

ANGLO-SAXON COINS IN ELEVENTH-CENTURY POLAND

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THE early medieval history and culture of Poland, on which only a limited number of written records throw light, has been uncovered in the course of a series of excavations carried out all over the country. Nowadays there are numerous archaeological sites and monuments providing excellent material evidence, particularly for the period of the foundation and early development of the Polish state in the tenth and eleventh centuries. These items, including numismatic ones, correspond to the known historical events which took place in early medieval Poland.

In 966 Prince Mieszko I (c. 960–92) of the Piast dynasty was converted to Christianity and established direct relations with Rome. In the following years Poland as a whole entered Christendom. The new state comprised several provinces: Great Poland, Little Poland, Silesia, Pomerania and Mazovia. Mieszko's son and successor, Bolesław Chrobry (992–1025), developed the administrative, ecclesiastical and economic structure of the Polish state and his coronation in 1025 concluded his energetic and successful reign. Bolesław's sister, Świętosława (known in the Scandinavian records as Sigrída Storada), married, first, in 985 Eric, king of Sweden, and then, after being widowed, Sven Forkbeard, king of Denmark. She was mother of Harald, king of Denmark, and Cnut, king of Denmark and England.

The written sources do not reveal anything about the direct relations between Poland and the British Isles. On the other hand, the abundant and ever-increasing material evidence, most of all the coin hoards, constitutes an indispensable source of information of some indirect contacts between these two distant European countries, occasionally illustrating aspects of the culture and economy of the early medieval Anglo-Saxons, Scandinavians and Poles.

The significance of the numismatic evidence has been recognized in a series of coin-hoard inventories covering the whole area of early Piast Poland, i.e. Great Poland,¹ Pomerania,² Mazovia and Central Poland,³ Silesia, Little Poland and the Mazurian region.⁴ There is also a published atlas of the early medieval coin hoards from Poland⁵ as well as a string of publications on hoards recorded quite recently. This material has been analysed from different points of view, to give both general and more detailed pictures of the monetary circulation in various regions of Poland, for example in Mazovia⁶ and Mazovia and Central Poland.⁷ To be noted is the fundamental research on the early

¹ J. Slaski and S. Tabaczyński, *Wczesnośredniowieczne skarby srebrne Wielkopolski. Materiały* (Warszawa-Wrocław, 1959).

² T. and R. Kiersnowscy, *Wczesnośredniowieczne skarby srebrne z Pomorza. Materiały* (Warszawa-Wrocław, 1959).

³ A. Gupieniec, T. and R. Kiersnowscy, *Wczesnośredniowieczne skarby srebrne z Polski środkowej, Mazowsza i Podlasia. Materiały* (Wrocław-Warszawa-Kraków, 1965).

⁴ M. Haisig, R. Kiersnowski and J. Reyman, *Wczesnośredniowieczne skarby srebrne z Małopolski, Śląska, Warmii i Mazur. Materiały* (Wrocław-Warszawa-Kraków, 1966).

⁵ L. Gajewski, I. Górski, L. Paderewska, J. Pyrgalla and W. Szymański, *Skarby wczesnośredniowieczne z obszaru Polski. Atlas* (Wrocław-Warszawa-Kraków-Gdańsk-Łódź, 1982).

⁶ S. Suchodolski, 'Prosperity Mazowsza w XI wieku w świetle źródeł numizmatycznych', in *Cultus et cognitio. Studia z dziejów średniowiecznej kultury* (Warszawa, 1976), pp. 537–46.

⁷ A. Mikołajczyk, 'Początki obiegu denarowego w Polsce środkowej i na Mazowszu' *Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi, seria archeologiczna*, 27 (1980), 235–70.

medieval coin-hoards from Poland done by Kiersnowski.⁸ In recent years a series of major and minor studies of high quality has appeared on a variety of aspects of the late tenth- and eleventh-century circulation in the Baltic zone, undertaken partly by Suchodolski, with respect both to the local monetary market⁹ and foreign relations,¹⁰ partly by Mikołajczyk,¹¹ and partly by Kluge.¹² Special mention should be made of the studies devoted to the Anglo-Saxon element in the coin hoards, carried out by Blackburn and Jonsson¹³ and also by Kluge.¹⁴ There have also been some papers devoted to imitations¹⁵ connected with the English¹⁶ and Polish material.¹⁷ Our knowledge of the Anglo-Saxon coins in the West Slav finds and generally in the museum collections gathered in this area was extended quite recently to two new volumes of the *Sylloge of Coins of the British Isles*: one containing the material from the Berlin Coin Room,¹⁸ and another covering the material from Polish museums.¹⁹

The contents of the coin hoards buried in the second half of the tenth century reveal a significant change in the nature of the currency circulating in Poland. Arabic dirhams, which were the most common coins available on the local monetary market, were frequently broken into smaller fragments – demonstrating on the one hand a certain need for smaller units of coinage and on the other that the hitherto plentiful stream of Oriental coined silver became severely reduced in the middle of the century. The most important feature of the changes taking place in the circulation of precious metals (including non-monetary silver which also had some role to play) was the appearance of a new standard of currency – the denar. This new currency, which reached Poland mainly through trade, came largely from neighbouring Germany where there was well organized mintage supplied by silver from rich deposits, especially in the Harz area.

Contemporaneous with the arrival of German denars in Poland was that of the earliest

⁸ R. Kiersnowski, *Pieniądz kruszcowy w Polsce wczesnośredniowiecznej* (Warszawa, 1960).

⁹ S. Suchodolski, 'A propos de l'intensité de l'échange local sur les territoires polonais au Xe-XIe siècle', *WN* 21 (1977) 1–11.

¹⁰ S. Suchodolski, 'Bemerkungen zu den Handelsbeziehungen im Lichte der numismatischen Quellen', *Zeitschrift für Archäologie*, 12 (1978) 261–65.

¹¹ A. Mikołajczyk, 'Between Elbe and Vistula: the Inflow of German Coins into the West Slavonic Lands in the 10th and 11th Century', *Acta Praehistorica et Archaeologica*, 16/17 (1984/85), 183–201.

¹² B. Kluge, 'Bermerkungen zur Struktur der Funde europäischer Münzen des 10. und 11. Jahrhunderts im Ostseegebiet', *Zeitschrift für Archäologie*, 12 (1978), 181–90.

¹³ M. Blackburn and K. Jonsson, 'The Anglo-Saxon and Anglo-Norman Element of the North European Coin Finds', in *Viking Age Coinage in the Northern Lands. The Sixth Oxford Symposium on Coinage and Monetary History*, edited by M. A. S. Blackburn and D. M. Metcalf, part I (Oxford, 1981), pp. 147–255.

¹⁴ B. Kluge, 'Das angelsächsische Element in den slawischen Münzfunden des 10. bis 12. Jahrhunderts. Aspekte einer Analyse', in *Viking Age Coinage*, pp. 257–327. As far as the Slav territory is concerned, it ought to be explained that the broad coastal zone along the Baltic Sea extending from the lower Vistula up to the Dvina river was settled for millennia by the Balts, and the coastal area further to the north was inhabited by the Estonians – relatives of the Finns. The Balts in a very general way were divided into the Latvians, Lithuanians and finally the Pruthenians. They had their own prehistory and history, manifested in material culture, traditions and early political organisation, and were

not connected with the Slavs, who were their nearest neighbours. The Pruthenians, inhabiting the present north eastern part of Poland, disappeared as a nation in the late fifteenth century, as a result of persecutions by the Teutonic Order. The Lithuanians converted to Christianity and joined Poland in the late fourteenth century. These remarks are made in order to exclude the Balts from the study of Slav history (both West and East) in the early middle ages. It is necessary because some scholars do not recognize this important difference. The Balt area within the present borders of Poland provided only three early medieval hoards with an English element: Mózgowo – an uncertain number of types of Æthelred coins, Niewodnica – an uncertain coin of Cnut, and Łążyn – coins of Æthelred II (6 + 5), Henry I (1), Stephen (2) and an imitation (1). The material was not considered in the present study.

¹⁵ S. Suchodolski, 'Imitations monétaires dans la zone balte durant le Haut Moyen Age', in *Proceedings of the International Numismatic Symposium – Warsaw and Budapest 1976*, edited by I. Gedai and K. Biró-Sey, (Budapest, 1980), pp. 197–203.

¹⁶ A. Mikołajczyk, 'Trzy naśladowcze pensy typu Crux znalezione na Kujawach', in *Nummus et Historia. Pieniądz Europy średniowiecznej*, edited by S. Suchodolski and S. K. Kuczyński (Warszawa, 1985), pp. 57–61.

¹⁷ A. Mikołajczyk, 'Skandynawskie imitacje monet anglosaskich z początku XI w. znalezione na Kujawach i Ziemi Sieradzkiej', *Rocznik Muzealny*, 2 (1988), 27–46.

¹⁸ B. Kluge, *SCBI 36, State Museum Berlin Coin Cabinet, Anglo-Saxon, Anglo-Norman and Hiberno-Norse Coins* (Oxford, 1987).

¹⁹ A. Mikołajczyk, *SCBI 37, Polish Museums, Anglo-Saxon and Later Medieval British Coins* (Oxford, 1987).

Anglo-Saxon pennies, though the latter by reason of their small numbers were only a minor admixture to the amount of money available in Poland for deposit.

The first hoards with Anglo-Saxon coins recorded were in the environs of Szczecin and Wolin, in Piaski-Dramino and Trzebiatów, and had been buried after 950 and 955. Both finds provided pennies of Eadmund (939–46). To the earliest coin hoards in question one should add the hoards of uncertain date, found in an unknown Pomeranian locality, containing still earlier English pennies: of Archbishop Plegmund of Canterbury (890–923) struck during the reign of Edward the Elder (899–924) and a second penny of Æthelstan (924–39). It is no accident that it was from the Pomeranian area that these earliest finds came. Another hoard containing an Anglo-Saxon penny of Edward the Martyr (975–78), and dated to *tpq* 976, was also uncovered in Pomerania, at Białogard. From beyond Pomerania there is only one relevant early hoard known – that from Obrzycko in north-east Great Poland, buried after 973, with a Reform penny of Eadgar (959–75). Moreover, it is from Pomerania that the next three hoards, chronologically, come – containing coins of Eadgar and Edward the Martyr: Moskorze near Szczecin (*tpq* 991), Słupsk (*tpq* 991), and Gralewo (*tpq* 996) on the Pomeranian–Great Polish border.

The latter three finds, dated to the end of the tenth century, bring into consideration the coins, which appear to be the essential ingredient of the inflow of English coined silver to Poland in the early middle ages – the pennies of Æthelred II (978–1016) – which are found in a number of Pomeranian localities: Rakoczyn (*tpq* 978) and Mierzeszyn near Gdańsk (*tpq* 994), the first hoards with an English element recorded in eastern Pomerania; then Połczyn Zdrój (*tpq* 996) and Wicimice (*tpq* 996). From there they began to reach the inner regions of the country, northern Great Poland (Murczyn hoard *tpq* 999) and north-west Mazovia (Proboszczewice hoard *tpq* 978). Although the coin types were not always distinguished in these hoards, we do know that in the Słupsk hoard there were pieces of the First Small Cross and First Hand types, that First and Second Hand occurred in both the Moskorze hoard and the Mierzeszyn hoard, and that the Wicimice hoard provided, for the first time, a Crux penny.

The hoards buried in the first years of the eleventh century display, however, a different picture. They contain exclusively coins of Æthelred II (except the Lisówek hoard, *tpq* 1011, which also has an Eadgar penny), they are numerous (thirty-nine hoards dated to *tpq* 1000–14) and they are distributed over the larger area of Poland including Pomerania, but now mainly in Great Poland (with a concentration in the environs of Poznań), in Western Mazovia (between Płock and Lower Bzura river), and finally in more distant Silesia. The number and distribution of the hoards reflect the topography of all contemporary coin hoards found in Polish soil. They were not deposited uniformly throughout Poland but made up two quite distinct zones: one, covering the territories of Pomerania, Great Poland, Central Poland and Mazovia, abounds with coin hoards buried in the tenth and eleventh centuries; the other, spreading from Silesia to Little Poland, is characterized by a relatively small number of precious metal deposits. In the first case we are concerned with the so-called Baltic zone of monetary circulation and intensive hoarding of silver, covering Scandinavia, Polabia, and the above mentioned Polish provinces, and in the second case with the so-called Continental zone, where hoarding of coin and hacksilver available in circulation was not so frequent. All coin hoards of this period consisted of non-monetary silver, with coins flowing in principally from Germany, but also from Bohemia and Hungary. The domestic coins of Mieszko I and Bolesław Chrobry have only rarely been found in the hoard material.

The Anglo-Saxon admixture in the hoards appears to be some marginal addition, seldom exceeding one per cent of the total number of the whole or fragmented coins in individual deposits. As mentioned above, they were Æthelred pennies only, constituting the following percentage in the hoards:

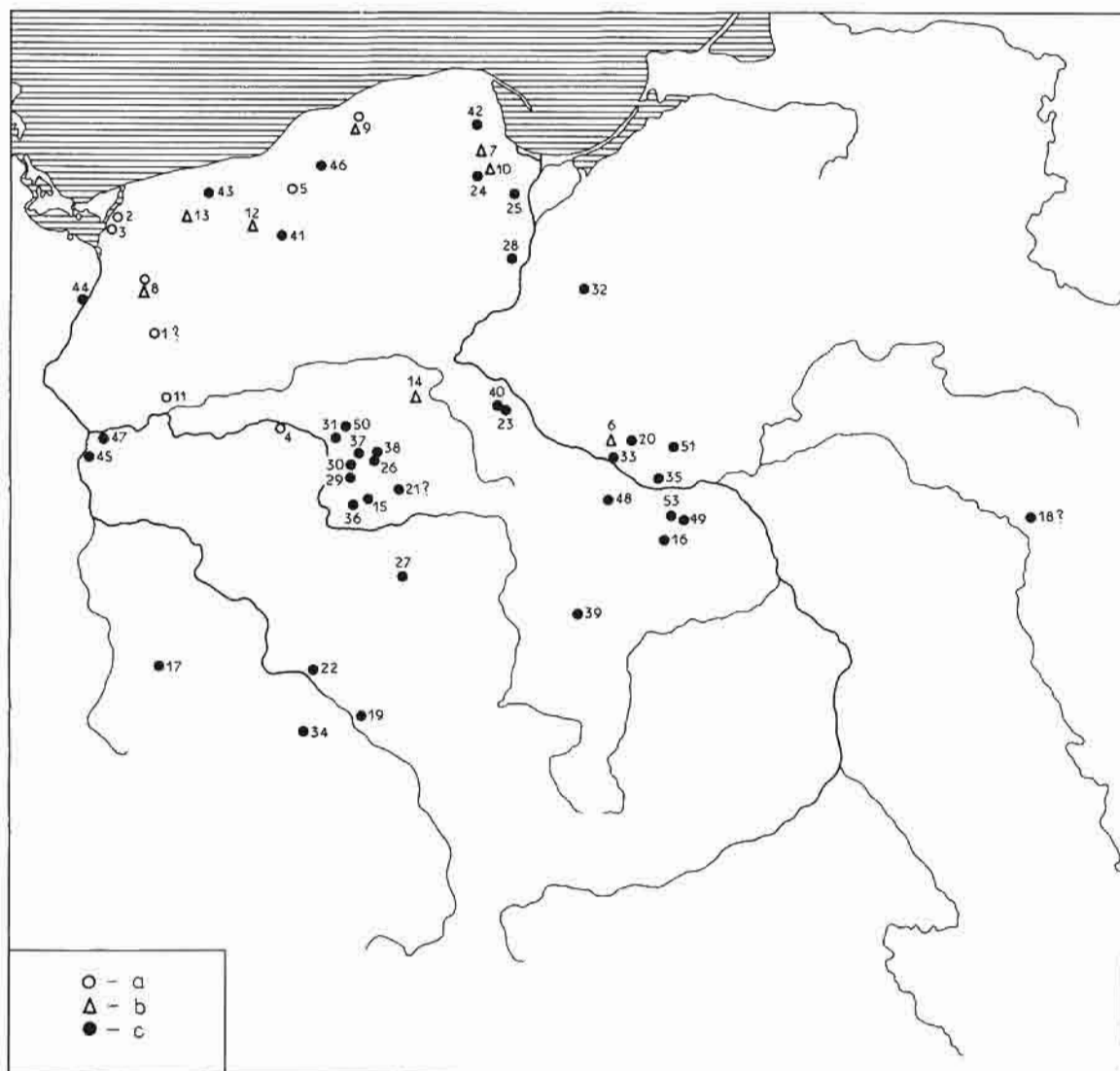


FIG. 1 (a) Polish finds of pre-Æthelred II coins, (b) Æthelred II coins buried in the late tenth century, and (c) Æthelred II coins buried in the early eleventh century.

<i>Pomerania</i>	<i>tpq</i>	<i>per cent</i>
Skowarcz, woj. Gdańsk	1002	7.69
Kopytkowo, woj. Gdańsk	1004	10.00
Kack Mały, woj. Gdańsk	10/11th c.	6.63
Dargocice, woj. Koszalin	1011	0.81
Kamieniec, woj. Szczecin	1011	4.65
Miastko, woj. Słupsk	1011	11.76
<i>Great Poland</i>		
Stępocin, woj. Poznań	1000	0.02
Unknown locality	1002	2.38
Przybranowo, woj. Włocławek	1002	c.0.60
Jarocin, woj. Kalisz	1004	0.51
Stroszki, woj. Poznań	1004	11.54

	<i>tpq</i>	<i>per cent</i>
<i>Pomerania</i>		
Kąty, woj. Poznań	1006	2.16
Ulejno, woj. Poznań	1009	3.31
Dzierznica, woj. Poznań	10/11th c.	0.02 ?
Poczałkowo, woj. Włocławek	10/11th c.	14.28
Lisówek, woj. Gorzów Wlkp.	1011	2.51
Przyborów, woj. Gorzów Wlkp.	1011	2.12
Długa Goślina, woj. Poznań	1014	1.31
<i>Mazovia and Central Poland</i>		
Zakrzew, woj. Skierniewice	1000	1.66
Brześć n.B. – environs	1002	0.33
Cekanowo, woj. Płock	1002	2.38
Dobra, woj. Płock	1009	2.17
Płock	1006	0.57
Teresin, woj. Skierniewice	1012	0.76
Dzierżążnia, woj. Ciechanów	1014	1.46
Sochaczew, woj. Skierniewice	1014	12.50
Ldzań, woj. Sieradz	10/11th c.	1.64
<i>Silesia</i>		
Bolesławiec, woj. Jelenia Góra	1002	0.75
Bystrzyca, woj. Wrocław	1002	0.17
Kowale, woj. Wrocław	1002	0.28

Almost all the high percentages, noted in the hoards from Stroszki, Poczałkowo, Sochaczew, Skowarcz and Kopytkowo, result from the incomplete state of preservation of those finds. Since none of those hoards contained more than thirty coins they were too small to have statistical value. Putting them aside we can see that in reality the highest proportion of Anglo-Saxon coins was recorded in the Pomeranian hoards from Miastko and Kamieniec, while the lowest percentage is represented by the Silesian finds. These calculations seem to confirm the earlier remarks on the role which the Pomeranian region played both in the reception and in the diffusion of English coin at the turn of the tenth and eleventh centuries in Poland.

The Pomeranian direction of flow indicates clearly the Scandinavian, and especially the Danish route by which Anglo-Saxon coins came to Poland. Most probably they came through trade with Scandinavia, which for its part, which had received large payments of tribute from England. Indeed, it has been suggested that at the turn of the tenth and eleventh centuries the heregeld tax was equal to a quarter or even a third of the whole Anglo-Saxon mint output. The year 991 was marked by large payments of this tribute and it was only a little later that we begin to find Anglo-Saxon pennies in Polish hoards. Although Blackburn and Jonsson expressed their suspicion, based upon the composition of the finds, that some English coins arrived in the West Slav lands by routes other than Scandinavia, possibly across northern Germany or in direct trade with Frisian merchants,²⁰ this direction of flow of Anglo-Saxon silver seems to have had quite secondary, if any, significance compared with that resulting from Danish-Polish commercial relations.

The typological division of Æthelred's coins recorded in the early hoards from Poland is as follows:

²⁰ Blackburn and Jonsson.

<i>Type</i>	<i>Pomerania</i>	<i>Great Poland</i>	<i>Mazovia, Central Poland</i>	<i>Silesia</i>	<i>Total</i>
First Small Cross	2	—	—	—	2
First Hand	10	7	—	—	17
Second Hand	5	6	3	—	14
Crux	15	107	23	1	145
Long Cross	3	21	4	1	29
Helmet	—	3	3	—	6
Last Small Cross	—	2	—	—	2
Uncertain	46	27	4	8	85
<i>Total</i>	81	169	37	10	297

This table, and those that follow, do not contain figures from the hoards registered in an incomplete manner, that is, providing only very general information about the Anglo-Saxon element. Nevertheless, we have a clear picture of English coin arriving in Poland in

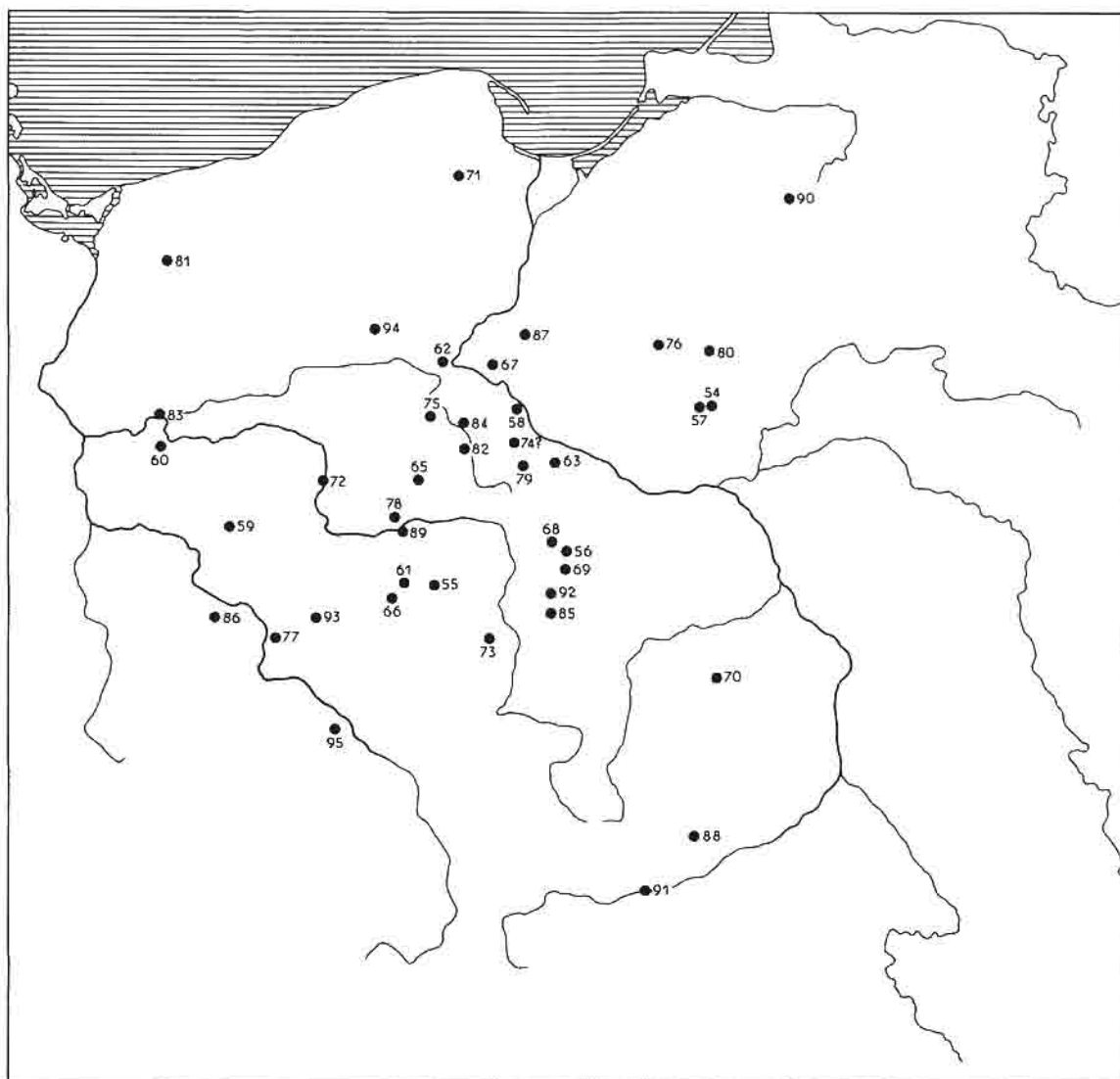


FIG. 2 Polish finds of Anglo-Saxon Coins buried between c. 1017 and 1034.

the first phase. Roughly half of the coins in question are Crux and it seems likely that the initial increase in this type coincided not only with the appearance of English money in Scandinavia, but also with the importation of coin from this area to Poland. In comparison with Crux coins, Long Cross were much less frequent by a factor of five.

In the next period, 1017–34, there were over forty hoards in which the Anglo-Saxon element consisted of coins struck by two rulers: Æthelred II and Cnut (1016–35). There are few finds in question containing coins of only one of these two rulers. The map of coin hoards (fig. 2) shows another important change; namely, a decrease in Pomeranian finds and the appearance for the first time of Anglo-Saxon coins in Little Poland. We should also note the increased proportion of the English element in the contents of the hoards as a whole. Once again leaving on one side hoards of thirty coins or less, which may distort statistics, we find that, roughly speaking, English coins are now 4–6 per cent of the whole.

<i>Pomerania</i>	<i>tpq</i>			<i>per cent</i>
Bierzgłowo, woj. Toruń	1024	4.27 + 0.18	=	4.45
Runowo, woj. Bydgoszcz	1034	2.50 + 0.83	=	3.33
<i>Great Poland and Kujavia</i>				
Rakoniewice, woj. Leszno	1017	2.30 + 0.00	=	2.30
Stary Dworek, woj. Gorzów Wlkp.	1017	12.00 + 0.87	=	12.87
Bydgoszcz	1018	5.71 + 2.38	=	8.09
Kowal, woj. Włocławek	1018	3.65 + 1.71	=	5.36
Kinno, woj. Konin	1021	2.66 + 0.70	=	3.36
Wielowieś, woj. Kalisz	1023	0.00 + 0.92	=	0.92
Poznań	1025	1.40 + 0.00	=	1.40
Kujavian region	1027	1.90 + 0.38	=	2.28
Parlin, woj. Bydgoszcz	1027	0.00 + 0.33	=	0.33
Lubraniec, woj. Włocławek	1030	0.00 + 6.65	=	6.65
Baranowo, woj. Bydgoszcz	1034	0.16 + 0.16	=	0.32
Gralewo, woj. Gorzów Wlkp.	1034	0.28 + 0.00	=	0.28
Inowrocław, woj. Bydgoszcz	1034	17.77 + 24.44	=	42.21
Modlica, woj. Konin	1034	4.00 + 0.00	=	4.00
<i>Mazovia and Central Poland</i>				
Ciechanów	1017	4.26 + 1.50	=	6.12
Bronczyn, woj. Sieradz	1021	0.94 + 0.00	=	0.94
Mniszki, woj. Płock	1024	0.28 + 0.00	=	0.28
Ozorków, woj. Łódź	1024	5.88 + 5.88	=	11.76
Wilczy Dół, woj. Sieradz	1026	3.22 + 3.22	=	6.44
Skurpie, woj. Ciechanów	1027	1.30 + 2.60	=	3.90
Brzozowo Nowe, woj. Ciechanów	1031	2.61 + 1.16	=	3.77
Łask, woj. Sieradz	1034	6.66 + 6.66	=	13.32
Oleśnica, woj. Sieradz	1034	2.43 + 0.32	=	2.75
<i>Silesia</i>				
Maniów, woj. Legnica	1034	1.54 + 0.44	=	1.98
Sobocisko, woj. Wrocław	1034	1.63 + 0.76	=	2.39
<i>Little Poland</i>				
Michałowice, woj. Kielce	1034	3.30 + 0.00	=	3.30
Nowa Huta – Pleszów, woj. Kraków	1034	4.26 + 1.31	=	5.57

Although one must not forget those contemporary hoards containing not a single Anglo-Saxon coin, one cannot ignore how these figures indicate a gradual increase of Anglo-Saxon coins in the monetary stock available in Poland. In this phase the new Anglo-Saxon coins arriving in north Poland do not seem to have remained in Pomerania as formerly, but rather to have moved out of that region to the central parts of the country, including Little Poland. This gradual diffusion all over Poland, but particularly to the regions of frequent

hoarding of the silver currency, introduced a new feature in the distribution of English coin in eleventh-century Poland.

The typological division of Æthelred and Cnut coins in the hoards of 1017–34 in Poland is as follows:

<i>Type</i>	<i>Pomerania</i>	<i>Great Poland</i>	<i>Mazovia and Central Poland</i>	<i>Silesia</i>	<i>Little Poland</i>	<i>Total</i>
First Hand	1	6	—	—	—	7
Second Hand	—	3	4	—	—	7
Crux	3	49	26	2	11	91
Long Cross	1	60	22	6	6	95
Helmet	1	5	2	2	1	11
Last Small Cross	5	30	10	2	7	54
Uncertain	14	36	10	4	3	67
Total Æthelred	25	189	74	16	28	332
Quatrefoil	6	30	3	1	5	45
Pointed Helmet	6	3	2	—	3	14
Short Cross	—	4	4	2	—	10
Uncertain	6	31	18	—	—	55
Total Cnut	18	68	27	3	8	124
<i>Total</i>	43	257	101	19	36	456

While the second phase of the inflow of Anglo-Saxon coin to Poland, reflected in the above figures, was characterised by the continuing predominance of Æthelred types over those of Cnut, Crux coins lost their predominance in favour of the Long Cross type, but not in every province. First of all, Mazovia and Central Poland, which certainly must have received a number of Crux pennies perhaps from Pomerania, resembled the former phase. However, the Long Cross became the main English type in the stock of Anglo-Saxon coins circulating and hoarded in Great Poland and even in the Continental zone (Silesia and Little Poland). The next Æthelred type was Last Small Cross while Helmet coins appeared in small numbers. The Cnut issues consisted mainly of the Quatrefoil type and the later types (Pointed Helmet and Short Cross) never reached very large figures in any region. In southern Poland they were hardly present at all, being registered in a few specimens only. Relatively few new English coins struck after 1023 seemed to be available for deposit in Poland which suggests that in this second phase Polish–Scandinavian trade had ceased.

In the late 1030s the third phase in the inflow of Anglo-Saxon coins to Poland began. It was marked with the arrival of the series of Cnut's successors: Harold I (1035–40), Harthacnut (1035–37, 1040–42) and Edward the Confessor (1042–66). The hoards buried during the rather long period from c.1036 to the early twelfth century are therefore numerous (101). The geographical distribution of the finds (map 3) reflects the general pattern covering all hoards from the eleventh century. The difference between Pomerania, Great Poland, Mazovia and Central Poland on the one side and the remaining part of the country on the other is still visible, indicating that the division between an important hoarding zone and a less important hoarding zone continued. The tendency seen in the previous period for English coin to increase in importance was now reversed.

The proportion of the Anglo-Saxon element (Æthelred, Cnut and later rulers) in the third phase was as follows:

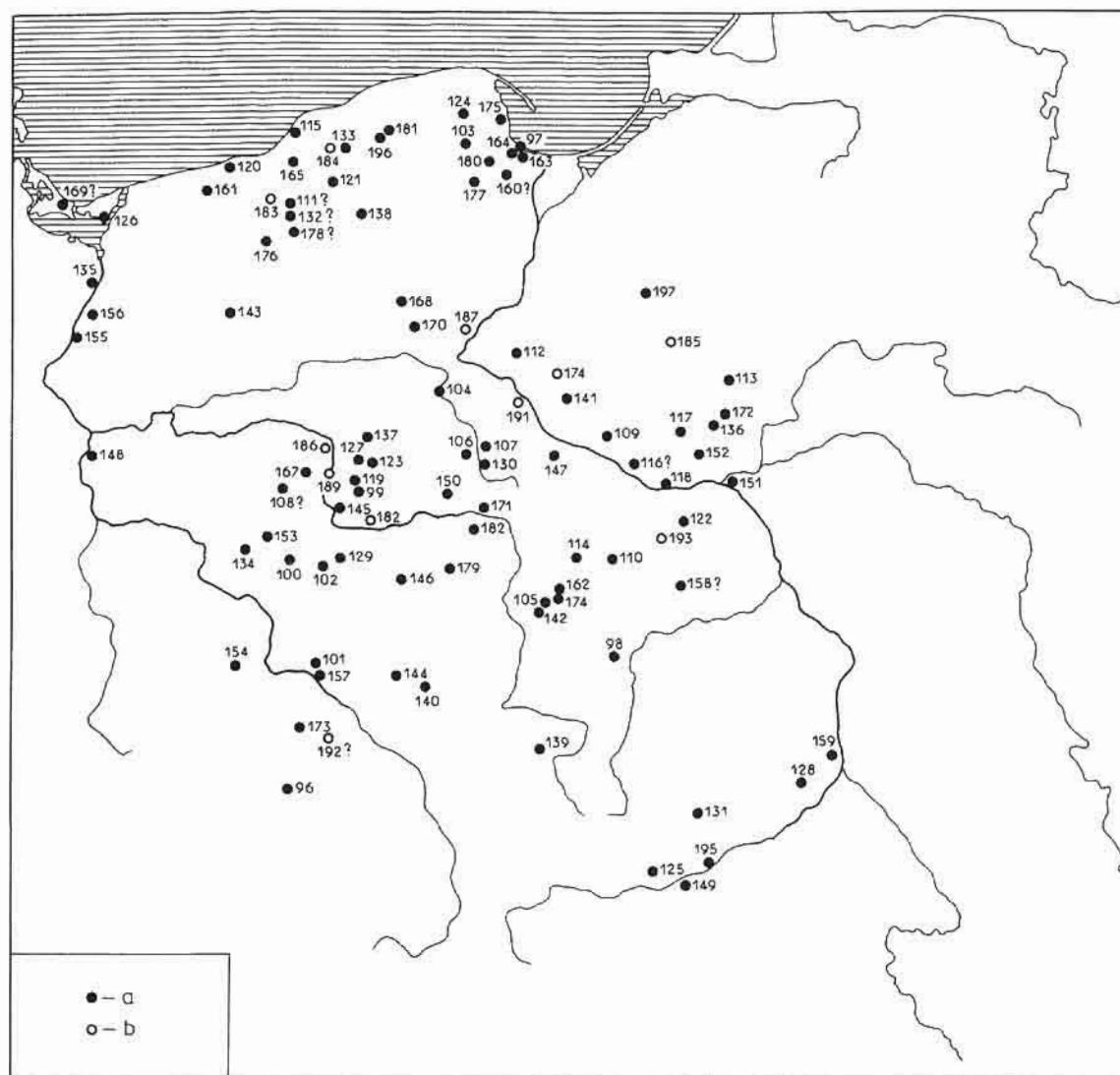


FIG. 3 (a) Polish finds of Anglo-Saxon coins buried between c. 1035 and the early twelfth century, (b) those dated generally to the eleventh century.

<i>Pomerania</i>	<i>tpq</i>	<i>per cent</i>
Gdańsk	1036	$1.05 + 0.52 + 0.00 = 1.57$
Bielawy, woj. Gdańsk	1039	$8.33 + 0.00 + 0.00 = 8.33$
Uncertain locality	1042 ?	$12.21 + 3.33 + 0.00 = 15.54$
Rychnowo, woj. Toruń	1042	$4.76 + 7.14 + 2.38 = 14.24$
Darłowo, woj. Koszalin	1046	$0.00 + 0.85 + 0.85 = 1.70$
Stojkowo, woj. Koszalin	1047	$0.40 + 0.20 + 0.00 = 0.60$
Luzino, woj. Gdańsk	c.1050	$0.30 + 0.00 + 0.00 = 0.30$
Uncertain locality	1055	$0.12 + 0.21 + 0.45 = 0.78$
Szczecin-Swierczewo	1056 ?	$0.07 + 0.10 + 0.20 = 0.37$
Mosiny, woj. Słupsk	1059	$0.00 + 0.35 + 0.35 = 0.70$
Pomierzyn, woj. Słupsk	1060	$0.00 + 0.60 + 0.30 = 0.90$
Widuchowa, woj. Szczecin	1061	$0.00 + 0.00 + 2.69 = 2.69$
Gdańsk – environs	1064	$0.00 + 0.22 + 0.22 = 0.44$

LAND

<i>Pomerania</i>	<i>tpq</i>		<i>per cent</i>
Siemysł, woj. Koszalin	1064	0.40 + 0.40 + 0.80 =	1.60
Gdańsk – Orunia	1068	0.90 + 0.18 + 0.00 =	1.08
Dębczyno, woj. Koszalin	1068	2.78 + 0.00 + 0.00 =	2.78
Uznam island	1077	0.00 + 0.63 + 1.26 =	1.89
Zakrzewek, woj. Bydgoszcz	1077	0.03 + 0.03 + 0.05 =	0.11
Pierwoszyn, woj. Gdańsk	1080 ?	2.33 + 0.00 + 0.00 =	2.33
Barvice, woj. Koszalin	1084	0.70 + 0.90 + 0.20 =	1.80
Horniki, woj. Gdańsk	1086	0.35 + 1.05 + 1.05 =	2.45
Uncertain locality	1089	0.00 + 1.68 + 0.00 =	1.68
Dobrociechy, woj. Koszalin	11th c.	0.42 + 0.00 + 0.00 =	0.42
Malczkowo, woj. Słupsk	1114	6.03 + 0.00 + 0.00 =	6.03
<i>Great Poland and Kujavia</i>			
Wilkowo, woj. Leszno	1036	0.33 + 0.20 + 0.00 =	0.55
Górzno, woj. Leszno	1038	2.02 + 1.01 + 0.00 =	3.03
Maszenice, woj. Bydgoszcz	1039	5.98 + 6.49 + 0.00 =	12.47
Poznań region	1039 ?	4.76 + 14.29 + 2.38 =	21.43
Dzierznica, woj. Poznań	1047	1.33 + 0.00 + 0.00 =	1.33
Łęki Wielkie, woj. Poznań	1051	0.00 + 2.17 + 0.00 =	2.17
Ostrów, woj. Bydgoszcz	1055	1.96 + 2.45 + 2.97 =	7.38
Zaborowo, woj. Leszno	1055	0.00 + 0.00 + 0.14 =	0.14
Baldowice, woj. Kalisz	1060	0.74 + 0.00 + 0.00 =	0.74
Bnin, woj. Poznań	1061	0.00 + 0.56 + 0.00 =	0.56
Borzęcice, woj. Kalisz	1061	0.19 + 0.76 + 0.19 =	1.14
Górzycy, woj. Gorzów Wlkp.	1061	0.09 + 0.00 + 0.00 =	0.09
Grójec, woj. Konin	1079	0.18 + 0.00 + 0.00 =	0.18
Słuszków, woj. Kalisz	1095 ?	0.01 + 0.03 + 0.00 =	0.04
Ogorzelczyn, woj. Konin	Late 11th c.	0.00 + 0.62 + 0.00 =	0.62
Zbójenko, woj. Włocławek	11th c.	0.63 + 0.00 + 0.00 =	0.63
<i>Mazovia and Central Poland</i>			
Piotrków Trybunalski	1036	3.23 + 0.00 + 0.00 =	3.23
Łask, woj. Sieradz	1039	0.96 + 1.68 + 0.24 =	2.88
Trzebnia, woj. Płock	1039	6.99 + 10.66 + 5.42 =	22.97
Głowno, woj. Łódź	1040	1.39 + 1.52 + 0.22 =	3.13
Rzewin, woj. Ciechanów	1046	0.92 + 0.00 + 0.00 =	0.92
Wyszogród, woj. Płock	1046	3.80 + 0.75 + 0.38 =	4.93
Naruszewo, woj. Ciechanów	1057	0.00 + 0.50 + 0.00 =	0.50
Okunin, woj. Warszawa	1061	1.44 + 1.44 + 0.00 =	2.88
Płońsk, woj. Ciechanów	1061	5.96 + 9.19 + 2.08 =	17.23
Apolonia, woj. Łask	1067	2.22 + 0.00 + 0.00 =	2.22
Zakrzew, woj. Skierniewice	11th c.	7.00 + 0.00 + 0.00 =	7.00
<i>Silesia</i>			
Ząbkowice Sl., woj. Wałbrzych	1036	0.00 + 1.50 + 1.50 =	3.00
Wszemirów, woj. Wrocław	1036	4.30 + 0.00 + 0.00 =	4.30
Ulesie, woj. Legnica	1061	0.00 + 0.50 + 0.00 =	0.50
Pęgów, woj. Wrocław	1063	0.00 + 0.25 + 0.50 =	0.75
Sokolniki, woj. Wrocław	1079	0.00 + 0.61 + 5.49 =	6.10
<i>Little Poland</i>			
Zielona, woj. Kraków	c.1050	5.80 + 1.45 + 0.00 =	7.25
Łagowica, woj. Tarnobrzeg	1054	0.00 + 0.28 + 0.00 =	0.28
Złochowice, woj. Częstochowa	1059	0.00 + 4.00 + 0.00 =	4.00
Grobla, woj. Kraków	1061	0.09 + 0.00 + 0.00 =	0.09
Trójca, woj. Tarnobrzeg	1063	0.00 + 0.22 + 0.22 =	0.44

The picture emerging from the above figures illustrates quite precisely the changes in the importation and distribution of English coin in Poland which took place in the third and longest phase. The most striking feature is the frequent absence of post-Æthelred-Cnut coins in the Great Polish, Mazovian, Silesian and Little Polish hoards. The bulk of the Anglo-Saxon element recorded in these provinces was still composed of the earlier issues, displaying some of the second phase. There are only relatively few hoards, like Maszewice, Ostrów, Zaborowo, Borzęcice, Łask, Trzebuń, Głowno, Wyszogrów, Płońsk, Żabkowice, Ślaskie, Pęgów, Trójca and Sokolniki, which contain later Anglo-Saxon pieces. The coins in question did not penetrate the entire Polish territory, being absorbed mostly in Pomerania. In fact, some Pomeranian hoards of this period contained an English element constituting mainly the later issues with a very marginal proportion of Æthelred pennies. It seems that it was just Pomerania which continued to receive the later Anglo-Saxon coins from Scandinavia, leaving only a small part of this supply for redistribution in the remaining regions of Poland. The marked fall in the number and percentage of the Anglo-Saxon coins struck after Cnut's reign which reached the inner regions of Poland may indicate not only a reduction in the volume and/or some change in the balance of trade with Scandinavia on the one hand, but also a change in the domestic monetary and commercial relations between Pomerania and the rest of Poland. The contacts with Scandinavia continued on a modest scale with a visible tendency to reduce even the limited configurations of that commerce, particularly towards the end of the eleventh century.

The typological composition of the Anglo-Saxon coins buried in the third phase, represented in the hoards, is as follows:

<i>Type</i>	<i>Pomerania</i>	<i>Great Poland</i>	<i>Mazovia and Central Poland</i>	<i>Silesia</i>	<i>Little Poland</i>	<i>Total</i>
First Hand	—	—	1	—	—	1
Second Hand	—	—	5	—	—	5
Crux	7	5	34	—	—	46
Long Cross	7	14	46	—	2	69
Helmet	4	3	19	—	2	28
Last Small Cross	11	5	16	—	1	33
Uncertain	22	63	28	4	—	117
Total Æthelred	51	90	149	4	5	299
Quatrefoil	13	10	80	5	4	112
Pointed Helmet	16	4	68	—	1	89
Short Cross	7	3	63	1	1	75
Uncertain	10	69	10	—	—	89
Total Cnut	46	86	221	6	6	365
Later types	42	12	53	3	3	113
<i>Total</i>	139	188	423	13	14	777

In this third and longest phase almost two-thirds of the material comes from Mazovia and Central Poland. The typological division of the Æthelred issues resembles the former phase, but the increasing proportion of Cnut coins can be interpreted as the result of continuous importation of that coinage from the stock of the Anglo-Saxon coins available in Scandinavia. Here again the Quatrefoil pieces appear the most numerous component, but also the later two Cnut types arrived in some quantity. Scandinavia must have been drained of its supply of those types in the middle of the eleventh century. The post-Cnut types – Jewel Cross and Fleur de Lis of Harold I, Jewel Cross and Arm and Sceptre of Harthacnut, Pacx, Radiate Small Cross, Expanding Cross of Edward the Confessor and others – reveal the sharp decline in the flow of English coin to Poland. As noted above,

they mainly reached Pomerania, from where they were redistributed to Great Poland and Mazovia. The hoarded coins represent probably some decrease in the volume of trade brought about by a reduction in the export of coined silver to Poland. Moreover, there were also some changes in the domestic, regional economic relations marked by an expanded absorption of the new coins in Pomerania.

Fig. 4 compares the Anglo-Saxon element in the coin hoards of the West Slav area with

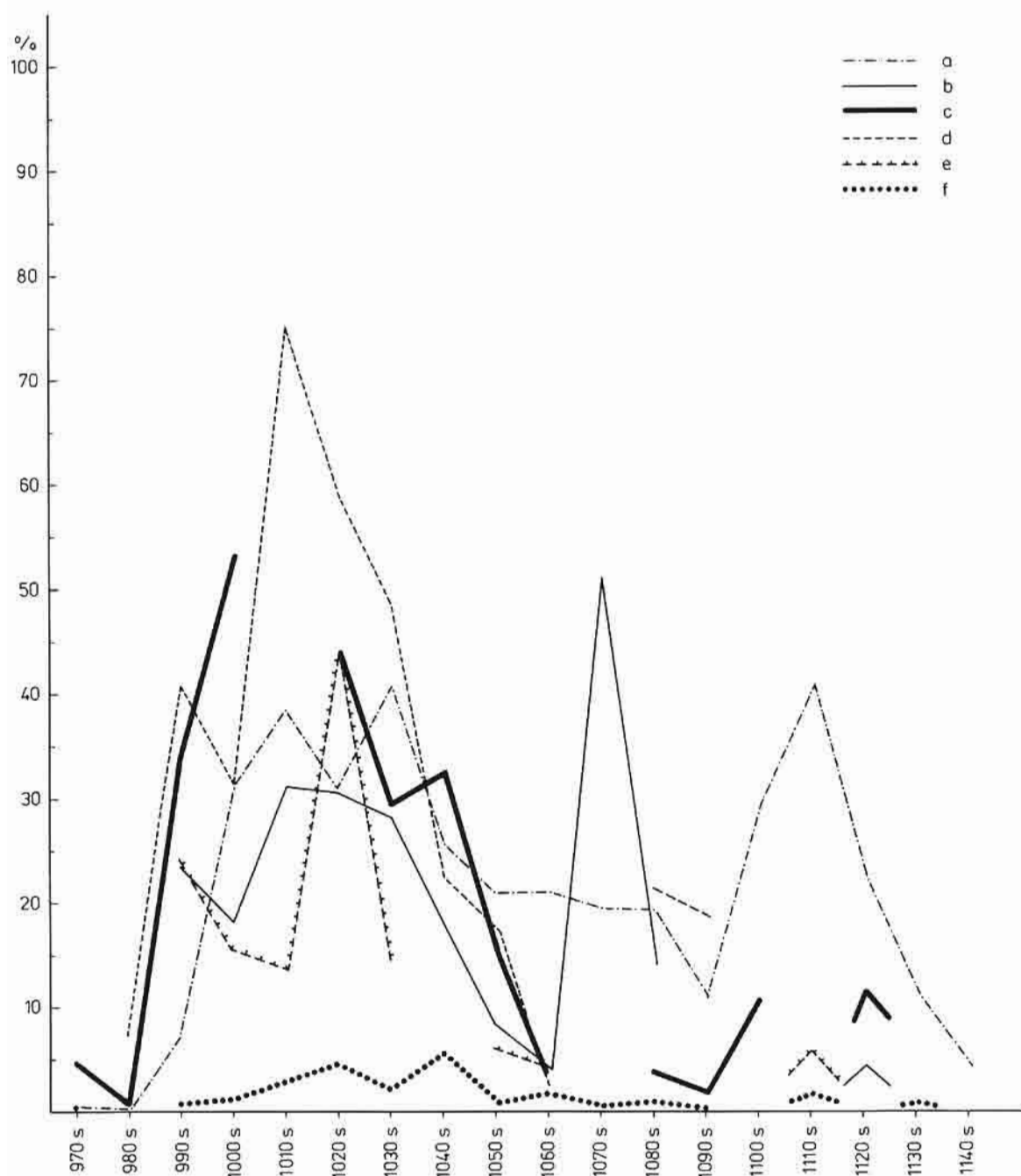


FIG. 4 Anglo-Saxon element recorded in coin hoards from Gotland (a), Swedish mainland with Oland (b), Denmark (c), Norway (d), Finland (e), and West Slav area (f). All figures prepared by A. Mikołajczyk, redrawn by P. Marosik.

those from Gotland, the Swedish mainland with Oland, Denmark, Norway and Finland. The most striking feature is the sharp increase of the inflow and hoarding of English coins in Denmark and Norway from about 980, reaching a maximum in the first two decades of the eleventh century. The next decades demonstrated a significant growth of this element in the coin hoards from Gotland, Sweden and Finland, up to 30–40 per cent on average. Finally a sharp decline is visible in the Scandinavian hoards from about 1040 with the exception of Sweden in the 1070s and Gotland in the very early twelfth century. Although the West Slav hoards to some extent mirror this long-term trend, there are two essential differences: first, the Anglo-Saxon element in the West Slav hoards is very low indeed, rarely rising above five per cent; and second the upsurge in the Anglo-Saxon element in the hoards comes later in the West Slav area than in Scandinavia: about a quarter of a century later than in Denmark and Norway, some 20 years later than in Gotland, and even some 10 years later than in Sweden. The calculation reveals the clear differences in velocity of the retransmission of coined silver in a circulation connecting West Scandinavia – in this case mainly Denmark – with the remaining regions of the Baltic zone in the first quarter of the eleventh century. The volume of that monetary movement depended however, on mutual commercial relations between individual regions. The number of Anglo-Saxon coins reaching the West Slav area, mainly Poland, shows a constant decline from the middle of the century, but from this time the Danish hoards also reveal the greatly reduced numbers of English coins.

A small addition to the Anglo-Saxon coins making their way to Polish soil was made up of Hiberno-Norse pieces. There are only a few such hoards from all Poland, and they provide mostly single specimens of Sihtric coins. With the exception of one case, they represent the first phase imitating mostly the Long Cross and only twice the Last Small Cross. In one hoard a coin of the second phase was recorded.

Another additional component connected with Anglo-Saxon coins was imitations of different types. They occurred in forty-seven hoards, or in roughly one-quarter of all the finds distinguished in the present study. The first imitations appeared at the very beginning of the eleventh century in finds from all over the country. There was only one early deposit from Pomerania. The most interesting were the Crux imitations from two hoards, particularly from the Pocałkowo hoard in which the Anglo-Saxon pieces constituted 14.28 per cent.²¹ Other imitations represented a Crux/Small Cross mule (one piece registered in the Płock hoard) and Long Cross (one piece from the Zakrzew hoard). More imitations are known from the second phase, in which almost every third hoard contained these elements but the proportion always remained low, at almost 0.5–1 per cent. Only two deposits were exceptional – Wilczy Dół (9.66 per cent) and Lubraniec (4.98 per cent). Unlike the first phase, the majority of the imitation pieces now represent Long Cross type. One can mention four die-duplicates of the 'Winsige, Exeter' pieces recorded in three hoards (Wilczy Dół, Oleśnica and Lubraniec), known also from the Scandinavian collections.²² The Wilczy Dół and Oleśnica hoards moreover provided imitation Helmet. In the first case we dealt with a 'Byrhtsine Winchester' piece not representing the usual Scandinavian style. There were also two Last Small Cross imitative pieces registered in the Maniów and Lubraniec hoards. The latter coin bore Cnut's name and 'Thorcl, Lund or London', resembling the imitation from the Copenhagen collection. From the third phase we know of twenty-five hoards (or one-quarter of the total number of hoards in question) containing imitations of Anglo-Saxon coins, usually in proportion of 0.01 to 3 per cent. The typological patterns were also very different, including Æthelred, Cnut, Harthacnut, Harold and Edward the Confessor issues, though here we are on only slightly unsure

²¹ Mikołajczyk, 'Tryzy naśladowcze pensy'.

²² Mikołajczyk, 'Skandynawskie imitacje monet anglosaskich'.

ground because, unfortunately, only a few pieces were properly identified in the find reports. The coins from the Łask hoard imitated the Long Cross, Helmet and Last Small Cross types. The Scandinavian origin of at least the major part of the imitations seems to be shown by the numismatic material. The question of Polish imitative pieces still remains unanswered. The serious study of the imitations of the whole material from the eleventh-century coin hoards, including, first of all the German types, has not yet been undertaken, and that is the only way to solve the problem.

The Anglo-Saxon chapter in the early medieval monetary history of Poland is evidenced by still another category of imitation. This was made in the ducal mint of Bolesław Chrobry at the very beginning of the eleventh century, just when the first Anglo-Saxon coins spread in relatively large quantity over most of the Polish provinces. This is the mule displaying on one side the obverse of the Bolesław Chrobry DVX INCLITVS type from the first decade of the century, and on the opposite side the obverse of Anglo-Saxon type showing Æthelred's bust resembling the Crux type encircled with a legend EDARED REX ATGON.²³ Some scholars think that this Anglo-Saxon pattern could have come to Poland through Saxony, but in the light of the present study the direct influence of Anglo-Saxon coins circulating in Poland upon the duke's and engraver's decision seems sufficiently evidenced.

²³ E. Majkowski, 'Coins struck by Bolesław the Mighty duke of Poland (992–1025) with the bust and name of Æthelred II of England', *NC* 5th ser. 14 (1934), 168 ff; Z.

Zakrzewski, 'Nieznany adalteryn typu "Æthelred"', *WNA* 20 (1939), 136 ff; S. Suchodolski, 'Moneta polska w X/XI wieku', *WN* 11 (1967), 99–100.