introduction date of Class A2. Mathew[†] of Edessa informs us that the emperor paid an Armenian governor the large sum of 40.000 *folles* in order to provide him with mules for his campaign to Syria. Class A1, indeed, could hardly tally with such an agreement².

Group (iii) undoubtedly follows in the sequence group (ii). It seems to have been issued in large quantities and is today very common. The system of the frequent changes of ornament above and below the reverse inscription, however, seems to have been abandoned during the course of its issue most probably due to the increased demand for money in order ^{for} extra war expenses to be met. Some of its very common varieties (i.e 3, 5) might have been minted, therefore, during almost the whole period of the war against the

1. See Appendix IV.

2. *DC*, 72 and n. 220.

Bulgars. I would conjecture that it should be attributed to the years 992-1015.

Groups (vii) and (ix) might follow in the sequence covering the period from 1015 to 1019. The "frozen" ornaments of varieties 3 and 5 were replaced by new ones indicating that after the important Byzantine victory at Kleidion, a renovation of the copper coinage was attempted, although both groups show a great variety in size, weight, fabric and general execution. Apparently these series reflect a transitional period.

Summarising we may propose the following provisional chronology for Classes A1 & A2:

Class A1:	969-972.
Class A2:	
Group (ii): var. 1, 6, 11, 50:	972-976
Group (ii): var. 14/22, 14a, {15, 15a}, {16, 16a}, 17, 18, 19, 19a, 30, 33a, 36, 42b, {48, 49, 9},	976-992
[group (v)]=var. 25, 26, 27	
Group(iii): var. 8, 4, 2, 3, 5, 3/20, 3/24b, 7, 6a	993-1015
Group(vii): var. 34, 21, 12	1015-1018
Group(ix) : var. 51	1018-1019

Class A3 { groups: (iv), (vi), (viii)}.

As has already been mentioned, Class A3, might represent the last phase of Class A, from 1019 onwards.

Some new information is available now pertaining to its internal classification.

Group (viii) is rather rare and hoard evidence indicates that

it might be the earliest in the sequence. Its frequent appearance in hoards along with groups (iv) and (vi) confirms their relation. The instability of its weight brings it closer to (iv). Moreover, hoard evidence, though still scanty, suggests that group (viii) could be the earliest: groups (iv) and (vi) are absent from hoard II.1 while only one specimen of the heavy-weighted variety 31 (viii) occurs alongside with groups (i), (ii), (v), and (iii).

Group (viii) includes two varieties of different weight-standards: this is difficult to explain in terms of mint organisation. It seems, however, quite possible that they were not concurrent issues.

Group (iv) might precede group (vi). The fluctuating metrology of its, possibly early, varieties strongly support this. Besides hoard II.8 from Reka Devna, which might have been concealed in an emergency during the Pecheneg incursions of 1028-36, shows a sharp contrast between the proportions between both groups, most probably due to its sudden deposit while group (vi) was still in production. The structure of most hoards of run III appears also to support the pattern.

Group (iv) could have been issued for a longer period of time than the two types of reverse ornament imply, for the heavy and large specimens of varieties 39 and 40 could have been issued separately from the rest of the "intermediate" size. Nevertheless they are not very common and probably represent an "experimental" issue at the beginning of group (iv).

With group (vi) the type of the anonymous coinage introduced by John Zimisces reached at its end. The precise date of its replacement by the anonymous *folles* of Class B is unknown.

Apparently the exclusive attribution of group (vi) to Constantine VIII's reign still needs to be proved. The chronology of Class A3 may be summarised as follows:

Class A3:

Groups (viii) & (iv):	var. 31-32-32a and	
	var. 23, {39, 40, 40a, 40b, 24a},	1019-1025
	{1a, 14b, 24, 33, 42a}	
Group(vi):	var. 29/41, 43, 45, 47 ¹	1025-1029.

Finally the imitations of the anonymous *folles* of Class A2 found in the Byzantine theme of Paristrion, created by Basil II, in north-central Bulgaria, have caused a considerable debate among numismatists. It seems likely that people, most probably from

1. Varieties 44 and 46 which have been classified by Metcalf in this group are omitted from the relevant table of the varieties in DOC; see however the commentary in DOC, 646-7.

further north¹, are responsible for these imitations in an effort to involve in themselves commercial affairs around Danube, where the anonymous coinage appears to have been circulated in considerable quantities.

1. D. M. Metcalf, *Coinage in South-eastern Europe...*, 62 ;
Y. Youroukova, "La circulation des monnaies byzantines en Bulgarie
VIe-Xes., *I. Międzynarodowy Kongres Archeologii Słowiańskiej.
Warszawa 1-18 ix 1965*, vol. VI (Section V), 1968, 128-41 : the author,
discussing a large hoard of imitations found at Zlataritsa, argues
that the imitations were occasioned by the presence of the
Byzantine troops in the area during the reign of John Zimisces.
These *folles*, however, are attributed now to Basil II and so the
above argument cannot be the case ; see also I. Jordanov, "Ramni
formi na monetno proizvodstvo (XI-XII v) v bulgarskite zemi,
Numismatika, 14, 1980, 4-15: he considers these imitations as a local
autonomous coinage; see also E. Oberländer-Tarnoveanu, "Un atelier
monétaire inconnu de la deuxième moitié du XIe siècle dans le thème
de Paristrion", *RevEtSEEur*, 21, 1983, 261-70. : the author discusses
later imitations of several Byzantine issues between 1068 and
1081.

The *Monetary* circulation (717-1081).

I. The historical frame and a survey of the recorded evidence.

The Byzantine monetary and financial affairs, from the accession of Leo III (717-740) to the monetary reform of Alexius I (1092), gradually changed their general character in several respects. These changes greatly influenced the expansion of the circulation of the Byzantine coins throughout the empire and beyond it.

The whole period may be sub-divided into five main units, the features of which can be summarised as follows:

A. (717-800).

The financial crisis of the late seventh century caused by the combined effects of hostile and foreign invasions, domestic instability, fractional violence, food shortages, and natural disasters¹ continues in this period.

In 1954 Kazdan² put forward the view that there was a serious decline in the urban history of Byzantium. This view was largely based on the lack of the petty-currency, since stray-finds of bronze coins from this period were extremely scarce from sites which had been systematically excavated, such as Athens, Corinth, Ephesus, Sardis. The reactions to this view were immediate and there was a considerable debate, over the extent of the damage which the empire had suffered.

1. C. Mango, *Byzantium. The Empire of New Rome*, 1980, 60-87.

2. A. P. Kazhdan, "Vizantijskie goroda v VII-VI vv.", *SovArc*, 21, 1954, 164-88; *id. Derevnija i gorod v Vizantii (IX-XV v.)*, Moscow, 1960.

Some scholars considered that the empire was seriously impoverished and they have submitted that its provincial cities were abandoned or changed into small villages and forts¹. Others have found the empire still relatively prosperous and powerful with an important trade and urban life maintained in Asia Minor and even to some extent in Greece and Thrace².

Moreover, Vryonis³, examining a hoard of 51 gold coins from Attica, concealed in the second quarter of the eighth century and presenting a variety of documentary evidence has asserted that the vast military expenditures of the government constituted a remarkable factor in the vitality of the provincial economy. He has also urged that the evidence from site-finds is inconclusive and unsatisfactory and concludes that the Attica gold hoard which, from the period when stray finds of bronze coins are extremely few, "shows how capricious the numismatic evidence is".

1. C. Foss, "The Persians in Asia Minor and the end of Antiquity", *EHR*, 90, 1975, 721-47; *id.* *Byzantine and Turkish Sardis*, Cambridge Mass., 1976; *id.* "Archaeology and the "twenty cities" of Byzantine Asia", *AJA*, 81, 1977, 469-86; *id.* *Ephesus after Antiquity: A Late Roman, Byzantine and Turkish City*, Cambridge, 1979.

2. G. Ostrogorsky, "Byzantine cities in the early middle ages", *DOP*, 13, 1959, 45-66; P. Charanis, "Observations on the demography of the Byzantine Empire", *Thirteenth International Congress of Byzantine Studies: Main Papers* 14, Oxford, 1966, 1-19.

3. S. Vryonis, "An Attic hoard of Byzantine gold coins (668-741) from the Thomas Whittemore collection and the numismatic evidence for the urban history of Byzantium", *Zbornik Radova Vizantološkog Instituta*, 8 (= *Melanges Georges Ostrogorsky*, I), 1963, 291-300.

Vryonis' assertion apparently created some criticism among numismatists and, indeed, the systematic study of the monetary circulation, during the period under discussion, became imperative¹.

There are hints that Leo III tried to stimulate the monetary sector in some provinces. The discovery of his rather scarce copper coins in the Athenian Agora, might reflect this policy². The years which followed, however, demonstrate an almost complete lack of archaeological and numismatic evidence in urban centers. Today, almost thirty years after the beginning of the controversy outlined above, the extreme scarcity of localized numismatic evidence, despite the increased number of excavations, either systematic or rescue, confirms that there was a severe decline of urban life, during the eighth century. Other archaeological finds give the same evidence and it seems highly likely, that the economy of the empire had become primarily agrarian and that monetary activity in the cities was reduced. Apparently the recession of the eighth century was much less profound in the capital as the

1. E. Frančes, "La ville byzantine et la monnaie aux VIIe-VIIIe siècles, contribution au problème de la crise de la ville byzantine", *Byzantinobulgarica*, 2, 1966, 3-14; D. M. Metcalf, "How extensive was the issue of folles during the years 775-820?", *Byzantion*, 37, 1967, 270-6; see also the latter's review of Vryonis' article in *HBN*, 18/19, 1964/65, 280.

2. M. Thompson, "Some unpublished bronze money of the early eighth century", *Hesperia*, 9, 1940, 358-380.

ratio of coins from various centuries discovered there suggests¹.

Undoubtedly salaries and taxes were mostly paid in money and there is written evidence indicating that a monetary economy still existed not only in important urban centers but even in smaller agrarian communities. References in Lives of Saints and in different law texts give some information for the prices of commodities, the salaries of craftsmen or workmen, and for loans which should be initially paid back in money². It seems plausible, however, that the monetary economy was largely limited to relations between the state and its subjects while *within* private and every day transactions it was less *important*. Therefore the circulation of gold coinage, and perhaps of silver, might have been directly influenced by the state financial and monetary policy and it cannot be connected with the evolution of the urban life.

The evidence of Attica hoard³, which actually is the only gold, so far, buried during the eighth century, might be handled with

1. A. H. M. Jones, "The coins", in [S. Casson and others] *Preliminary Report upon the Excavations Carried out in the Hippodrome of Constantinople in 1927 on Behalf of the British Academy*, 1928, 46-50; see also D. M. Metcalf, "How extensive was the issue...", 304, where some statistics are provided; the coins of this period represent the 9% of the total discovered in Sarachane while those dated from 800 to 886 show almost a double proportion.

2. A fair amount from the stipulations of Leo III's *Eclogae* concerned such matters.

3. See Appendix V no. 35. For a hoard of the early eighth century (711) from Asia Minor found in 1976(?) see *CH*, III, 240

some reserve: it is a saving hoard and cannot reflect the current trends in monetary circulation.

From the eighth century three hoards of *miliaresia* are recorded¹. Two come from Asia Minor and one from Thessaloniki. Military enterprises against Arabs during the second half of the century might have brought plenty of *miliaresia* in Asia Minor either as part of soldiers' salaries or as payments for miscellaneous supplies and maintenance. The Thessaloniki hoard of 1891 has been described as a pot hoard including seven *miliaresia* of Artavasdus. Due to the lack of a detailed description of the whole hoard the *available* evidence is very fragmentary.

The loss of Byzantine control in external trade should have contributed greatly to the reduction of the Byzantine coins in circulation. The former imperial provinces of Syria, Mesopotamia, Egypt and North Africa were under Arab occupation, while in Mediterranean the Arabs were supreme. Moreover land routes were no longer safe and the southern regions of the Balkan peninsula were overrun by the Avaroslavs. Finally, a new independent state, the Bulgars settled in the northern part of the Empire. Coin finds indicate that commercial relations with them during this early period were almost non-existent, but trade by exchange might have taken place.

The numismatic evidence, however, suggests that there was long-distance trade, for the provisioning of the capital, with the area of Dobrogea or *further* north with Moldavia. Both copper and silver coins of the eighth century are recorded from

1. See Appendix V nos. 51, 120 & 121

these areas either as stray-finds or as hoards¹. The Urluia hoard from Central Dobrogea and the Cleja hoard from Moldavia² are indeed of great importance, as far as concerns the monetary history of the eighth century.

B. 800-969.

The ninth century was a turning point in the history of the Byzantine world. The attacks by the empire's northern neighbours abated after Krum's death in 814³. In the central and southern regions of the Balkan peninsula the Slavs began to fall under the military and political control of Byzantium and the Peloponnese was made into a theme in about 810. Furthermore, in 842, Arab power began to decline and the Byzantines brought the eastern frontier under their control. After their victory in a major battle in northern Anatolia (863) they were able to exert an offensive policy in the East. The fall of Crete, however, in 826-7 resulted ⁱⁿ the entire loss of sea-control, although some local flotillas were stationed in different ports of the Aegean coast and in the islands.

This period eventually witnessed a progressive increase in the monetary economy. The coins suggest that active life gradually returned to some parts of the Balkan peninsula and Asia Minor.

Apparently, the underlying reasons for the gradual recovery of the monetary sector were complex but the main factor was the general reorganization in the structure of the state.

1. D. M. Metcalf, *Coinage in South-eastern Europe* . . . , 23.

2. See Appendix, V, nos. 111, 112.

3. D. Obolensky, *The Byzantine Commonwealth. Eastern Europe, 500-1453*, 1971, 69-102.

At the beginning of the period, the emperor Nicephorus I, a former minister of finance, made a series of reforms which undoubtedly laid the foundation for the empire's stability for the future, although at the time they were strongly criticized by the contemporary historian Theophanes¹. In addition the fiscal and economic reforms, which the emperor introduced in order to strengthen public finance, some very important administrative innovations took place. It seems highly plausible, that the emperor's concern for the provinces and the creation of new themes in key areas, was the main factor for the recovery of urban life during the course of the ninth and the beginning of tenth centuries.

Moreover, the emperors of the Amorian dynasty, as we have seen already, undertook a series of innovations as far as the copper coinage is concerned. Michael II introduced a much heavier and larger *folles* than that of the previous period. The intent of the innovation is not recorded but might be connected with the very beginning of the revival of provincial monetary affairs. Probably it reflects the market needs which arose from a renewed trend of consumption and the emergence from the former situation of self-production and self-consumption. The recoinage of the copper currency undertaken by Theophilus ought to be considered a similar development.

The formal fiscal commercial treaty in 816 between Byzantium and Bulgaria, the formal treaty in 907 between the Byzantines and the Russians and the treaty of 944/5 between Byzantium and the

1. For Nicephorus I's various reforms see P. Niavis, *The Reign of the Byzantine Emperor Nicephorus I (AD 802-811)*, Athens, 1987.

prince Igor of Kiev, suggest that merchants travelled between Constantinople, the Danube and the Black sea ports.

The numismatic evidence, as we shall see later, shows a dramatic increase of petty currency in Corinth, but there are obvious indications of a general recovery in the provinces whose cumulative effect by the turn of the millenium was great.

The gold *solidi* of Theophilus appear to have circulated quite widely in north-west Balkans. Stray-finds are recorded from the Adriadic coasts¹, as well as from the interior² and it has been suggested that they might reflect the tribute Dalmatian cities and islands paid to the Slavonic tribes. Besides small hoards from Corinth³, Turkey⁴, Ragusa⁵ of Italy and Sardinia⁶, as well as stray finds

1. I. Marovic. "Zlatnici Cara Theophila u numizmatickoj zbirci Arheoloskog Muzeja u Splitu", *VAH Dalmat*, 55, 1953, 213-6; see also H. Spahiu, 'Monnaies Byzantines des Ve-XIIIe siècles decouvertes sur le territoire de l' Albanie, *Iliria*, 9-10, 1979-80, 385-6: 3 *solidi* are recorded but without a certain provenance.

2. D. M. Metcalf, *Coinage in South-eastern Europe...*, 32 and esp. n. 21 where there is a detailed reference of the places that Theophilus' *solidi* occurred.

3. See Appendix V no. 1.

4. Sungurlu hoard: see Mosser, 85.

5. Mosser, 71: the author erroneously assigns the hoard to Ragusa of Yugoslavia.

6. Porto Torres/1922: Mosser 68.

from Dobrogea¹, Bulgaria² and even from Moravia³ indicate an abundance of gold coinage which might also have been distributed through imperial gifts. The famous Lagbe hoard included thirty-five specimens of the rare *solidi* of Theophilus alone, and even the unique silver hoard of Santorini possibly confirms this procedure⁴.

Similarly the *folles* of Theophilus, though few, show a wide geographical distribution. They are recorded from Dalmatia⁵, Bulgaria⁶, Dobrogea⁷, Wallachia⁸ and, of course, from Greece and Asia Minor.

1. D. M. Metcalf, *Coinage in South eastern Europe...* 32.

2. D. Angelov, and others, *Istoriya na Finansovata...*, 31, Table 4: 1 *solidus* from Preslava, 1 from Varna, 3 from Sumen.

3. J. Sejbal, Zum Fund einer byzantinischen Goldmünze aus der ersten Hälfte des 9. Jahrhunderts auf dem grossmährischen St. Klemenens-Burgwallen, *Moravské Numismatické Spravy*, 6, 1959, 17-9.

4. An uncirculated *solidus* of Theophilus' successor, Michael III, found in the mouth of a skull in a Moravian grave has been viewed as a Byzantine gift to some noble Moravian who was later buried with it; see J. Halacka, 'Nalez byzantské mince v Mikulčicích', *Moravské Numismatické Spravy*, 7, 1960, 52-3 and V. Vavrinek, '"Charònyv obolos" na Velké Morave', *NListy*, 25, 1970, 33-41.

5. H. Spahiu, *op. cit.*, 385: the one comes from Dyrrachium.

6. Y. Yurukova, "Bulgarie VIe-Xe s.", 139: 1 specimen from Kasitchane, Sofia; D. Angelov, *op. cit.*: 3 *folles* from Stara Zagora and 4 from Varna.

7. 2 *folles* in Rasova hoard: see Dimian, "Citeva descoperiri", 198; for Mangalia finds see D. M. Metcalf, *Coinage in South-eastern Europe...*, 32 and n. 13.

8. See Metcalf *op. cit.*, n. 11: 1 specimen from Oltenia.

The Antalya hoard, the most remarkable find of Basil I's reign, included about five hundred *miliaresia*. The character of the hoard is not clear but, indeed, hints at a striking volume of mint output¹.

Surprisingly enough, the recorded numbers of Basil I's *solidi* from Bulgaria are rather impressive especially when compared with areas under direct Byzantine rule. The Maluk Povorets hoard² from northern Bulgaria includes two *solidi* of Basil I while stray-finds are reported from Pliska, Preslav, Varna and Sumen³. Gold coins of the reign from Dobrogea are rather scarce⁴.

There are remarkably few silver finds from Basil I's reign. One coin is recorded from the island of Samos⁵ and one, finding its way to Moldavia, is included in Cleja hoard⁶.

The copper coinage of Basil I appears to be rather scarce, except in Corinth. A couple of *folles* are recorded from Greece⁷ while their number from the Sarachane excavations in Instabul is less than those of Nicephorus and Theophilus. In Sardis, however,

1. D. M. Metcalf, "The Antalya hoard of *miliaresia* of Basil", *NC* ⁷, 1977, 113-125 and esp. 119-20.

2. See Appendix V, no. 72.

3. D. Angelov, and others, *Istoriya na Finansovata...*, 31, table 4: 2 from Pliska, 4 from Preslav, 3 from Varna, 1 from Sumen.

4. D. M. Metcalf, *Coinage in South-eastern Europe...*, 35 and esp. n. 42.

5. U. Jantzen, Die Münzen in *Samos XIV: Das Kastro Tigani*, 186, no. 65.

6. See Appendix V, no. 111.

7. See Appendix V: stray finds.

the two specimens from the excavation period 1910-4¹ are balanced by the two *folles* of Theophilus recorded from the rest of the published material². A few specimens are reported from Dobrogea³, Bulgaria⁴ and Dyrrachium⁵.

The reign of Leo VI shows a remarkable increase in the circulation of the Byzantine coins inside and outside the boundaries of the Empire, although the evidence from Asia Minor is still very patchy⁶. There are plenty in Corinth and considerable numbers are reported from other Greek sites⁷ and the capital⁸. From the area of the Byzantine theme of Dyrrachium there are nineteen *folles* against four of the previous period, while from Bulgaria more than one hundred specimens are listed⁹. The small Bratimir hoard from this area entirely consists of Leo VI's issues¹⁰.

1. W. H. Bell, *Sardis*, 95.

2. G. E. Bates, *Byzantine Coins* . . . , 123.

3. D. M. Metcalf, *Coinage in South-eastern Europe*, 34 and esp. n. 32-34.

4. Y. Yurukova, "Bulgarie VIe-Xe s.", 139: 1 specimen is recorded respectively from Pliska, Preslav and Mogilata; see also D. Angelov and others, *Istoriya na Finansovata* . . . , 31, Pl. 4. Preslav: 3; Stara Zagora: 3; Varna: 3; Sumen: 1.

5. H. Spahiu, "Monnaies Byzantines des Ve-XIIIe . . .", 386: 2 come from Dyrrachium and 1 from Tirana.

6. 10 specimens have been published from Sardis.

7. See next chapter and Appendix V: The stray-finds.

8. 42 specimens are listed from the excavation in Sarachane.

9. D. Angelov, *op. cit.*: Pliska: 5; Preslav: 54; Stara Zagora: 9; Varna: 15; Sumen: 10; Silistra: 5; see also Y. Yurukova, *op. cit.*, 140: Mesek, Svilengradsko (hoard): unidentifiable number.

10. See Appendix V no. 88.

A high number of *folles* are also recorded from Dobrogea¹ and from north-east Wallachia², while a specimen was found in Moravia³. Two *milliareisia* of Leo VI were included in a hoard of the eleventh century, found north of Transylvanian Alps⁴.

The figures from the reign of Constantine VII (913-59) and his colleagues up to the reign of Nicephorus II (963-9) show an even greater increase in the volume of Byzantine copper coins circulated in Greece, in the capital and most probably in Asia Minor. The evidence from the Balkans is quite different. Only eight are reported from the theme of Dyrrachium⁵. From Bulgaria the newly published material gives a more precise figure than it was previously known. One hundred twenty seven *folles* are reported from Pliska, Preslav, Stara Zagora, Varna, Sumen and Silistra while a small number is known from other less important sites⁶. This number, compared with the one hundred *folles* from Leo VI's considerably shorter reign, shows a reduction in the circulation of Byzantine coins in the area. The underlying reasons for this reduction are not clear; the military events between Byzantines and Bulgars in the period 896-923 and probably foreign political conservatism during the rule of Tzar Peter might have played a role. The Patzinak and Magyar

1. G. Poenaru Bordea, I. Donoiu, 'Contributii', 75-6; Ochesanu, 'Citeva monede bizantine', 309-14.

2. Metcalf, *Coinage in South-eastern Europe...*, 42 and esp. n. 6-8;

3. V. Nemecek, "Nalez byzantské mince z. IX-X stoletive. Vel. Mezirici", *Moravské Num. Spravy*, 14, 1977, 112.

4. Preda' 'Catalogul descoperirilor', 411 (Vadas).

5. Spähiu, "Monnaies Byzantines des Ve-XIIIe...", 388-9.

6. Angelov and others, *op. cit.*; Pliska:8; Preslav:80; Stara Zagora:10; Varna:17; Sumen:9; Silistra:3.

invasions of Thrace in 934 and 943 might also have resulted in the modest number of coins from Constantine VII's reign, found in Dobrogea and Wallachia¹, although the *folles* struck by Constantine VII during the regency of his mother Zoe (914-9) are *surprisingly* common there².

The number of gold hoards³ and stray finds⁴ from Bulgaria, dating back to Constantine VII's reign is considerable. They might be divided into two chronological groups: the first consists solely of Romanus I's and Christopher's issues; the second includes additions of Constantine VII and his son Romanus II. A third group is slightly later and contains issues of Nicephorus II with Basil II. Undoubtedly these hoards reflect the different stages in the political relations between the Byzantines and the Bulgars during the second and third quarter of the tenth century: they might be connected with Romanus I's agreement in 924 to pay tribute to Bulgars. Nevertheless finds of third group, which are mainly localized in frontier areas of the Bulgarian

1. D. M. Metcalf, *Coinage in South-eastern Europe* . . . , 42

2. *Id.*, 'Constantine VII with Zoe', 253-5; the author connects these finds with the appearance of the Byzantine fleet in the Danube in 917.

3. *Id.* 44 and esp. nn. 30-4: stray-finds from Dobrogea and Bulgaria (Aboba-Pliska, Iatrus, Svishtov, Maritsa); see also D. Angelov, *op. cit.*: Pliska:3; Preslav:6; Stara Zagora:2; Varna:3; Sumen:2; Silistra:2; for a *solidus* from Isaccea in North Dobrogea see A. Popeea, "Monede Bizantine din Nordul Dobrogei", *Feuce*, 4, 1973-5, 175-96.

4. See Appendix V, nos. 71-8.

empire, north on the Danube or even south on the border with Greece¹, could reflect the deterioration in relations between the Byzantines and Bulgars in 965/6 when the emperor Nicephorus II refused to pay tribute and in 967 when he seized some Bulgarian frontier forts. Gold *nomismata* of this period are also recorded from Ochrid², Viminacium³, Albania⁴ and even from Cherson⁵. The Tegani hoard/1914 from Samos, very similar with the Bulgarian finds, includes nine *solidi* of Constantine VII and Romanus II as well as fifteen *miliaresia* of Nicephorus II⁶. A small hoard consisting of fifteen *miliaresia* of this period is recorded from Preslav⁷ while a silver coin in the names of Romanus, Christopher and Constantine is listed from Albania⁸.

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1. i.e the hoard from Chryse near Edessa: Appendix V, no. 50.
 2. D. Razmoska, "Presped na vizantiskite moneti od V do XIII vek od numizmatichkata zbirka vo Okhrid", *Likhnid*, 5, 1983, 90.
 3. V. Ivanisevic, "Vizantisjci novats (491-1092) iz zbirke narodnog muzeja u Pozharevtsu I", *Mumizmatičar*, 11, 1988, 95 : Constantine VII and Romanus II:1; Nicephorus II Phocas and Basil II:1; Nicephorus II alone:1.
 3. H. Spráhiu, "Monnaies Byzantines des Ve-XIIIe...", 389: 2 specimens.
 4. K. V. Golenko, "Vizantiiskie monety X v. iz nakhodok vg. Stanislave (Khersonskaia oblast)", *SA*, 3, 1962, 290-1.
 5. See Appendix V, no. 84.
 6. D. Angelov *op. cit.*, *Istoriya na Finansovata...*, 29, table 3.
 7. H. Spráhiu, *op. cit.*, 388.
 8. S. Skowronek, "Nieznane znaleziska monet z terenu Wielkoposki", *W*, 17, 1973, 75-81.

969-1028.

From the reconquest of Crete in 960-1 to the death of Basil II in 1025, the Byzantine empire rose to the greatest heights of its post-seventh century territorial expansion and political success. Basil II left behind him an empire which reached from the mountains of Armenia to the Adriatic and from the Euphrates to the Danube. The whole Balkan peninsula once again belonged to the Byzantine empire, for the first time since the Slav occupation.

Coins of the three metals were struck in large quantities and were widely circulated throughout the expanded empire.

We have already mentioned the main features in the circulation of the anonymous copper coinage - Class A. The complete list of provenances would be lengthy¹. It includes however a considerable number of hoards from Bulgaria, though not always well documented, hoards and stray-finds from Greece and Rumania, and evidence from far-off areas². Synoptic lists of stray finds have been recently published, from Dobrogea, Pacuil lui Soare³, and Bulgarian urban centers⁴.

1. See Appendix V; for stray finds from Rumania see Appendix IV: .

2. I. V. Sokolova, "Nakhodki vizantiiskikh monet VI-XII vv. v Krymu", *YY*, 29, 1969, 254-64:22 anonymous *folles* are recorded from Crimea among other coins of the ninth and tenth century ranging from Nicephorus I up to Nicephorus II Phocas; see also P. O. Karyszkowski, "Nakhodki pozdneriskikh i vizantiiskikh monet v Odesskoi oblasti", *IASP*, 7, 1971, 78-86.

3. G. Custurea, N. S. Andronescu, "Unele consideratii asupra circulatiei monetare in Dobrogea in perioada 969-1092", *Fontica*, 14, 1981, 221-36.

4. D. Angelov, *Istoriya na Finansovata...*, 65, Table 6; 6; C. Zdravka, 'Antichni vizantiiski moneti v b'lgarskitezemi prez X-XI vek', *Numismatika*, 2, 1978, 11-6.

The silver *miliaresia* of this period and especially of Basil II usually found their way to Russia, to Baltic and Scandinavia, and they were hoarded together with Arab *dirhems* and west European coins¹.

From the Balkans there is the Calarasi hoard from east Wallachia ^{which} consisted of five *miliaresia* of John Zimisces².

Silver coins of this emperor are also included in the large Gigen hoard from Bulgaria deposited most probably after Constantine IX's reign³. There are a few other stray finds from Bulgaria⁴ and a small deposit of two specimens of Basil II is reported from Silistra⁵.

One *miliaresion* of John Zimisces has been found at the Athenian Agora excavations and a second has been published from Amfissa⁶. From the reign of Basil II there is a small hoard of five *miliaresia* from Kenchreai which probably was the *content* of a purse⁷.

1. See numerous examples in Mosser; see also T. Noonan, "The Circulation of Byzantine coins in Kievan Rus", *Byzantine Studies-Études Byzantines*, 7, 1980, 143-81.

2. Appendix V, no. 109.

3. Appendix V, no. 86.

4. D. Angelov, *Istoriya na Finansovata...*, 65, table 6: (969-976): Preslav:8; Varna:1; Sumen:3; (976-1030): Preslav:3.

5. Appendix V, no. 85.

6. Δ. Κραβαρτογιαννος, Κατάλογος Βυζαντινῶν νομισμάτων (491-1203 μ.Χ) μεμονωμένων εὑρημάτων Ἀμφίσσης, *Τετράμηνα*, 2, 1974, 10 no. 32.

7. Appendix V, no. 2.

Coin hoards and stray finds indicate that the circulation of Basil II's *tetartera* of 23 carats was almost restricted to Dinogetia in North Dobrogea¹. From further north, in the Iasi district of Moldavia, 40 similar specimens were included among other gold items in a hoard found in 1904². Stray-finds of *histamena* have been reported from Bulgaria³, Albania⁴ and Greece⁵. In addition the Ayies Paraskies hoard from Crete⁶ consists solely of *histamena* of Nicephorus II (963-9) and Basil II (976-1025).

C. 1025-1081.

The death of Basil II marked a turning point in Byzantine history. It was followed by a period of political decline, social crisis, and military failures. The battle at Mantzikert in 1071 which resultedⁱⁿ the sudden loss of Asia Minor to the Seljuk Turks, was the vital moment of the collapse. Mantzikert was followed by the capture of Sicily and South Italy by the Normans and that part of the empire in the Balkan peninsula was surrounded by newly independent nations.

1. Appendix V, nos. 105-6; for stray finds see Metcalf, *Coinage in South-eastern...*, 54.

2. Dolhesti/1904 hoard: Appendix V, no. 104.

3. D. Angelov, *op. cit.*, 65, table 6: (976-1030): Pliska: 2; Preslev: 2; Stara Zagora: 1; Sumen: 1; Silistra: 1; see also M. Metcalf, *op. cit.*, 54.

4. H. Spáhiu, "Monnaies Byzantines des Ve-XIIIe siècles...", 394: 1 specimen.

5. For a specimen in the Museum of Thessaloniki see Metcalf, *op. cit.*

6. Appendix V, no. 59.

Nevertheless the period under discussion was characterised by a prosperity, which was expressed by a considerable number of private and public buildings, and by a remarkable flourishing of the literature and the arts. Some wills from the second half of the eleventh century, similarly reflect the great wealth of the landed proprietors of the age, and the large quantities of coined money, especially of gold, that they had in their hands¹. Most probably this prosperity led to the debasement of the gold coinage either because the precious metal was not adequate to cover the needs of its circulation or because the large volume of transactions had to face the lack of a substantive fractional denomination.

The circulation, during this period, especially of the petty currency, shows a number of peculiarities with regard to its distribution pattern in the different parts of the empire.

First in Corinth, it seems to have levelled off². On the contrary, the evidence from the surrounding area, though still very much fragmentary, indicates a greater expansion and *folles* are found at sites where almost none of earlier periods are recorded.

The few stray finds from Thessaloniki and its surrounding area, as well as from other cities of this part of Greece, do not yield, at the moment, much systematic information.

1. i. e the will of Eustathios Boilas: see S. Vryonis, "The will of a provincial Magnate Eustathius Boilas (1059)", *DOA*, 11, 1957, 263-77; the wills of Symbatios Bakuriani and his wife Kali: see P. Tivchen and G. Tsankova-Petkova, "Au sujet des relations féodales dans les territoires bulgares sous la domination byzantine à la fin du XI^e et pendant la première moitié du XII^e siècles", *Byzantinobulgarica*, 2, 1966, 107-25.

2. See next chapter.

The evidence from Anatolian sites¹ indicates that *folles* of this period, at least before the defeat at Mantzikert, were much commoner there than in Corinth. The lack of comparative figures from different vital parts of the capital does not permit any satisfactory conclusion for Constantinople; the pattern, however, provided by the limited material found at Saracahne excavation echoes that of Corinth. Similarly, in Sardis the *folles* of the previous period are more predominant.

The evidence from the newly created theme of Paristrion and Dobrogea indicates a stimulation of the monetary sector in these areas, something that has been already noted when examining the geographical distribution of the so-called Class A3.

The find-series from Preslav and especially from Pliska, the two important cities of the First Bulgarian Empire show, however, a reduction in their monetary activity². From Varna, Silistra, Sumen and Stara-Zagora the numismatic evidence is indicative of a substansive recovery³. The evidence from other areas in central and south-west part of Bulgaria is fragmentary⁴. On the contrary the number of listed hoards from various places is considerable⁵ especially of those including *folles* of Class B.

1. D. Waage, *Antioch-on-the-Orontes*, IV, part 2. *Greek, Roman, Byzantine and Crusader's Coins*, Princeton, 1952; see also W. Metcalf, *Early anonymous folles from Antioch...*, 122.

2. D. Angelov and others, *Istoriya na Finansovata...*, 65, table 6: (976-1030): Pliska: 105 ; Preslava: 356. (1030-1081): Pliska: 58; Preslav: 300

3. *Id.* Stara Zagora: 79; Varna: 154; Sumen: 32; Silistra: 111.

4. For a few specimens found in Sofia and Plovdiv see D. M. Metcalf, *Coinage in South-eastern...*, 76 and nn. 32, 33.

5. Appendix V, nos. 92-102.

From the north Dobrogea, copper stray-finds are recorded from various places. Conversely the evidence from the southern sector of the region is limited to the area around and south of Constanta¹. There are hoards from Dinogetia, Nufarul (Little Preslava), Plopeni, and Limanu². The fortress island Pacuil lui Soare in the river Danube appears to be the last western limit of the monetary activity³; from Wallachia, the numismatic evidence is almost non-existent⁴.

There is also a considerable quantity of stray-finds from Albania (theme of Dyrrachium)⁵ but the evidence from the central and south Yugoslavia is still very fragmentary⁶.

1. D. M. Metcalf, *Coinage in South-eastern...*, 66; for more recent finds from Dobrogea see E. Oberländer-Tarnoveanu, "Cronica descoperirilor monetare"; A. Popea, "Monede Bizantine din nordul Dobrogei"; A. Popea, V. Baumann, "Monede Bizantine anonime".

2. Appendix V, nos. 115-8.

3. G. Custurea, N. S. Andronescu, "Unelle consideratii asupra circulatiei monetare...", 226, table 2; see also Appendix V, nos. 113-4.

4. 1 specimen of Class B from Oltenia (Sendreni): V. Spinei, "Sapaturile de salvare de la Oltenesti", *Carpica*, 5, 1972, 133-41; 1 of Michael IV from Sarateni: G. Coman, "Cercetari arheologice cu privire la sec. V-XI in sudul Moldovei", *ArchMoldovei*, 6, 1969, 290.

5. H. Spahiu, "Monnaies Byzantines des Ve-XIIIe siècles": Class B: 14; Class C: 12; Class D: 5; Class G: 4; Romanus IV: 5; Class H: 2; Class I: 22.

6. V. Ivanisevic, "Bizantinski novats sa Veogradske", 102; Belgrade: 1 specimen of Class C and 1 follis of Nicephorus III; *id.* "Bizantinski novats (491-1092)", 94-6; Viminacium: Constantine X and Eudocia: 1; Michael VII: 1; Class I: 1; Metcalf "The currency of Byzantine coins"; V. Popovic, "Catalogues des monnaies", 188.; Sirmium: Class C: 1; Constantine X: 1; Romanus IV: 1; Novi Banovci: H-K(?);

A series of important hoards of gold have been found in Bulgaria, Dinogetia, South-east Yugoslavia and Dalmatian coasts. They are of different character and presumably give useful information for the economic life and the history of the areas.

The extended age-structure of the Bulgarian hoards from Gyurgendzhik, Ishirkovo, Khisar, Khisarluk, and Sofia¹ may be the treasure-chests of wealthy landed owners concealed in emergencies, during the various invasions from north. They are very much reminiscent of the "coined" gold and hoarded wealth, mentioned in the wills of Symbatios Bacuriani and Kali. The Sofia hoard including a considerable amount of jewellery illustrates very well the case.

The peculiar age-structure of two hoards from Dinogetia (1939, 1954), the latter of which also contained jewellery², and the Kalipetrovo hoard³ may reflect similar reserves of gold belonging to rich locals.

A hoard from South-east Yugoslavia⁴ extending from the reign of Constantine IX up to the first years of Alexius I's reign, could belong to the same category of hoards.

Furthermore a series of finds found on the Dalmatian coast consisting entirely of *nomismata* of Romanus III, as well as stray-finds from the same reign are of a great interest⁵.

1. Appendix V, nos. 79-83.

2. Appendix V, nos. 105-6; see also above, 265.

3. Appendix V, no. 108.

4. Appendix V, no. 67.

5. Appendix V, nos. 60-4.

Since they appear not to have been supplemented to any great extent by later issues, and regardless of the reasons for their arrival there¹, they hint at a close monetary economy, quite independent from the current tendencies of the numismatic circulation. The small Matak hoard² also from the Adriatic coast ranging from the reign of Constantine VII up to Michael IV, one *nomisma* of Theodora from the Adriatic island of Brac, three *nomismata* of Romanus IV and Michael VII from the island Korcula³ probably indicate some commercial activity.

Gold from Greece is very much limited. Twelve specimens of Constantine X were included in a small hoard from Chalkis, deposited at the second half of the twelfth century⁴. Similarly two gold coins of Romanus IV were found in a twelfth century hoard from Kastoria⁵.

Stray-finds or hoards of gold from other areas from Balkans, are very few. One specimen of Nicephorus III is reported from Ochrid⁶, while two others of the same emperor, in Zagreb Museum have been considered as part of a larger hoard from the region of C.Mitrovica⁷. From Bulgaria there are stray finds of gold coins from

1. Metcalf, "A shipwreck", 101-6; the author connects the Dalmatian finds with a shipwreck in 1040; *id. Coinage in South-eastern...*, 179 and esp. n. 15.

2. Appendix V, no. 65

3. For Brac and Korcula finds see D.M. Metcalf, *Coinage in South-eastern...*, 179.

4. Appendix V, no. 36.

5. Appendix V, no. 43.

6. D. Razmoska, "Presped na vizantiskite", 91.

7. D.M. Metcalf, "The currency of Byzantine coins in Sylvania", 439.

Pliska, Preslav, Stara Zagora, Varna, Sumen Silistra¹ and a few other places² while four specimens are listed from Albania³.

Numerous hoards of gold from this period have been reported from eastern Asia Minor⁴ and Transcaucasia⁵. The majority of the hoards from Asia Minor appear to have been concealed during the revolt of Nicephorus Botaniates in 1077.

Remarkably little silver has been found in hoards from this period. From Strovij in South⁶ east Yugoslavia there is a pot hoard, consisted of over one hundred silver coins terminating with a specimen of Nicephorus III. It has been suggested that the hoard is a further part of the large hoard from South east Yugoslavia consisted of gold and silver coins ranging from the reign of Constantine IX up to the reign of Alexius⁷. In the Dinogetia (Carvan) hoard of 1954 four *miliaresia* are included⁸. A few stray

1. Angelov, *op. cit.*: Pliska:4; Preslav:2; Stara Zagora:4; Varna:5; Sumen:2; Silistra:2.

2. Metcalf, *Coinage in South-eastern*, 76, nn. 29, 30.

3. H. Spähiu, 'Monnaies byzantines des Ve-XIIIe siècles', 395-7.

4. See Mosser, 11(Claudiopolis/Bithynia), 25(Diarbekir:3 hoards), 42(Ilioje Erzurum), 92(Unknown locality).

5. *Ibidem.*, 2, 3, 28, 31, 47, 99; see also T. Abramishvili, "Klad iz Dviri", *Vest GosmuzGrus*⁴, 19B, 1956, 107-21: the Dviri hoard contained 48 coins of Constantine X and 1 of Romanus I with Eudocia; *Id.* "Idumalas gandzi", *Vest GosmuzGrus*, 26B, 1970, 149-61: 13 of Constantine X and 12 of Nicephorus III.

6. Appendix V, 68.

7. Appendix V, 67.

8. Appendix V, 106

finds are recorded from Romania¹ Bulgaria², Yugoslavia³, Albania⁴ and Greece⁵.

1. For a 2/3 *miliaresion* from Mangalia see R. Ocheseanu, " Citeva monede Bizantine", 312; for a silver coin of Michael VII from Zimnicele see C. Preda, "Monedele Bizantine", 412.

2. D. Angelov, *op. cit.*, 64, table 6: Pliska:2; Preslav:1; Varna:2; Sumen:1; for two *miliaresia* from Sofia see D. M. Metcalf, *Coinage in South-eastern...*, 76.

3. For a rare *miliaresion* of Constantine X with Eudocia from Prilep see D. M. Metcalf, *op. cit.*

4. H. Spahiu, "Monnaies Byzantines", 397.

5. There is one *miliaresion* of Michael VII and Maria from Corinth excavations (1925-6); for one *miliaresion* of the same emperors from Amfissa see Δ. Κραβαρτόγιαννος, " Κατάλογος Βυζαντινῶν νομισμάτων"

II. The trends of the *monetary* circulation in Greece.

The study of the numismatic circulation in Greece during the eighth, ninth, tenth and eleventh centuries is mainly restricted to Corinth and Athens. The great scale of the archaeological enterprise in both sites has, indeed, yielded considerable numbers of coins from the period in discussion. They offer a particularly precious and reliable witness as far as the numismatic circulation is concerned.

Rescue and systematic excavations all over Greece have, however, produced supplementary material. Although it is still very limited, the comparison with the statistics from Corinth and Athens is a promising exercise. Moreover, a number of new hoards could supplement the available information.

Appendix V contains a detailed description of stray-finds from various places. The classification of find spots within the different administrative themes, could facilitate the study and could be of a great help in drawing up regional peculiarities.

The whole period is sub-divided into five smaller periods as follows: The first covers the fifty five years of the reigns of Theophilus, Michael III and Basil (829-886). The inclusion of Basil I in this period is based purely on the numismatic evidence. This emperor's coinage reflects a period of reajustement in the circulation of the petty-currency, for although he undertook a thorough recoinage, his *folles* outside Corinth are quite scarce. It seems highly likely that there was a temporal interruption in

the expansion of the monetary sector due to the flow of currency under Theophilus. The second period covers the eighty-three years of the reigns of Leo VI, Constantine VII and his colleagues, and Nicephorus II (886-969) while the third consists of the issue of the anonymous *folles* of Class A (969-1028). Finally the separation of the period (1028-1070) from the following period (1070-1092) is based on the political events of the time. The defeat of Mantzikert, but especially political instability and incursions of the northern nations might have influenced the monetary circulation in some areas of Greece. Separate figures will provide evidence for frontier areas and will be of great help when comparisons with other Balkan regions of the empire are made.

The main features of the circulation in Greece may be described as follows:

First the high proportion of Theophilus' coins at Corinth demonstrates a sudden and dramatic recovery of the city¹. This is of particular interest since the lack of any archaeological evidence from the previous period, including coins, is striking. From the reign of Leo III to the reign of Michael II there are only twenty-three *folles*, while 169 have been survived from the reign of Theophilus. Documentary and archaeological evidence confirm the recovery of the city which might have been directly related

1. D. M. Metcalf, "Corinth in the ninth century: the Numismatic evidence", *Hesperia*, 42, 1973, 180-251.

to Theophilus' domestic policy concerning the reorganisation of the themes¹. Moreover there is evidence which connects the impressive growth in the currency of the city with a revival of trade between Byzantium and the West mainly following the sea-route through the Gulf of Corinth rather than along the *Via Egnatia*. It is, however, difficult to estimate the extent of this trade since both western and Byzantine issues of the Italian and Sicilian mints are extremely rare in Corinth. Nevertheless, there is a considerable number of Byzantine hoards from South Italy and Sicily, dated to the following period, in which *folles* of Theophilus occasionally occur².

The scarcity of Theophilus' coins from the surrounding area, as well as from Athens, is remarkable and indicative for the restricted character of the recovery. Theophilus' *folles*, however, show a wide distribution in Greece.

There was a gradual and stable recovery, up to the second half of the eleventh century. However, in Athens the nineteen specimens of Basil I suggest a radical recovery during the second half of the ninth century. Actually the rate of increase in petty-currency appears greater at Athens than at Corinth, despite the higher number of specimens found there.

1. W. Treadgold, *The Byzantine Revival*... 313-9.

2. For some old hoards from Italy see Mosser, 71; see also A. Siciliano, "Gruzzolo di monete bizantine": the hoard contains 1 *folles* of Theophilus; E. Leuthold, "Tesoretto di monete bizantine"; for a gold hoard from Portotorres see G. Perantoni Satta, "Rinvenimenti in Sardegna": the hoard contains mainly gold coins of Theophilus and Basil I

From other areas the evidence is very fragmentary and only synoptic figures can be drawn up. In Sparta, however, a more regular recovery is presented. The themes of Thessaloniki and Macedonia show an abnormally high incidence of the anonymous *folles* Class A. The contrast is clearer in the former. The majority of the anonymous *folles* reported from the theme of Thessaloniki comes from Rentina, a fortress on the frontier with the theme of Strymon. It seems quite probable that the military activity in the area during the wars of Basil II with the Bulgarians might have increased temporarily the circulation of the petty currency.

The available hoards from the ninth up to the first quarter of the eleventh century demonstrate a circulation in which the petty currency was continuously renewed. One-type hoards from the period of Leo VI, Romanus I, Constantine VII and of anonymous *folles* of Class A as well as thousands of stray-finds are indicative for an active monetary circulation.

There was some reduction in monetary activity in Corinth during the fourth period (1028-1070). The scarcity there of the anonymous *folles* of Class A3 which has been already noted, in the appropriate chapter, indicates that the reduction had already started around 1015-20. The reasons for this reduction are obscure but it might be due to the abundance of currency which reached Corinth at the beginning of millenium.

During the last period (1070-1092), an inexplicable increase in the monetary sector appears in all regions except Macedonia. In Corinth, Sparta and especially in Athens the increase is striking.

Nicephorus III's issues have the highest proportion. From other areas outside Greece the evidence is scanty and a comparative study, in order to speculate possible regional peculiarities, cannot be, at the moment thorough.

A pattern which contrasts considerably with that at Corinth, Athens and Sparta is seen in the find-series from Dobrogea and Pacuil-lui-Soare¹. The explanation may be that the abundant coinage of the previous period had a prolonged circulation in these areas at least up to the beginning of 1080s. The Patzinaks' incursions of 1085-7 are reflected by a greater reduction in Pacui-lui-Soare while the figures from Dobrogea show special activity at this very period.

Some useful evidence from Asia Minor is yielded by the find-series of Sardis. The period under discussion is represented by twelve specimens while the previous by thirty-six. This reduction appears normal, for the defeat at Matzikert in 1071, followed by a series of rebellions and advances of the Turks in Asia Minor together might have caused great instability in the area.

Surprisingly enough the numismatic evidence from the Sarachane² excavations indicates a decline of the place during the last

1. G. Custurea, N. S. Andronescu, "Unele consideratii asupra circulatiei" 225-6, tables 1 and 2; from Dobrogea the figures are: (1028-1071):289 and (1071-1092):73; from Pacuil-lui-Soare they are: (1028-1071):420 and (1071-1092):95.

2. There are 13 coins from the period (1028-1070) and only 5 from (1070-1092).

quarter of the eleventh century

At present, it seems quite probable that the increase was restricted to Greece, and there mainly to Peloponnese and Hellas. The underlying reasons are obscure and it is not clear whether the attested increase of money corresponds to actual activity or reflects a high loss-rate due to unspecified factors. It seems probable that after the reform of Alexius a considerable number of pre-reform copper coins, among which Nicephorus III's were the most abundant, were repudiated. The available evidence is still very intriguing. In Argos during a rescue excavation a hoard consisting of signed issues of Nicephorus III and anonymous *folles* of Classes I and J, was found in a rubbish pit together with broken house ware¹. However, two hoards from Athens², consisting essentially of Nicephorus III's *folles* plausibly reflect contemporary losses.

Some of the available hoards from this period give useful evidence, not only for Nicephorus III's coinage but also for the general tendencies of monetary circulation in Greece during the second half of the eleventh century (Table X). They divided into two main groups. The first includes hoards deposited before Alexius' reform, that is before 1092 (hoards nos. 22, 23, 42). The second contains hoards deposited either during the first years of the reform or later, even up to the end of the 12th century (hoards nos. 24, 28, 30-3, 42, 45).

1. This hoard is a recent discovery and it is not included in the corpus provided in Appendix V; the coins are still uncleaned and there are problems of identification.

2. Appendix V, nos. 40-1.

The distribution of the types in the most hoards appears regular and normal.

Hoard no.23 shows, however, a much higher concentration of coins dating to the reign of Nicephorus. Its evidence is very much reminiscent of the information provided by the stray-finds. It covers a shorter period of time than the two other hoards of the same group and appears to reflect better the current tendencies of circulation after 1071; the one *folles* of Class G, included in the hoard, could possibly be a survival from the previous period. The hoard under discussion indicates that indeed Nicephorus III's coppers were circulated plentiful even up to the first years of Alexius reign. The increase of monetary sector during the last quarter of the eleventh century could imply that at that time there was considerable inflation which led Nicephorus III to an over-minting of low value coins.

The two other hoards of this group as well as four from the second, have a rather long-age structure, starting from the last phase of the anonymous *folles* Class A, which appear to survive up to the middle of twelfth century. This, however, contradicts the evidence from various one-type hoards which strongly suggest that after the first quarter of the eleventh century there were a series of rapid recoinages which very much affected the circulation of older types¹. Consequently late survivals of Class A in hoards deposited after Alexius's reform and even earlier would not

1. Appendix V, nos. 19, 20, 21, 39, 40-1.

represent currency withdrawn from circulation. The impression is that these hoards reflect selective hoarding. They are very much reminiscent of the gold hoards found in Bulgaria and Dobrogea. They simply reflect the attitudes of a different society, much poorer, consisting not of rich land-owners but of industrious individuals who managed to create, in their barren and mountainous country, small family industries for silk production or dying fabrics. It was a society with a monetary economy based very much on the copper currency.
