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## FELLOWSHIP FINAL REPORT

# Coins, Dies, Silver: for a new approach to the making of the feudal period 

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#### Abstract

The transition in the 10th century from the centralised Carolingian state to the decentralised feudal principalities is a subject of debate among historians: was it a violent breakdown or a continuous evolution? The major problem facing historians is the scarcity of written sources. But coins are numerous and constitute a relevant source material. Indeed, Coinage is an official institution, and studying it informs us about the state of society and the organisation of the administration. The study of Norman coinage in the 10th century shows a large and wellmanaged production and a firm control of the circulation. Exchange fees provided income for the duke. This reflects a well-organised stable administration and an ability of controlling society, far from the chaotic, violent and anarchistic picture of early feudalism that is sometimes purported.


## 1- Introduction

The transition from the centralised $9^{\text {th }}$-century Carolingian state of Charlemagne's heirs to the decentralised feudal principalities and lordships of the $10^{\text {th }}-12^{\text {th }}$ centuries is one of the major features of European history. The $10^{\text {th }}$ century was crucial in this process. It is a subject of long-standing debate among historians whether early feudalism was a violent and chaotic breakdown or rather an orderly continuous evolution (see e.g. Barthélemy 2017). In turn, this shed light in general on processes of societal change and the upcoming of centrifugal powers that is relevant for the understanding of other historical situations and even present day societies.

The major problem facing historians is the scarcity of sources. Taking Normandy, we only know two charts from the $10^{\text {th }}$ century (Fauroux
1961). Chronicles are either later or from remote Rheims. On the contrary, coins constitute a mass material. More than 6500 coins struck at the Rouen mint are known and 25 finds from Norman territory are recorded, totalising around 9000 coins.

Moreover, coinage is an official institution, and studying it informs us about the state of society and the organisation of the administration. Coins are also everyday mass artefact, widely circulating and used by the general public. Coinage is thus potentially an interesting and relevant historical source.

At a first glance, $10^{\text {th }}$-century coinage seems disorganised. Some coins carry the king's name, others do not. The discovery of a few hoards has provided numerous specimens of some coin types, whereas others are only known by a few specimens. One easily gets the
impression of an erratic variation in minting over time and from place to place, consistent with the idea of an unstable political situation. But what if the scarcity of some coin types was just a result of a low survival rate?

Normandy has been chosen as case study. Indeed, the coinage struck in the name of the Duke shows a great variety of coin types that can be dated quite closely which makes it suitable for this kind of study (Dumas 1971, 1979).

Former research has established from the coin finds that non-Norman coins as well as older local Norman coins were to a large extent excluded from circulation. The Duke probably had revenues in the form of fees from the compulsory exchange of foreign and old coins, as documented for later periods. Looking at the number of different coin types, one can postulate the introduction of a new type every four years or so, following by the demonetisation of the previous type (the socalled renovatio monetae). This reflects a wellorganised managed currency (Moesgaard 1998, 2011, 2014). But hitherto no over-all attempt had been made to estimate the size of the coinage - and consequently its societal importance. Likewise, the control of the silver alloy, the origin of the silver are features that potentially shed light at the organisation of the coinage. The coin circulation itself is also in need of scrutiny.

In the present article, we will address these aspects of the Norman coinage of the $10^{\text {th }}$ century in order to gain insight in the role and organisation of coinage which in turn will help us to characterise the society during this crucial transition period.

## 2- Experimental details

1. This case study is empirically based. Consequently, the establishment of the catalogue of all the relevant coins has been a priority. Some coins are available in public collections, others are documented more or less in detail in literature, sale catalogues, museum archives or handwritten notes of scholars. Unsurprisingly, through this work, the number
of recorded specimens dwindled, as it turned out that many were duplicates (same coin quoted in different publications). Several hitherto unprovenanced specimens have regained their find spot, making them more valuable evidence. In all, a minimum of 6192 coins attributed to the mint of Rouen were listed. 6022 from the hoard of Fécamp have already been published by Dumas (1971). The remaining 170 coins - as well as few dozens of other coins related to Normandy - were described, and when possible photographed. A special effort has been made to include the find spot and circumstances, whenever they are documented.
2. In order to assess the importance of coinage in society, one must estimate the mint output. No mint accounts survived for this period. Some coin types survive in large numbers of specimens, whereas others are rare today. As each type probably represents four years of production (see above), one gets the impression of great variations in mint output over time. However, the number of surviving specimens cannot be used as a measure of mint outputs, because it probably just reflects erratic survival rates. A single new find may transform the situation overnight. The type "au fronton" was known in only one specimen, until the discovery of the Fécamp hoard on 3 July 1963 brought to light more than 3239 specimens (Dumas 1971, 76-90)!

The existing specimens carry minor variations in the motive and the inscriptions and they must have been struck by different dies. This feature has been investigated systematically and it turned out that numerous dies had been used. Consequently, the coins must have been struck in large numbers. Albeit based on all surviving specimens, it is unlikely that this die study documents the totality of the dies used. Originally, our ambition was to use statistic methods to extrapolate the original number of dies, but it turned out, that our sample did not fulfil the criteria of representativeness required (Esty 2006; Bompaire et Dumas 2000, p. 528531; Callataÿ 2005, p. 75). It is however clear that the coinage was much larger than expected from the scarcity of surviving specimens of some of the rare types.

[^0]3. The silver value of the coins is a key factor of the monetary policy of the coin issuer. The important feature is the amount silver per coin which is determined by the combination of the weight and the alloy of the coins. The Norman coinage with its succession of rather precisely dated issues is the perfect material for observing the chronological evolution of the silver value. Whereas the study of the weight is easy to conduct, the determination of the alloy demands specialist skills and equipment. The project has largely benefitted from the collaboration with Guillaume Sarah from host laboratory IRAMAT that is world leading in the field of the study of the metal composition of coins. 157 coins from the collections of the BnF , the Musée des Antiquités of Rouen and Mont-Saint-Michel have been analysed for the project. The limited number of coins available for analysis for some of the rarer coin types however prevents us from obtaining definitive conclusion.

The results as they stand today show a rather firm control of the silver content within each issue, with a downward trend over time from some $90 \%$ to some $60 \%$. The exception to the rule is a surprising improvement of the alloy during the short-lived Frankish control of Rouen after the assassinate of William Longsword in 942. Quite unexpectedly, a case of two distinct silver standards of c. 75 and c. 55 $\%$ at the same time during the 970 s has been detected. A minute change in the design of the coin (the position of a pellet and a crosslet in the angles of the cross motive of the reverse) allowed for the initiated to distinguish between the good and the base coins (Moesgaard \& Sarah 2018).

The minor impurities in the metal shows a relatively homogeneous stock of silver that seems to be a mixture from various sources which is logical given the lack of silver mines in Normandy and the active raiding and trading of the Normans. In order to determine the more precise origin of the metal, more analyses of older Norman coins and contemporary neighbouring coinages are needed for comparison. There seem to have been a change in the metal added to the silver for alloying by
the middle of the century. This feature has allowed us to suggest adjustments to the chronological sequence of the coin types.
4. The geographic scatter of the coin finds within Normandy in the $10^{\text {th }}$ century shows a concentration in the eastern part of the province and a quite clear dominance of the city of Rouen (c. $75 \%$ of the single finds in Upper Normandy). This latter feature is in marked contrast to the picture of the $9^{\text {th }}$ and the $11^{\text {th }}-12^{\text {th }}$ centuries. Even if Rouen also stands out during these periods, its role is less dominant (respectively c. 20 and $35 \%$ of the single finds). The exceptional picture of $10^{\text {th }}$ century may be the result of the concentration of population in the city of Rouen that according to the hypothesis of Jacques Le Maho happened under the pressure of the Viking attacks in the late $9^{\text {th }}$ century, allowing the king to better control trade and the taxes deriving from it (Le Maho 2005).

## 3- Results and discussion

Summing up the results: (A) The Norman coinage of the $10^{\text {th }}$ century was well-managed and well-controlled. The typology was consistent. A new type was introduced at regular intervals. The silver content was fairly well-controlled. Discrete privy marks were used for the initiated ducal officers to distinguish sub-issues. (B) The mint output was considerable and one may assume that production was continuous. (C) The coin circulation was controlled, and foreign and old coins were banned from circulation. (D) Coin use seems to have been more frequent in Eastern and Central Normandy than in than in Western Normandy. The city of Rouen stands out as the absolute hotspot of coin use.

We know from parallels to later, better documented periods, that coins were put into circulation at a higher value than just the silver value (Dieudonné 1916, p. 81-82, 87-90). The difference was a kind of fee to the minting authority for putting coins at the disposal of the market. This revenue was probably a prime motivation for the issuer to start a coinage and to strike coins. We do not have direct sources to
such a fee in Ducal Normandy, but general income from the mint is documented in 1025 (Fauroux 1961, no 34, § 35), so it is likely to have existed. By forcing people to exchange their old and foreign coins, the Norman duke attempted to maximise revenues from coinage.

This well-organised and continuous coinage must have required a stable and rather large administrative set-up to handle the production and the income, as well as a firm control system of the coin circulation. This may astonish considering that this is the period of early feudalism when the institutions are supposed to have been under pressure. It suggests that early feudalism evolved in continuity, not in disruption with the previous period.

It is worth noting that the Norman coinage of the $10^{\text {th }}$ century lies fully within the Frankish coinage tradition. It has nothing to do with the coinage traditions that the Vikings settling in Normandy knew from back home in Scandinavia. Coinage is thus a sign of the rapid assimilation of the Vikings into the Frankish society.

## 4- Conclusions

The study of Norman coinage in the $10^{\text {th }}$ century shows a large and well-managed production and a firm control of the circulation. Exchange fees provided income for the duke. This reflects a well-organised stable administration and an ability of controlling society, far from the chaotic, violent and anarchistic picture of early feudalism that is sometimes purported.

## 5- Perspectives of future collaborations with the host laboratory

The collaboration the Fellow and the Host Laboratory has been very successful. Many ideas of new common projects have emerged during this work. However, it will depend on the availability of funding whether they will materialise.

The host laboratory has applied for a month as visiting professor for the Fellow in October 2019.

A promising idea for a future collaboration that will directly follow up at the results of the Fellowship would be to have a look at the metal of various groups of coins (e.g. $9^{\text {th }}$ century coins from the Norman mints, Islamic dirhams, $10^{\text {th }}$ century coins from the Loire Valley and Ile-deFrance) in order to try to determine the source of the silver stock of $10^{\text {th }}$ Normandy.

## 6- Articles published in the framework of the fellowship

The results of the Fellowship, including a full catalogue of all known specimens of Norman coins of the 10th century, will be published in a monograph by J. C. Moesgaard and G. Sarah at the University Press of Caen/Publications du CRAHAM.

Until known the following scientific article has appeared: J. C. Moesgaard \& G. Sarah, «Un affaiblissement secret à Rouen vers 970/975 », Bulletin de la Société Française de Numismatique, 2018, p. 247-254.

For a popular summary in Danish: J. C. Moesgaard, "Vikingernes mønter i Normandiet", Fund og Fortid, 2018, 3, p. 1819.

The project has been presented at the 18 th Viking Congress, Copenhagen-Ribe, Denmark, 6-12 August 2017. The article "Coinage as catalyst for societal change" is submitted for the Proceedings.

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## 8- References

Barthélemy, Dominique, «La société de l'an mil dans le royaume capétien: essai historiographique », Revue historique 681, 2017, p. 93-140.

Bompaire, Marc \& Françoise Dumas, Numismatique médiévale (L'atelier du médéviste 7), Turnhout, 2000.

Callataÿ, François de, «A quantitative survey of Hellenistic coinages: recent achievements », Making, Moving and Managing. The New World of Ancient Economics 323-31 BC, dir. Zofia H. Archibald, John K. Davies, Vincent Gabrielsen, Oxford 2005, p. 73-91.

Dieudonné, Adolphe, Monnaies royales françaises depuis Hugues Capet jusqu'à la Révolution (Manuel de numismatique française, vol. II), Paris 1916.

Dumas, Françoise, Le trésor de Fécamp et Le monnayage en Francie Occidentale pendant la seconde moitié du $X^{e}$ siècle, Paris 1971.

Dumas, Françoise, «Les monnaies normandes ( $\mathrm{X}^{\mathrm{e}}$-XII ${ }^{\mathrm{e}}$ siècles) », Revue numismatique 1979, p. 84-140.

Esty, Warren W., « How to estimate the original number of dies and the coverage of a sample», Numismatic Chronicle 166, 2006, p. 359-364.

Fauroux, Marie, Recueil des actes des ducs de Normandie de 911 à 1066, Caen 1961.

Le Maho, Jacques, «Les Normands de la Seine à la fin du $\mathrm{IX}^{\mathrm{e}}$ siècle», Les fondations scandinaves en Occident, Caen 2005, p. 161179.

Moesgaard, Jens Christian, <Renovatio monetae en Normandie à l'époque ducale ? »,

Bulletin de la Société Française de Numismatique, 1998, p. 127-131, og 206.

Moesgaard, Jens Christian, «Renovatio Monetae et la chronologie des monnaies de Richard I ${ }^{\text {er }}$, duc de Normandie 942/945-996 », Bulletin de la Société Française de Numismatique, 2011, p. 125-133.

Moesgaard, Jens Christian, «Le trésor d'Eu et l'éventuelle renovatio monetae en Normandie sous Guillaume Longue-Epée (927/933-942) », Cahiers Numismatiques 201, 2014, p. 47-51.

Moesgaard, Jens Christian \& Guillaume Sarah, «Un affaiblissement secret à Rouen vers 970/975 », Bulletin de la Société Française de Numismatique, 2018, p. 247-254.


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