

# Plant Ornament

## A Key to a New Chronology of the Viking Age

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### Abstract

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Plant ornament in the Viking Age has never received much attention. We can see foreign vine scrolls and acanthus plants of Mediterranean origin. Research into the European use of plant ornaments helps us to find out when they appeared in Scandinavia. It is worth mentioning that the ornaments do not all appear in the same period of time. These ornaments together with other Viking objects such as trefoil brooches and various grave gifts can be used to establish the modern chronology of the Viking Age.

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In recent years, there has been active discussion of chronological and dating problems in the Viking Age. The purpose of this article is to contribute to the continued debate on chronology, typology and style<sup>1</sup>. This article does not discuss how the Viking Age started, despite the fact that a more accurate definition of the current terminology could have an influence on the chronology and the dating of artefacts from the Viking Age. It is a preliminary article for a forthcoming publication, in which a re-evaluation of the art and objects of the period shows that it is possible – with evidence from the continental and insular areas – to illustrate a typological and chronological way of presenting problems with the Nordic material by using some new approaches (Skibsted Klæsøe 1996).<sup>2</sup>

A reassessment of the chronology of the Viking Age has been needed in recent years. Obvious discrepancies in dating between dendro-artefacts

from graves (Iversen & Vellev 1986; Christensen & Krog 1987; Bonde & Christensen 1993, 1994), monumental structures (Ramskov 1980; Bonde & Christensen 1984; Frandsen & Jensen 1986; Jensen 1991; Andersen 1995; Feveile 1996) and the existing chronology has for a long time hampered a more precise dating of the artefacts and the subdivision of the period (Montelius 1895; Petersen 1928; Brøndsted 1966, p. 342; Jansson 1987, p. 774; Randsborg 1990). Several researchers have contributed important comments and publications, in which the chronology has been taken up for discussion (e.g. Callmer 1977; Tegnér 1981, pp. 140 ff.; Carlsson 1983, 1988; Jansson 1985; Jensen 1986, 1996;<sup>3</sup> Braathen 1989; Madsen 1991; Näsman 1991; Lund Hansen 1993; Myhre 1993). However, we lack an overall presentation of the Nordic chronology.

A revision of Viking Age chronology should

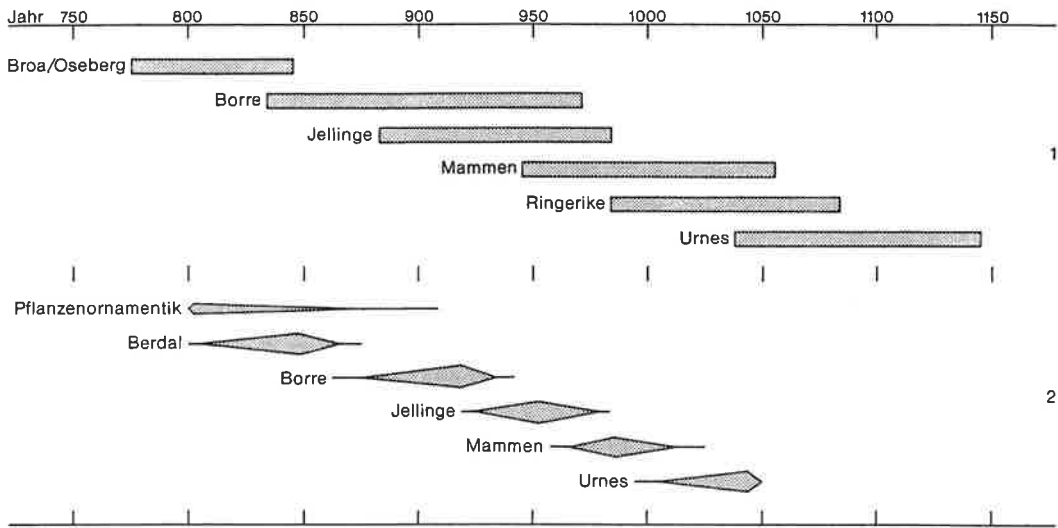


Fig. 1. Chronological classification of art styles in the Viking Age. 1: Graham-Campbell 1982. 2: Capelle 1981. (Figure after Muhl 1991.)

include a reconsideration of the typology as well. Substantial amounts of the material from the Viking Age are still both typologically and chronologically based on Jan Petersen's exemplary publications dealing respectively with swords (1919) and jewellery (1928). Decisive for these works was Rygh's large-scale classification of Norwegian artefacts (1885). The chronology of the Nordic swords has since been re-evaluated (Müller-Wille 1972, p. 97). A new revision of the sword typology, based on Petersen's works, has also been carried out (Jacobsen 1992). A complete review of jewellery of the Viking Age – typological as well as chronological – is nevertheless desirable. Several valuable contributions have been made for the oval brooches (Jansson 1985), equal-armed brooches (Aagård 1984a+b), trefoil brooches (Hårdh 1984), disc brooches (Jansson 1984) and other types of jewellery (Arwidsson 1984). These publications are, however, based solely on data from the Birka material or the eastern Scandinavian area. There are artefacts in this material that are especially characteristic of Birka. Conversely, it should be noted that several Nordic artefacts and types are either not represented or appear only on a limited

scale in the plentiful Birka material. Consequently, these publications should not alone represent the long awaited review of all Nordic material from the Viking Age.

A reappraisal of Viking Age art also seems to be necessary. This has not been an object of consideration in recent times. Art of the Viking Age has always been synonymous with the animal styles (among others Müller 1880; Shetelig 1920; Marstrander 1964; Klindt-Jensen & Wilson 1965; Capelle 1968a; Johansson 1979; Karlsson 1983; Fuglesang 1982, 1992; Wilson 1995). There is now general agreement that animal styles overlap each other in time (Fig. 1), they also can appear together on the certain artefacts (Fig. 2). This is the reason why it is not desirable to use the animal styles alone for exact dating of the material in question.

## Art in the Viking Age

A closer examination of art from the early Viking Age shows that it is much more complex than hitherto assumed. Several different ornament types are observed from the period, and some are even used at the same time. It is not only the



Fig. 2. Trefoil brooch with Borre Style and Jelling Style. (Copenhagen, National Museum, C 20248, Bornholm). (Private photo.)

animal ornament that prevails. Geometric motifs decorate different equipment as well as being used as decoration on jewellery and weapons. Several scholars regard plant ornament as marginal (Wilson 1995, pp. 111 ff.). It becomes a decisive motif in the latter part of the Viking Age. It is also closely connected to the animal ornaments in Mammen, Ringerike and Urnes styles (Fuglesang 1980; Karlsson 1983; Wilson 1995). It becomes clear that in the early Viking Age vegetative art is used as an independent ornament without any connection to the animal ornament. It is the twisted vine scrolls and twining branches of the acanthus, that originate from the Mediterranean area. The tradition of the classical ornaments with twisted scrolls and acanthus branches reached areas north of the Alps during the 7th and up to the 9th century. Motifs were introduced by itinerant missionaries, through trade and handicraft contacts, and internal connections between European nobility.

### Early plant ornament

From the middle of the 8th century, the artistic use of vine scrolls (The Tree of Life) and four-



Fig. 3a. English stone cross with vine scrolls (after Collingwood 1927).

legged climbing animals had been widespread in north-eastern England. These are paradisiac motifs, which adorned numerous stone crosses together with other liturgical objects (Brøndsted 1924; Collingwood 1927; Cramp 1978, 1984; Wilson 1984). This ornamental tradition was brought to England by Syrian monks, who settled in these remote places from the end of the 7th century and at the beginning of the 8th century. The earliest production of stone crosses is known from the Northumbrian monastery school, Hexham, and other places, and is dated back to 740 (Cramp 1978, 1984).

It is presumably these twisted scrolls (Fig. 3a) that served as an inspiration for the spiral orna-



Fig. 3b. Trefoil brooch with early plant ornament (Lund University Historical Museum, LUHM 2910:24, Råga Hörstad. (Photo LUHM.)

ment (Capelle 1968a, p. 37) seen on a number of trefoil brooches (Fig. 3b) (JP 88–89, SK Type 2<sup>4</sup> (Skibsted Klæsøe 1996)) (Group 1 (Hårdh 1984, p. 85)). Hårdh (1984, p. 88) draws attention to the fact that this type of brooch carries a consider-

able ornamental resemblance to the vine-scroll-ornamented brooch from Mosnæs, Rogaland. This in turn points back to the British prototype (Klindt-Jensen & Wilson 1965, p. 63, Table XXXII:f–g; Hårdh 1984, p. 88). A similar elaboration of the elegant double vine scrolls of the Mosnæs brooch can be found in the beautiful English Vespasian Psalter (fol. 30v). There is a certain disagreement as to the dating. The Psalter dates back to either 720–730 or 775 (Wilson 1984, fig. 112, and p. 91).

Many trefoil brooches with stylized Syrian/English plant ornaments have been discovered in particular during the excavations at Hedeby (Capelle 1968a). Mould fragments suggest (Jankuhn 1977; Hårdh 1984, p. 88 with references) that there had been a certain distribution of brooches from Hedeby; perhaps the motif itself had also been brought further. Some scroll-ornamented jewellery (JP 88–89/SK Type 2.a and 2.b) had also been discovered in Zealand, Scania, Bornholm and Vestfold in Norway. Several of these brooches carry a motif that is

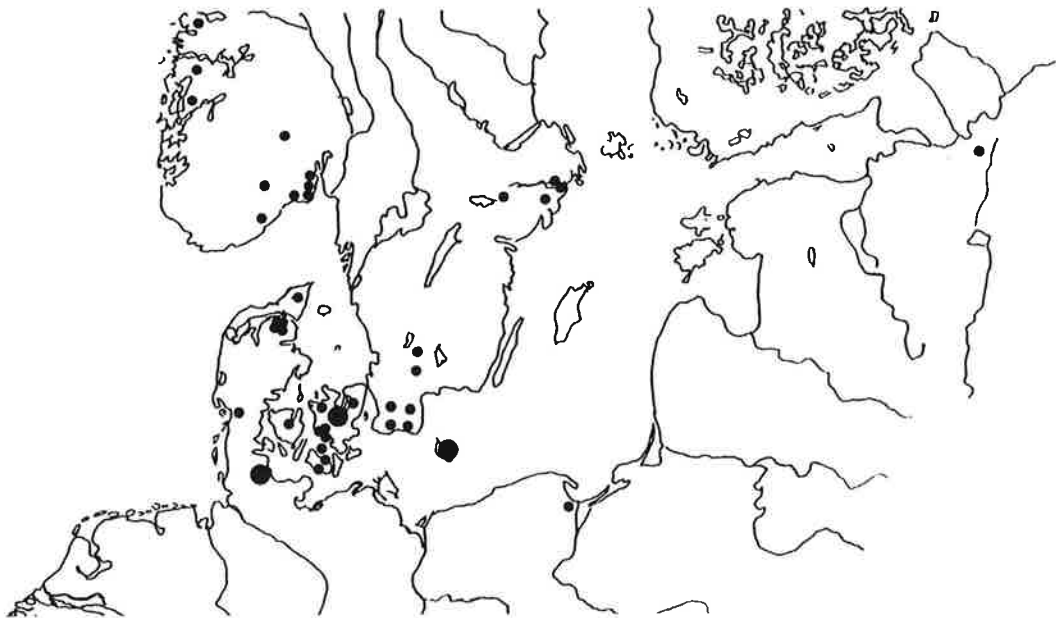


Fig. 4. Distribution of artefacts with early plant ornament (Skibsted Klæsøe 1996).

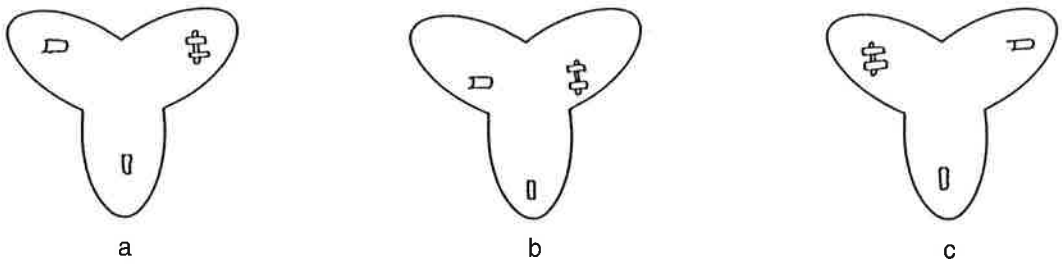


Fig. 5. Castle needle holders placed in three different ways. a: NM 1, C 3369, Søndregård, Bornholm. b: SHM, Bj 1062, Birka, Uppland. c: KrM 7040, Fjälkinge, Skåne.

limited to very simple and highly stylistic spiral scrolls, similar to those one can observe on the brooch from Råga Hörstad (LUHM 29210:24) (Strömberg 1968; *Vikingarna* 1989, fig. 148). However, it is not the decoration that has made an impact on the large amount of jewellery from Ribe or the eastern Scandinavian area. Quite a few artefacts with early plant ornament are registered here (Fig. 4). It is characteristic of the early Viking Age that every group of artefacts had its own specific ornament. From the end of the 9th century this sharp distinction in the ornamentation of artefacts and type of artefacts ceases to exist.

Three identically designed brooches with plant ornament found in Sweden and Bornholm are different in size from Hedeby brooches.<sup>3</sup> This could be of chronological significance. However, there is a certain deviation in size among these three brooches. The one from Bornholm is slightly bigger than the Birka brooch, while the Fjälkinge brooch is the smallest. There could be several reasons for these differences in size (Callmer 1984). With repeated use, moulds can shrink (Brinch Madsen 1984). It is unlikely that the same mould was used for production of all the three brooches, because the cast needle holders on the reverse side are placed differently (Fig. 5). Probably the deviation in size of those brooches occurred because one of them was used as a model for production of two others. Thus we are talking about an original and two copies. However, it is difficult to determine which brooch should be



Fig. 6a. Stone cross with paradisiac animals (After Collingwood 1927).



Fig. 6b. Oval brooch, JP 37, with four-legged animals (British Museum, BM 68 6-27 126). (Private photo.)

considered the original. There is no reason to believe that they were produced by a single artist. Discussion of the production and distribution of ornaments was published by Callmer (1984). Further discussion of the matter is, however, desirable.

On the sides of the oval brooches of JP 33/37 (Petersen 1928; Jansson 1985 pp. 46 ff.) one can see animal ornaments, which were supposedly inspired by the Syrian/English artistic traditions of four-legged animals (Jansson 1985, fig. 44–45) (Fig. 6a+b). These designs, among others, decorate stone crosses and the Ganderheim shrine (*ibid.*, p. 56). These oval JP 33/37 brooches have a wide distribution in Norway, whereas Hedeby, Scania, Bornholm and Birka<sup>6</sup> have a strong representation too. Apart from northern Jutland and Bornholm, this type of brooch has not been found in large quantities in Denmark.

Ornamental influences from England have a varied effect on the distribution and typology of

Nordic artefacts. Even though the trefoil brooch from Mosnæs in Norway represents the most beautiful vine scrolls, this type of plant ornament acquired a major significance only in the southern Scandinavian areas. The Syrian/English animal ornament is, on the other hand, applied mostly on the artefacts from Norway and more eastern parts of Scandinavia. Scroll ornament is used in Norway exclusively as a decoration on equipment belonging to women only.

### Acanthus ornament

The Frankish king (who then became Emperor) Charlemagne (768–814) and his clear preference for classicism brings the acanthus ornament to its renaissance in the Carolingian period (Köhler 1930; Braunfels & Schnitzer 1965; Braunfels 1968; Hubert *et al.* 1969; Hutter & Holländer 1987). It was the Emperor's wish to create a new Roman Empire to the north of the Alps. From

the end of the 8th century and up to the 10th century this classically inspired motif had a special ornamental influence on liturgical items such as manuscripts (Ausstellungskatalog 1965, 1994), chalices and thuribles (Wamers 1991), shrines and altars, such as the Golden Altar in Milan (app. 840) (Hubert *et al.* 1969; Skibsted Klæsøe 1996).

Secular items such as swords, spurs and fittings also became ornamented with acanthus (Stein 1967; Fraenkel-Schoorl 1978; Menghin 1980, 1983; Müller-Wille 1982). The production of these objects was associated with the well-known Carolingian monastery workshops in Aachen, Tours, Rheims, Metz, Trier, and so on. The secular items, preferably made of gilded silver inlaid with niello (Lund Hansen 1975), belonged to the nobility at the Carolingian court. These beautiful objects had also been used as presents for the Emperor's and Empire's vassals as well as for foreign diplomatic representatives (Wamers 1995). Oval, tongue-shaped and trefoil sword strap-tags are illustrated in the Vivian Bible (843–851) (Bibliothèque Nationale, Paris, Lat. 1; Hubert *et al.* 1969, fig. 128–29) and Lothar Gospels (849–853) (Bibliothèque Nationale, Paris, Lat. 266; Hubert *et al.* 1969, fig. 133). The Stuttgart Psalter (820–830), on the other hand, depicts no such fittings (de Wald 1930).

The period of time over which these manuscripts were created makes it likely that the production of the Carolingian mountings first started in the middle of the 9th century. This is, however, contradicted by the dating of several other acanthus ornamented Carolingian mountings, especially the one from Heljarp, Scania (Arbman 1937; Hårdh 1976; Fraenkel-Schoorl 1978; Wamers 1981), which was found together with the coins dated to Louis the Pious (814–840). As the coins were still minted even after Charlemagne's death, they cannot be used to determine an exact dating for the strap-tag. However, the Coptic-inspired ornament (Forsander 1943) can give an approximate dating for the mounting. It was presumably made in



Fig. 7. Trefoil brooch with acanthus ornament (Museum of National Antiquities, SHM 3145, Tävvelsås, Småland). (Private photo.)

Charlemagne's Court School in Aachen between 780 and 800. At this time, Godescale, the Roman/Coptic-inspired monk, resided at the Court in the Emperor's metropolis.

The discovery of the Carolingian mountings in the Scandinavian area makes it probable that young Nordic nobility had participated in the continental conflicts, which were common at the time, and returned home with remuneration in the form of these fine silver mountings. On the other hand, only few of the continental swords from the 9th century have been found in the Nordic areas (Müller-Wille 1982). This is very likely due to Charlemagne's embargo on export of weapons. Acanthus ornament is picked up by Nordic art through the process of copying ornaments on the Carolingian mountings, all of which are dated to 780–855 (Arbman 1937; Skibsted Klæsøe 1995 with references). Despite the fact that some continental male items from the 8th and the 9th century are ornamented with acanthus plants, this ornament was used in Scandinavia only on female jewellery – the trefoil brooches, Fig. 7<sup>7</sup>.

Acanthus-ornamented artefacts are especially widespread in southern Scandinavia, where the



Fig. 8a. Trefoil brooch with late plant ornament (SHM, Bj 605). (Private photo.)

original mountings have been discovered. It is remarkable that the original artefacts and the imitations are found alongside each other. The trefoil mounting from Huseby near Trondheim, Norway, was discovered in a woman's grave together with oval brooches JP 40 and other artefacts (Shetelig 1920; Wamers 1981), presumably placed in the grave in the first part of the 8th century. The strap-tag was altered into a pendant, but that did not result in the copying. Acanthus ornament imparts no influence on the early Norwegian Viking ornament.

## Late plant ornament

A new ornamentation develops within Carolingian cloister art in the latter part of the 9th century. This was given the name of the late Carolingian plant ornament (Goldschmidt 1914). It is the so-called early Metzner art tradition, which from the end of the 8th century had been inspired by a Franco-Anglo-Saxon tradition with both vine scrolls and acanthus plants. The early Metzner art was led by Bishop Drogo with his artistic activity at the monastery in Metz from 826 to 855 (Skibsted Klæsøe 1995). The ornament in the Drogo Sacrament (850–855) (Hubert *et al.*



Fig. 8b. Part of ivory book-cover with late Carolingian plant ornament (after R. W. Schiller, *A Survey of Medieval Model Books*, 1963) (Skibsted Klæsøe 1993).

1969; Hutter and Holländer 1987) is contemporary with the trefoil mountings from Kolin (Fraenkel-Schoorl 1978, with references) and these two artefacts are very fine examples of this late artistic tradition. After Drogo's death in 855, the early art style received further development at central European monastery workshops. It was with a late Metzner tradition in the last quarter of the 9th century that Carolingian ornament reached its artistic culmination. It is manifested, among other things, in exclusive ivory carvings such as liturgical combs (Goldschmidt 1914; Volbach 1952) and ingeniously elaborated book-covers (Menz-Vonder Mühl 1981). The trefoil strap-tag found in Trabjerg Bakker, Denmark, also belongs to this artistic tradition (Skibsted Klæsøe 1995). It has not yet been possible to single out a continental workshop for this item. Different artefacts with the late Carolingian plant ornament have been discovered in Hedeby (Fraenkel-Schoorl 1978, with references). A tongue-shaped mounting discovered there (Capelle 1968a, Tab. 1:1a, cat. 108; Fraenkel-Schoorl 1978, cat. no. 15; Wamers 1984, cat. no. 1) might, according to Fraenkel-Schoorl, be a Carolingian item (1978, p. 361), although the artefact in question has certain features that point in the direction of Nordic production.

From the end of the 9th century and the beginning of the 10th century, late Carolingian





Fig. 9a. Trefoil mounting with late plant ornament (LUHM 2993). (Private photo.)

plant ornaments start to influence the decoration of different Nordic types of artefacts. A Scandinavian version of the late Carolingian ornament was used on trefoil brooches (ten brooches were discovered in Uppland<sup>8</sup>), big and small disc brooches, pendants of different size, silver beads, etc. One especially refined version of the vine scrolls is commonly used in different filigree works (Duczko 1985).

It is considered that Nordic ornaments are inspired by artistic traditions resulting from the contacts between itinerant missionaries from the monasteries of Central Europe and Scandinavian craft workers. It is especially the trefoil brooch from Bj 605 (Arbman 1940, 1943; Hårdh 1984) that shows a clear ornamental similarity to the carved ivory book-cover. The technical details of the workmanship suggest that this book-cover was made by the monk, Tuitilo, who stayed at the Swiss monastery of St. Gallen from 896 to 912, (Fig. 8a+b) (Skibsted Klæsøe 1993, figs. 7–8).

Complete sets of oval, tongue-shaped and trefoil mountings are known only from the drawings in Carolingian manuscripts and from such finds as St. Vincenzo al Volturno, southern Italy (app. 780–800) (Capelle in print)<sup>9</sup> Östra Påboda, Småland (app. 840–850) (Arbman 1937; Fraenkel-Schoorl 1978, cat. no. 50; Wamers 1984) and Biskupija-Cravina in Croatia (around 800 to the first half of the 9th century) (Menghin 1980, p. 254, 1983, p. 88, Abb. 44, no. 11). A few imitations of the Carolingian mountings are found in Blatnica, Hungary (Undset 1891; Fettich 1937, pp. 263 ff.; Capelle 1968b) and Stará Kourim, Bohemia (Solle 1966; Wamers 1995, p. 151). There is reason to suppose that something similar can be applied to the Swedish objects with the same plant ornament—a big trefoil mounting (LUHM 2993), (Fig. 9a) (Arbman 1937, p. 177; Wilson 1995, Bild 94, p. 112) and a little bell-shaped one (SHM 2549), (Fig. 9b) (Salin 1890). Unfortunately, only limited information about



Fig. 9b. Bell-shaped mounting with late plant ornament (SHM 2549). (Private photo.)

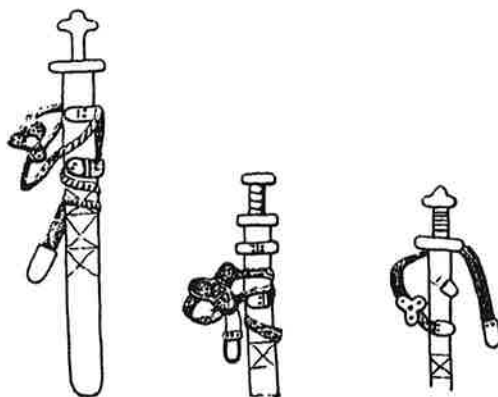


Fig. 10. Trefoil, tongue and oval strap-tags. (After Undset 1891).

these finds is available. A trefoil artefact with a Nordic version of the late Carolingian scrolls was found in Scania. This item is referred to by Wilson as a brooch (1995, Bild 94, p. 112), but there is no sign of a needle holder on the reverse side. With rivets and rivet marks on both front and reverse, it is rather likely to be a mounting. It served the function of holding heavy warrior swords on leather belts (Fig. 10) (Undset 1891) worn around the loins. There are no details of the find of the little bell-shaped fitting. Ornaments on these two artefacts are so much alike that one can imagine these two pieces to be a part of a complete Swedish set.

The distribution of the late scroll ornament is especially associated with the Swedish – more explicitly – eastern Swedish areas (Skibsted Klæsøe 1993, p. 147).<sup>10</sup> This has already been pointed out with the publication dedicated to the big treasure-hoard from Terslev, Zealand (Friis Johansen 1912). Artefacts carrying this ornament were found around the Baltic Sea and up to Russia. In spite of the dispersed finds, however, this ornament has no significance in western Scandinavia.

## Dating and chronology

It is the oval brooches that are used to determine the datings for the artefacts in Scandinavia. Brooches with vine ornament (JP 88/SK Type 2.a.) are found together with oval brooches JP 27 and Berdal brooches, JP 33/37 and JP 42. The type JP 27 is ornamented with Style III/F, where a dating before or around 800 seems probable. The debate about the Berdal brooch from Ribe is not yet over, but datings of shortly before 800 and the first half of the 9th century may be accepted (Jensen 1986, 1996). Further moulds for the Berdal brooches were discovered at the new excavations in Birka.<sup>11</sup> The oval items JP 33/37, according to Jansson (1985, p. 181), belong to the “early Birka time”, corresponding to “the 9th century”. The trefoil brooch from Birka (Bj 466) is represented by oval JP 42 (Hårdh 1984, p. 88) which Jansson (1972, p. 74) assigns to “the late Birka time” and can therefore be dated at the earliest to the latter part of the 9th century or close to 900 (Jansson 1985, pp. 181, 186). Capelle (1986, p. 383) draws attention to the fact that the terms “early and late Birka time” cannot be applied to the rest of Scandinavia. The same could be correct for datings. The chronological material indicates that JP 42 especially in Norway has

an earlier dating. Therefore, regional variations are possible.

Brooches with plant ornament (JP 89/SK Type 2.b.) are discovered together with oval brooches JP 51. Jansson attributes JP 51 to "the late Birka time" and later than 900 (Jansson 1985, p. 181), but the rest of the combination material suggests a dating around the middle of 9th century. It seems probable that artefacts with the early vine ornament should be dated around 800–850. This makes substantial changes to the original dating of this type of artefact and has, therefore, a decisive influence on the chronology. Considered from this point of view, those brooches will not be "ornamentally last" (Petersen 1928, p. 100), but on the contrary are some of the earliest examples of Viking Age jewellery.

With the joint ornamental art traditions between the English vine scrolls and four-legged animals, the oval brooches JP 33/37 are tentatively dated to the first half of the 9th century. This supposition is supported by their ornamental attachment to Style III (Jansson 1985, p. 56).

The acanthus-ornamented jewellery is dated to the second half of the 9th century. It is especially the oval brooches, JP 51, which form the chronological material. However, as this type of artefact remained in use for a long time, it is difficult to establish an exact dating for them. The possibility of placing the production of JP 51 back to around the middle of the 9th century is real, as several brooches are found together with material which belongs to the middle of the 9th century. This requires further analysis. Dating of the original mountings and drawings in the Carolingian manuscripts and comparison of ornament types makes it probable that Nordic imitations are produced in the second half of the 9th century and up to the 10th century. Acanthus-ornamented trefoil brooches should not therefore be regarded as "the ornamental first". They were first produced when the early vine scrolls went out of fashion.

On the continent, late Carolingian art was developed in Carolingian monastic settings in

the latter part of the 9th century. Nordic artefacts with vine-scroll ornament have been dated, in the light of the chronological material, from before 900, probably in the first half of the 10th century. There are no oval brooches earlier than JP 51 and several belong to JP 52 and 55. Many artefacts with this ornament were found in a treasure-hoard (Skovman 1942) together with coins, which, with circumspection, can be used for dating. They must have been deposited around the middle of the 10th century.

## Conclusion

The extent to which use of plant ornaments can form a basis for dating the material in question and hence establish the chronology of the Viking Age has been discussed in this article. The Nordic versions of the different plant elements are linked to the characteristic artistic traditions of the insular and continental areas. Therefore, dating can tentatively be transferred to the Scandinavian material.

Plant ornament of the early Viking Age has not been credited with any significance, either for the art itself or for the datings. Despite this, it is emphasized that the artistic influence from the continent and the insular areas first starts in the late Viking Age (Fuglesang 1980). It has been possible to show in this article that earlier during this period, there was a plant ornament which should be regarded as more significant. It is on the basis of the early Viking Age plant ornament that the later vegetative motifs in Mammen, Ringerike and Urnes styles are further developed.

Knowledge of the insular and continental art traditions together with datings of foreign styles, artefacts, and so on, have permitted a more accurate relative dating of different types of artefacts. Some of them could not be given a more precise dating before. There are types which now can be moved back in time and dated as some of the earliest in the Viking Age. Conversely, there are others which should be considered as late for the period. These changes will of course

have consequences for a modern chronology.

I have described here how and when different plant styles came to Scandinavia. The scroll ornaments from the Syrian/English tradition received further development in southern Scandinavia from around 800. The classically inspired acanthus obtained ornamental importance in the north in the second half of the 9th century. This also applies to southern Scandinavia. Few original acanthus-ornamented artefacts have been found in other areas too.

The late vine-scroll ornament has not been recognized as an independent artistic style for the Nordic material. The continentally inspired ornament is presumed to have arrived in Scandinavia around 900. It had an influence on the decoration of different types of artefacts. It is possible that its special connection to the eastern Scandinavian areas originates from contacts between clergymen from the mid-continental monasteries and especially in Birka. Bishop Rimbert, in his work *Vita Ansgari* (ca. 870) (Swedish translation by E. Odelman 1986) expounded the importance of Birka in the foundation of the Birka church and for the mission at "the end of the World" (Hallencreutz 1986, pp. 176 ff.).

Perhaps those Mediterranean plant elements were too exotic for the Norwegian art tradition. It is quite clear that this ornament played a marginal role in Norway in the early Viking Age. Here other motifs, such as Syrian/English animal ornaments, became predominant. Knowledge of the other animal ornaments together with a further analysis of the different types of artefacts in the early Viking Age must be accumulated. The plant ornament cannot stand alone as it is used only on a limited range of material. However, the time difference and connection to some artefacts shows that it can be used as a key that will open up the prospect for a more accurate dating of the material and, with that, for establishment of a modern chronology for the Viking Age.

## Notes

1. Warm thanks are due to Ulla Lund Hansen, Dr.Phil., Institute of Archaeology and Ethnology, University of Copenhagen, for her unfailing support, professional advice and inspiration.
2. My Ph.D. thesis is under preparation for publication.
3. My thanks to Stig Jensen, M.A., Ribe Antiquarian Collection, for permission to use his manuscript.
4. New typology for the trefoil brooches, cf. note 2. Brooches of the JP 88 are named SK Type 2.a, and JP 89 are named SK Type 2.b.
5. NM I C 3369, Bornholm, Søndregård, Østerlars (Vedel BO1 1890, p. 390; Brøndsted 1936, cat. no. 131); KrM 7040, Scania, Fjällkinge, Ksp. Fjällkinge (Strömberg 1961, Cat., p. 68, Tab. 70:5); Bj 1062, Uppland, Birka (Arbman 1943, Tab. 73:6; Hårdh 1984, p. 85 ff.).
6. The Swedish material is not completely registered.
7. JP 85–87 or SK Type 4, cf. note 2.
8. JP 94 or SK Type 5, cf. note 2.
9. I am grateful to Professor T. Capelle, Münster, for permission to use his manuscript.
10. Among others trefoil brooches – JP 94 or SK Type 5, cf. note 2.
11. My gratitude to B. Hårdh, Ph.D., for this information, and for reading, commenting on and correcting the proofs.

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