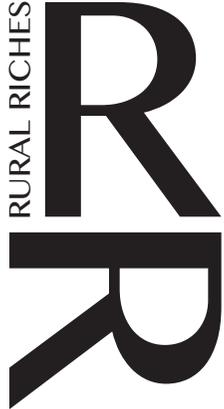


Navigating Early Medieval Europe

The Rural Riches Database Manual

Appendix 2a Brooches (recording Bow brooches and Garnet brooches)



European Research Council
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Introduction

This appendix describes the decisions we took before we started recording brooches in the Rural Riches database.

The limited time available prevented us from considering all brooch types. In line with the goals of the Rural Riches project we first recorded bow brooches to study rural wealth and garnet brooches to study long-distance exchanges. We thus concentrated on sixth century brooches. Other sixth century brooches, such as bird brooches and S-brooches can be recorded in the database as it is, but it will be needed to consider their typo-chronological qualifications first. These are unfit to record in a database like this and may not be up to date. Specialists will be consulted how to solve this problem.

To record bow brooches and garnet brooches we started using existing surveys of garnet decorated brooches (Vielitz 2003) and bow brooches (Koch 1998) and later added entries of new finds discovered after these surveys were closed. This however does not mean that the database contains yet all such brooches, although the large majority found in the Rural Riches research area will be present. Records are checked and improved regularly for instance after a comparison of the general surveys with the original site publications except when it is clear that the data in the general surveys was created on the basis of the inspection of the objects themselves.

Merovingian brooches have been the subject of study already since the nineteenth century. Today most main types of brooches (bow brooches, circular garnet decorated brooches, S-brooches, bird brooches, other small brooches, filigree brooches, *Pressblech* brooches, etc.)¹ have been studied individually, often several times, although some studies are by now outdated. Moreover, brooches have an important place in typo-chronological studies because their changing forms are considered helpful in establishing their date and the date of the contexts (mainly graves) in which they were found.² There is of course the uncertainty of the unknown time span between the moment of production and moment of deposition. Some authors suggest that brooches were obtained by individual women at an early age, who kept them their entire life and finally were buried with them after death. It seems to be an unlikely practice.³ Such reasoning leads to the following possibilities. The oldest specimens of a certain type of brooch would then be in the graves of children who obtained such a brooch at a young age soon after the first ones were produced and then died shortly afterwards. Other girls who obtained such a similar brooch at the same time but lived 70 years were buried with them much later.

¹ For example: bow brooches: Kühn 1940, 1974, 1981; Göldner 1987; Koch 1998. Garnet brooches: Vielitz 2003. Pressblech brooches: Klein-Pfeuffer 1993. Filigree brooches: Thieme 1978; Graenert 2007. Equal-armed brooches: Thörle 2001. Bird brooches: Thiry 1939; S-brooches: Brather-Walter 2009. Cruciform brooches: Martin 2015, Martin 2020.

² See for instance Friedrich 2016.

³ Sorg 2022.

Older people would already have one and thus do not receive, in this way of reasoning, such a new type of brooch. When such brooches were produced over a time period of 30 years and women were buried with them like 70 years later the last brooches of that type would then be buried almost one hundred years after the start of the production of the type. However, such reasoning is a matter of debate and now discarded.⁴ A number of overviews have been published introducing the various brooch types, how they were worn and in what combination, where they were placed on the body of the deceased person.⁵ Moreover specialist studies on specific types of brooches and how they were worn and distributed are now available.⁶

We did not develop new typologies of garnet and bow brooches for the database. We used the often very detailed existing typologies of the bow - and garnet brooches because they cover almost the entire Rural Riches research area. The finds discovered after the closure of the surveys used, could as a rule be fitted in the existing typologies.

Most of the existing brooch typologies are geared to typo-chronological research, and are often of an exceptional detailed nature, leading to types of which only a few specimens were found.⁷ Future research will show how relevant this is. Most scholars studying brooches also aimed to a varying degree at studying production, exchange, the development of art styles, the ethnic ascription, etc. They hoped, or à priori assumed, that details of the form and decoration not only had chronological significance but that they also related to specific workshops, social categories or ethnic groups. As can be expected all these topics and the way they are dealt with on the basis of brooch typo-chronologies are subject to debate, not the least because series of presuppositions are at times not tested but taken for granted such as the assignment of specific brooch types to specific ethnic groups mentioned in written sources.⁸ Moreover, an ordering of brooches geared to chronological research might not be ideal to study other aspects of society. See for instance Friedrich with a critical assessment of chronological reasoning and the use of historical events which might lead to circular arguments in the creation of '*histoire événementielle*' models on the basis of material culture.⁹ His work also shows what the consequences are of using a strict chronological research question for the ordering of material culture such as bow brooch types. He has only 20 bow brooch types whereas Koch in the end has 178 types. Friedrich claims that for chronological purposes the decoration is not very relevant, just the form and a number of knobs (three, five or more than five), and in several but not all cases the size of the bow brooches, whereas in many other typo-chronologies size is not considered a relevant element. Decoration is a difficult to use criterion for there seems to be an infinite variability. Even within types various motives were used.¹⁰

⁴ Steuer 1977; Kars 2011, 2012 [2014]; Sorg 2022.

⁵ Martin 1991, 1994; Heeren/Van der Feijst 2017; Heynowski 2016².

⁶ Martin 1994; Strauss 1992; Furtmayer 2004; Martin 2020.

⁷ See the table with garnet brooches below and the table at the end of this appendix with the types of bow brooches created by Koch (1998) and the number of specimens of each type in West-Francia and in his '*Fundlisten*' (including also brooches in the Rhineland and Southern Germany).

⁸ See for instance Koch 1998.

⁹ Friedrich 2016. Apart from that it is reasonable to ask whether the analysis of material culture can lead to an *histoire événementielle* at all. See a critical assessment of his work is by Meier (2020).

¹⁰ See for instance the choices for the eight formal components of the square-headed brooches as defined by Martin (2020, 870, fig. 4) and the possible

However, one wonders what kind of ordering of material is needed if one searches for answers on other types of questions related to production, exchange and identity. Especially this last point might be of great interest in answering questions about the relation between norm (bow brooch) and variability in the production, use and deposition of brooches. This search for identity in relation to norm and variability seems to go far beyond the simple ethnic ascription of many types common in much research on this type of object.¹¹

The dilemma is clear, what to do in our case: generalize (for instance use only 20 types of bow brooches) and not being able to split up the brooches in a later phase of the analyses in the detailed types created by the various authors? Or copy the extremely detailed typologies of the available surveys, with the risk of constantly having to create new types because new discoveries do not fit the detailed types already created or press new varieties into the existing typo-chronology with the consequence that some types become an amalgam of variability which is suggested not to exist because of the detail in the description of the type? Or walk a middle ground whereby we use much of the existing typo-chronologies but skip the ultimate refinements, so that we do not end up with types to which only a few specimens can be assigned to? We chose the last option and not to use the ultimate very detailed typological differences in long 'determination trees' such as those in the typo-chronology of bow brooches (from type I to I.1.1.1.3.3 for instance). This will be explained below for bow brooches and garnet disc brooches.

This choice was also determined by the time expenditure/size of research area dilemma. Our goal is to record data on early medieval material culture over a large area if not Europe as a whole. This has consequences for the level of detail one can grasp within a specific time period (five years) with a limited team. It is not possible to deal with objects on the same level of detail in a small area or of one cemetery or a large research area. However, we think we created a database that allows easy for recording larger detail than we recorded at the moment.

The choice for using the coding systems of Koch and Vielitz is that they can be used in a digital database. Names of brooches such as 'Rosdorf/Trossingen/Munningen/Torgny' (Koch V.2.1.5) can have no place in a database like this one.

Scientific research in its turn will create new groupings of brooches based on the chemical composition of the materials and the production technologies used instead of their form and decoration. Brooches were usually singular handmade objects which often are alike at first sight but differ in detail on closer inspection. Scientific research in combination with traditional typo-chronological research is important in analyzing the 'chaines opératoires', raw material procurement (including recycled material), workshop output and distribution.

combinations.

¹¹ Brather-Walter 2019.

While studying typo-chronologies of brooches we sensed that there was not yet sufficient theoretical reflection on what types and their distribution actually mean. There should be clearer definitions on brooches that are really equal (*'gleich'*, that is from the same mould) or alike (*'ähnlich'* with a similar form and some other attributes). This difference is more developed in for instance numismatics where coins from the same die (obverse and/or reverse), which allow to create genealogy-like trees of related coins, are distinguished from coins that have the same characteristics but are slightly different (types, meaning alike). The same goes for studies of pottery decoration. For example, there are many rosette-like single stamps on sixth century pots, but only a limited number are equal (*gleich*) and were made with the same stamp. When the clays of pots with unequivocal identical stamps are scientifically analyzed it becomes clear how complicated the organization of production can be and how many possible types of organization of production and distribution can be suggested.¹² The analyses of the network of motives by Martin is a good step forward.¹³ We have to consider and find out how we can differentiate the diffusion of motives and ideas from the diffusion of the objects. It is possible that 'aliqueness' can get distributed without brooches moving. More reflection is needed. We hope we can contribute by recording as many brooches as possible.

It what follows it will be explained how garnet brooches and bow brooches were recorded in the database.

¹² Van Wersch et al. 2022.

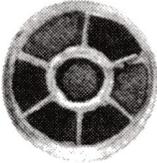
¹³ Martin 2020.

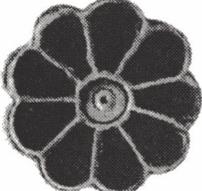
Garnet decorated brooches

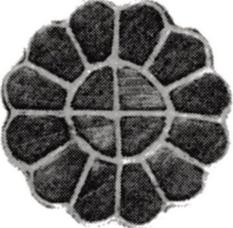
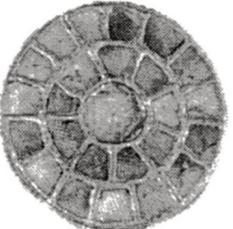
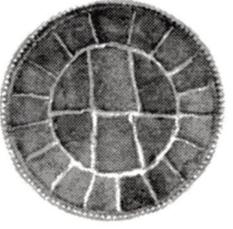
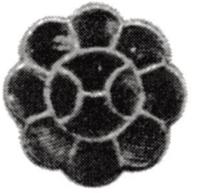
We used the work by Vielitz (2003) to record the garnet decorated brooches. However, we simplified the typological indications in the 'Type' field to some extent in that we only used the main typological distinctions and did not include the many variants of each type, as only a few specimens can be assigned to each variant. This has as a consequence that often brooches have to be assigned to a type although they do not exactly match the images and descriptions given by Vielitz (reproduced below). The description is in those cases more important than the image. Often the description makes no distinction for instance between the lobed edge or a straight round edge.

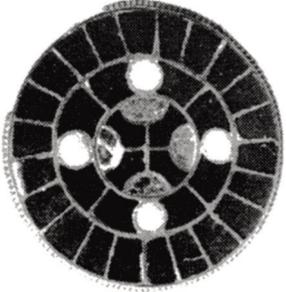
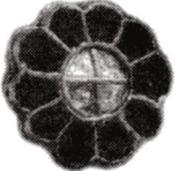
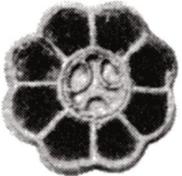
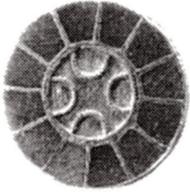
In the table below, we illustrate the type indications used. In the first column an image of a specimen of the type from the publication by Vielitz is presented, in the second its typological indication, in the third the description by Vielitz, in the fourth the phase or phases to which the type is assigned as defined by her, in the fifth the number of specimens collected by her and in the sixth remarks of various kinds. At a later stage we can easily create lists and distribution maps of each type and analyze their mutual distributions using GIS.

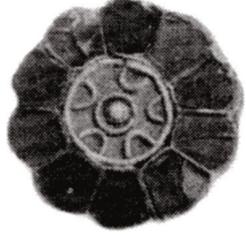
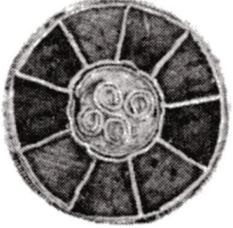
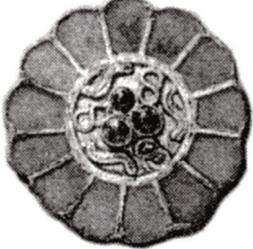
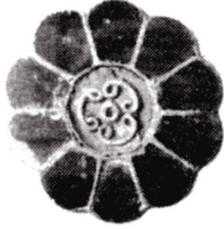
Vielitz, K., 2003: <i>Die Granatscheibenfibeln der Merowingerzeit</i> , Montagnac.					
Phase 1: 480/500-530/540 Phase 2: 530/540-560/570 Phase 3: 560/570-600/610					
Image	Vielitz type	Description	Vielitz phase	Number	Remark
	A1	Einzonige Rundfibeln ohne Zellmuster	1	3	

	A2	Einzonige Rundfibern mit drei- oder vierfach radialen Zellmustern	1-2 (3)	57	
	A3	Einzonige Rundfibern mit fünf-, sechs- oder siebenfach-radialen Zellmustern	1-2 (3)	88	
	A4	Einzonige Rundfibern mit achtfach-radialen Zellmustern	1-2 (3)	65	
	A5	Einzonige Rundfibern mit neun- oder mehrfach-radialen Zellmustern	1-2 (3)	33	
	A6	Einzonige Rundfibern mit kästchen-zellmustern	1-3	7	
	A7	Einzonige Rundfibern mit Bogen-zellmustern aus zwei oder drei Segmenten	1	9	

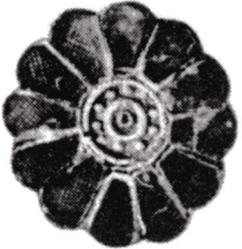
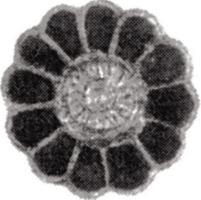
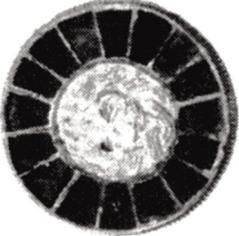
	A8	Einzelzellige Rundfibeln mit Bogen-Zellmustern aus vier Segmenten	2-3	9	
	B1	Einzelzellige Rosettenfibeln mit fünf-, sechs- oder siebenfach-radialen Zellenmustern	1-2	20	small brooches: phases 1-2
	B2	Einzelzellige Rosettenfibeln mit achtfach-radialen Zellenmustern	1-2	42	small brooches < 2.5: phases 1-2 large brooches > 2.5: phases 2-3
	B3	Einzelzellige Rosettenfibeln mit neun- oder mehrfach-radialen Zellenmustern	2-(3)	22	small brooches < 2.5: phases 1-2 large brooches > 2.5: phases 2-3
	C1	Zweizonige Fibeln mit zwei- oder dreifach-radialen Zellmustern	1	15	

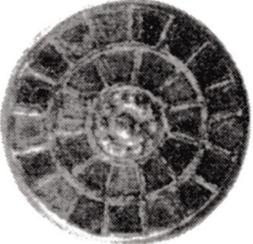
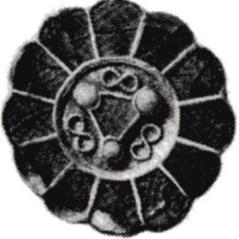
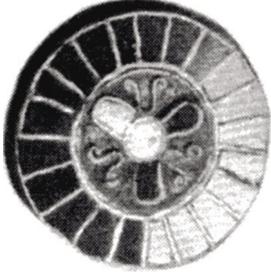
	C ₂	Zweizonige Fibeln mit vierfach-radialen Zellmustern	1-2	50	small brooches < 2.5: phases 1-2 large brooches > 2.5: phase 2-(3)
	C ₃	Zweizonige Fibeln mit sechs- oder mehrfach-radialen Zellmustern	2-(3)	31	
	C ₄	Zweizonige Fibeln mit Kästchen-Zellmustern	3	9	
	C ₅	Zweizonige Fibeln mit Bogen-Zellmustern	1-3	38	

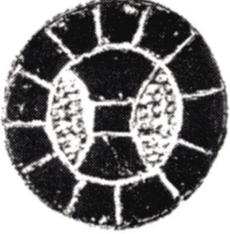
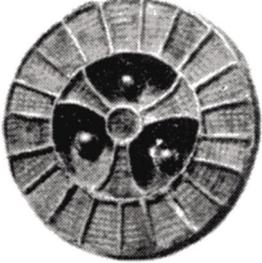
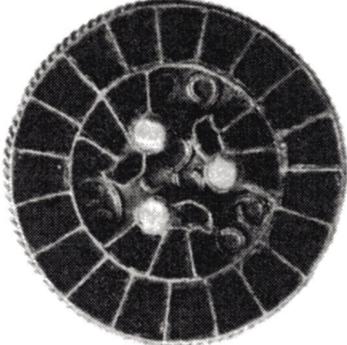
	C6	Drei- und mehrzonige Fibeln mit granatbelegter Innenzone	(2-)3	31	Large brooches phase 3
	D1	Zweizonige Fibeln mit radial-linearen Filigranmustern	1-(2?)	6	Only one specimen could be dated.
	D2	Zweizonige Fibeln mit Filigran-bogenmustern aus zwei oder drei Halbkreisen	(1)-2	47	
	D3	Zweizonige Fibeln mit Filigran-bogenmustern aus vier Halb- oder Vollkreisen	(1)-2	50	

	D4	Zweizonige Fibeln mit Filigran-bogenmustern aus fünf oder mehr Halbkreisen	2-3	12	brooches 2.2 - 3.0: phases 2 brooches > 3.1: phase 3
	D5	Zweizonige Fibeln mit Filigranmustern aus ein oder zwei S-/8-förmigen Elementen	(1)-2 (3)	26	
	D6	Zweizonige Fibeln mit Filigranmustern aus drei oder mehr S-/8-förmigen Elementen	(1)2-3	23	Mainly phase 3
	D7	Zweizonige Fibeln mit Filigranmustern aus volutenförmigen Elementen	2	10	Possibly also in phase 3, no examples yet

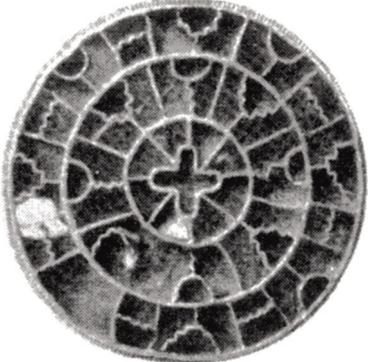
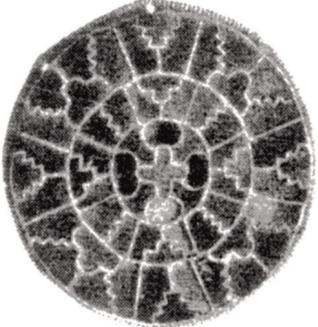
	D8	Zweizonige Fibeln mit Filigranmustern aus lyraförmigen Elementen	2 (3)	14	
	D9	Zweizonige Fibeln mit Filigran-Flechtknoten	3	4	
	D10	Dreizonige fibeln mit filigranverzierter Innenzone	(2) 3	12	
	E1	Zweizonige Fibeln mit Pressblechmustern aus Kügelchen und Linien in radialer Anordnung	(1) 2-3	12	

	E2	Zweizonige Fibeln mit Pressblechmustern aus Kügelchen und Linien in konzentrischer Anordnung	(1)2-3	18	
	E3	Zweizonige Fibeln mit Pressblech-Strahlenkranzmustern	3	8	Few examples to substantiate the dating.
	E4	Zweizonige Fibeln mit Pressblech-Bogenmustern	3	10	Few examples to substantiate the dating.
	E5	Zweizonige Fibeln mit Pressblech-Flechtmustern	2-3	14	

	E6	Driezonige Fibeln mit pressblechverzierter Innenzone	3	3	
	F1	Fibeln mit Filigran- oder Pressblech-Innenzone und Granat-Zentrum	3	12	
	F2	Fibeln mit Filigran- oder Pressblech-Innenzone und einzelnen Granaten	3	6	Few examples to substantiate the dating.
	F3	Fibeln mit Filigran- oder Pressblech-Innenzone und Granat-segmenten	3	13	

	F4	Fibeln mit Filigran- oder Pressblech-Innenzone und Granat-Mittelachse	3	5	Few examples to substantiate the dating.
	F5	Fibeln mit Filigran- oder Pressblech-Innenzone und (einzelligen) Granat-Sektoren	(1)2-3	36	
	F6	Fibeln mit Filigran- oder Pressblech-Innenzone und Granat-Vogelköpfen	3	3	Few examples to substantiate the dating.

	F7	Fibeln mit Filigran- oder Pressblechdekor und Granatsektoren in der Zwischenzone	3	29	
	G1	Vierpasfibeln mit ungeteilten, abgeschrägt-halbkreisförmigen Aussenzellen	1	2	Few examples to substantiate the dating.
	G2	Vierpasfibeln mit ungeteilten oder radial-geteilten Halbkreis- Aussenzellen	1-2	14	
	G3	Vierpasfibeln mit ungeteilten oder radial-geteilten Halbkreis- Aussenzellen und mit filigran- oder pressblechverzierter Innenzone	1-2	5	

	G4	Vierpasfibeln mit doppelt halbkreisförmigen Aussenzellen	1	9	Few examples to substantiate the dating.
	H	Fibeln mit engzelligen Mustern	3	34	
	H	Fibeln mit engzelligen Mustern	3	34	

	H	Fibeln mit engzelligen Mustern	3	34	
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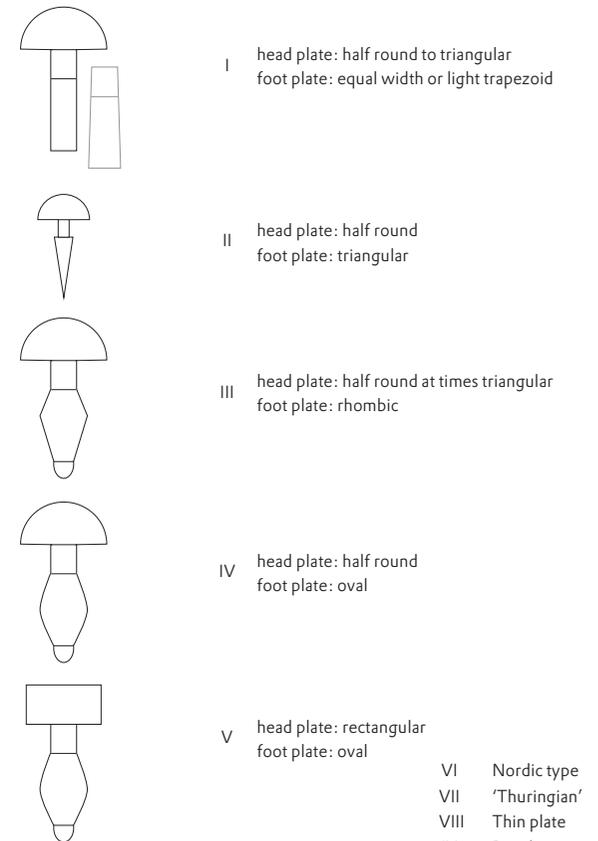
If the brooch does not match one of the above types, type: 'Other' in the 'Type' field

Bow brooches

For the bow brooches we followed the typology by Koch (1998). In this case too we did not use the fine-grained determinations at the bottom ends of the determination trees. Koch distinguishes bow brooches on the basis of three main criteria in decreasing order of importance. The first criterium is the form of the head and foot plate.¹⁴ They may be round/triangular or square for the head plate and of equal width/light trapezium-shaped, rhomboid or oval for the foot plate. The second criterium is the number of knobs on the head plate and whether they were placed independent of each other or connected to one another. The third criterium are the different forms of decoration and decorative motives used. There is however a large variability in decorations leading to a substantial number of sub-types (third to fifth grade sub-types). Moreover, there are hardly any equal (*gleich*) bow brooches except those found in pairs in graves. New discoveries would thus constantly lead to the definition of new types which is unworkable in the end. Some generalization is thus necessary when one wants to record bow brooches over large areas. When necessary detailed studies have to be carried out on the basis of a detailed study of limited sets of bow brooches (keeping in mind that better theoretical points of departure are formulated).

At the end of this appendix a table with all types distinguished by Koch and the number of specimens he catalogued and the number of specimens in his *Fundlisten* that go with his maps as well as the date of each type is provided. In this table and the list below the types designations we used to record the bow brooches in our database are marked in blue. It shows that we often did not use the fourth and fifth grade sub-types because the number of specimens in for instance the fifth sub-type is usually very small although there are exceptions. Most sub-types of the third to fifth order are found with brooches with five knobs, the most common type.

Main types as defined by Koch 1998



¹⁴ The term head plate and foot plate are used here in spite of the by now generally accepted opinion, based on the position of the brooches in graves, that the brooches were worn in such a way that the head plate was at the lower end and the foot plate at the top end.

Bow brooch types marked in **blue**, are used in the Rural Riches database (based on Koch 1998).

* = there is a further subdivision of this group which is not used in this database (see the table at the end of this appendix).

I Bow brooches with half round to triangular head plate and foot plate of equal width or light trapezoid form

I.1 Bow brooches of form group Gross-Umstad and Nieder-Florstadt/Wiesloch

I.1.1 Bow brooches of form group Gross-Umstad

I.1.2 Bow brooches of form group Nieder-Florstadt/Wiesloch

I.2 Bow brooches with three knobs

I.2.1 Bow brooches with animal style foot of equal width

I.2.2 Bow brooches with swallow tail foot (form group Jena-Lobeda)

I.2.3 Bow brooches with foot of equal width or light trapezoid form*

I.3 Bow brooches with five knobs

I.3.1 Bow brooches with animal form foot of equal width

I.3.1.1 Brooches of type Krefeld-Gellep

I.3.1.2 Brooches of type Heilbronn-Böckingen and related variants

I.3.1.3 Brooches of type Eisleben/Stössen

I.3.1.4 Brooches of form group Fruges/Coizard-Joches

I.3.1.5 Brooches of form group Schwarzhreindorf/Maastricht/Müngersdorf

I.3.2 Bow brooches with swallow tail foot (form group Bulles/Krefeld-Gellep)

I.3.3 Bow brooches with foot of equal width or light trapezoid form*

I.3.3.1 Brooches with spiral or hook decorated head plate, concentric circles, interlace or their rudimentary representation or degenerated animal style*

I.3.3.2 Brooches with head plate decorated with stripes*

I.3.3.2.1 Brooches with radiating stripes in an arcade arrangement on the head plate*

I.3.3.2.2 Brooches with radiating stripes in an arcade arrangement above an undecorated half circle on the head plate

I.3.3.2.3 Brooches with stripes in a boxlike configuration on the head plate*

I.3.3.2.4 Brooches with parallel vertical stripes on the head plate*

I.3.3.2.5 Brooches of type Bingen/Engers

I.3.3.2.6 Brooches with opposing hooks on the head plate

I.3.3.2.7 Brooches with stripes in V form on the head plate

I.3.3.2.8 Brooches with stripes on the head plate and bird shaped knobs (type Laon)*

I.3.3.3 Brooches with geometric 'Kerbschnitt' decoration on the head plate*

I.3.3.4 Brooches with grille decoration on the head plate*

I.3.3.5 Brooches with two zone decoration on the head plate*

I.3.3.6 Various brooches*

I.4 Bow brooches with six knobs *

I.5 Bow brooches with seven knobs

I.5.1 with animal style foot of equal width *

I.5.2 with foot of equal width or light trapezoid form*

I.6 Bow brooches with nine knobs *

II Bow brooches with half round head plate and triangular foot plate*

III Bow brooches with half round at times triangular head plate and rhombic foot plate

III.1 with three knobs

III.1.1 Form group Bifrons/Preures*

III.1.2 Form group Gondorf *

III.1.3 Eastern Germanic and eastern Germanic influenced bow brooches *

III.1.4 with triangular head plate *

III.2 with four knobs *

III.3 with five knobs

III.3.1 type Douai

III.3.2 type Junkersdorf

III.3.3 type Hahnheim *

III.3.4 type Champlieu *

III.3.5 type Bréban

III.3.6 Eastern Germanic and eastern Germanic influenced bow brooches *

III.4 with six knobs *

III.5 with seven knobs

III.5.1 brooches of type Grottammare

III.5.2 brooches of type Mistrín

III.5.3 brooches with hypertrophic end of the footplate

III.5.4 brooches with stripe decoration over entire head plate and birds heads knobs

III.5.5 brooches of Baltic-Masuric type

III.6 with nine knobs *

IV Bow brooches with half round head plate and oval foot plate

IV.1 with separate knobs

IV.1.1 brooches of type Burghagel

IV.1.2 brooches of group Cividale/Holubice/Breny

IV.1.3 brooches of the group Schwaz/Szentendre/Lucca/Belfort

IV.1.4 brooches with 11 knobs and geometric 'Kerbschnitt' decoration

IV.2 with coalesced knobs

IV.2.1 brooches with 10 knobs and interlace decoration on the headplate

IV.2.2 brooches with 14 knobs and stripes on the head and foot plate

V Bow brooches with rectangular head plate and oval foot plate

V.1 with no knobs at the head plate *

V.2 with knobs at the head plate

V.2.1 with coalesced knobs

V.2.1.1 brooches of type Worms

V.2.1.2 brooches of type Nordendorf/Maastricht

V.2.1.3 brooches of type Herbrechtingen

V.2.1.4 brooches of type Schwarzhendorf

V.2.1.5 brooches of the series Rosdorf/Trossingen/Munningen/Trogny

V.2.1.6 brooches of type Peigen/Kápolnásnyék

V.2.1.7 Singular forms

V.2.2 with separate knobs

V.2.2.1 brooches of the form group Anguilcourt-le-Sart/Monceaux

V.2.2.2 brooches of type Achenheim/Sauville

V.2.2.3 brooches of from group Rhenen/Lavoye

V.2.2.4 brooches of type Andernach/Kent

V.2.2.5 brooches of type Montale/Weimar

V.2.2.6 brooches with angular 'Kerbschnitttdekor'

V.2.2.7 singular forms

VI Bow brooches of Nordic type

- VI.1 Jutland-Anglo-Saxon bow brooches
- VI.2 type Langweid
- VI.3 type Cividale
- VI.4 type Caulaincourt
- VI.5 type with half round foot end (local type)
- VI.6 form group Sainte-Sabine/Horkheim
- VI.7 various bow brooches (continental imitations)
- VI.8 type Andernach/Nordendorf
- VI.9 Kentish little square headed brooches and imitations *
- VI.10 various bow brooches

VII 'Thuringian' bow brooches

- VII.1 brooches with three round inlays, miniature brooches of form Weimar/Arcy-Sainte- Restitue and with pincer shaped head plate *
 - VII.1.1 miniature brooches of form Weimar/Arcy
 - VII.1.2 miniature brooches with pincer shaped lobed head plate
 - VII.1.3 brooch with three roundels and half round head plate without knobs
- VII.2 bird head brooches *
- VII.3 pincer brooches
 - VII.3.1 brooches with trapezoid foot plate
 - VII.3.2 brooches with oval foot plate
- VII.4 type Rositz

VIII Thin plate bow brooches, their developed forms and imitations

- VIII.1 trapezoid or diamond-shaped foot plate (greatest width below the middle)
- VIII.2 polychrome cabochon decorated *

VIII.3 type Smolin and developments

VIII.3A type Smolin

VIII.3B derivatives of type Smolin

VIII.4 'kerbschnitt' addition of type Saint-Martin-de-Fontenay and developments

VIII.5 with garnets on head- and foot plate

IX Domburg brooches

X Various bow brooches*

Dating the bow brooches

Koch went at great length to date the individual types of bow brooches, although he also warns for accepting the suggested dates with great certainty because often not enough well-dated contexts are available which is partly due to the limited number of specimens for a type. For the time being we accept his dates and take new suggestions for dating bow brooches on board.¹⁵ Although it is necessary to consult his texts, we *rearranged* his chronological schemes in that we did not organize them according to type but to date. In the image presented below this scheme is presented. The various colored boxes represent groups of brooches that form more or less coherent chronological groups. They are thus series of more or less contemporary brooches. It can be seen that there is a gradual chronological development. Above the frames of the colored boxes the types are mentioned that were not represented with an image. Below the frames are the type indications of the illustrated brooches as well as the number of specimens in his study area and the numbers in his *Fundlisten*. In this way it can be immediately seen which types have been found often and which ones are rare. Next the typo-chronological schemes provided by Koch are presented.

¹⁵ Friedrich 2016.

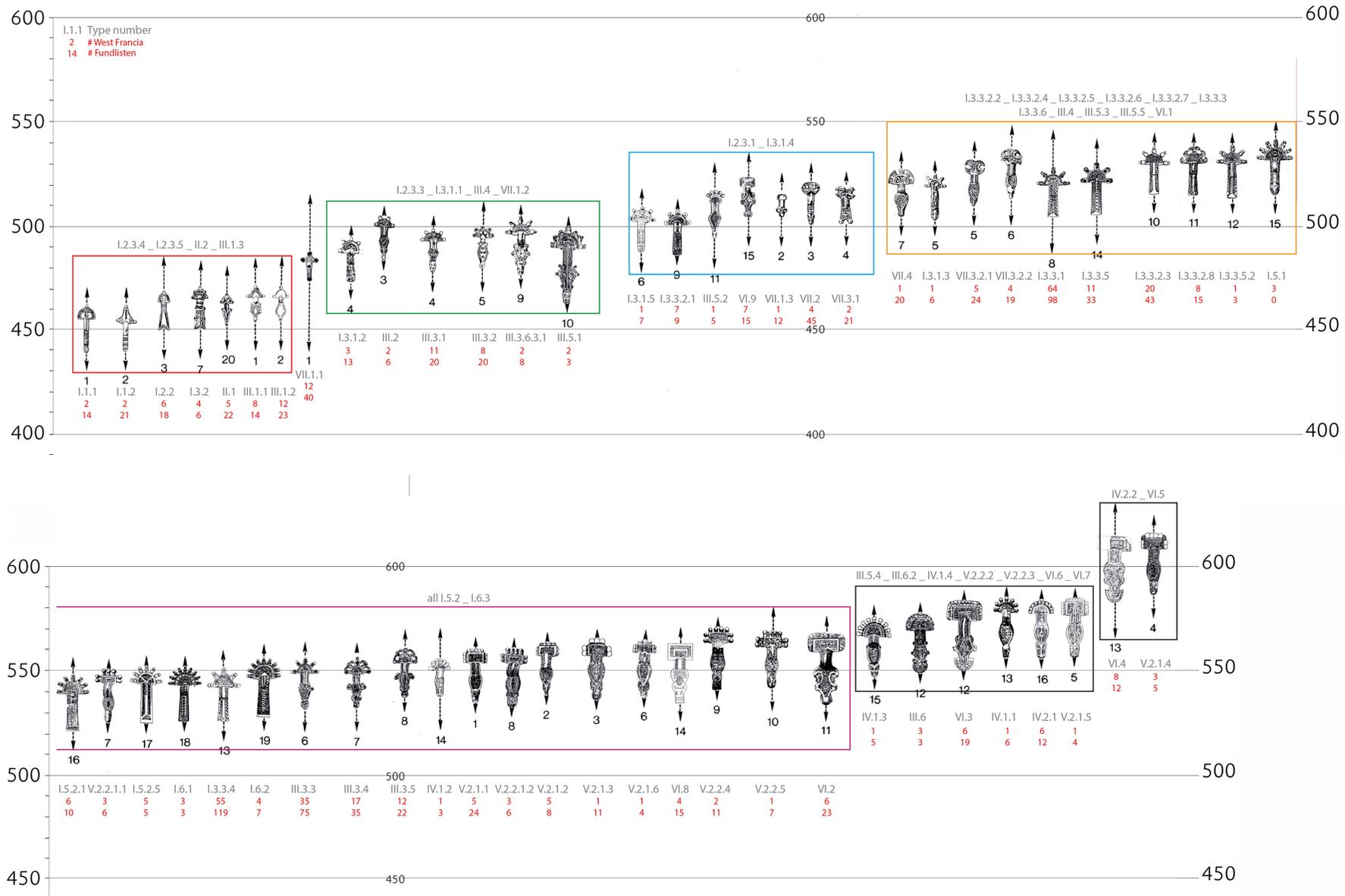
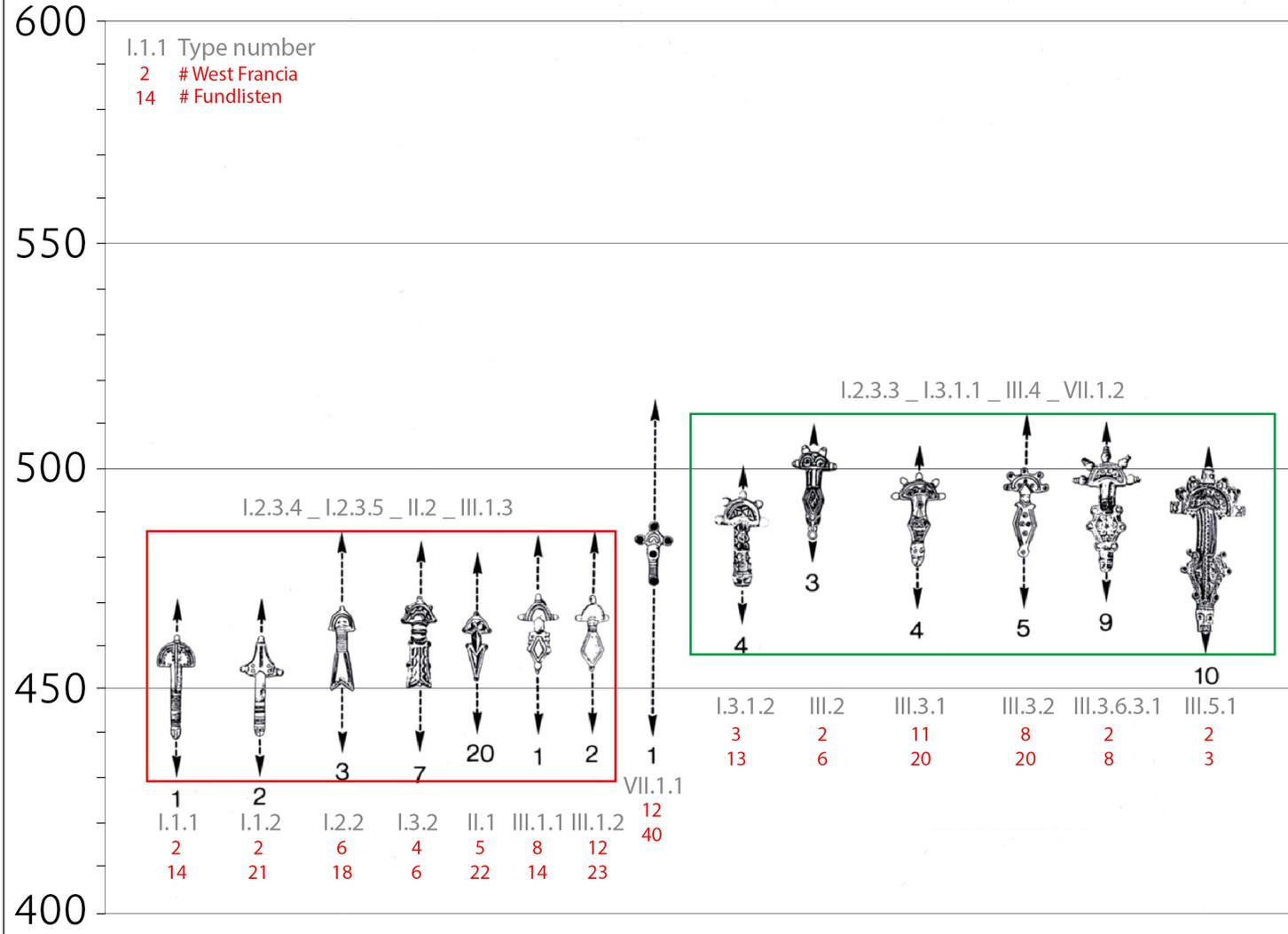
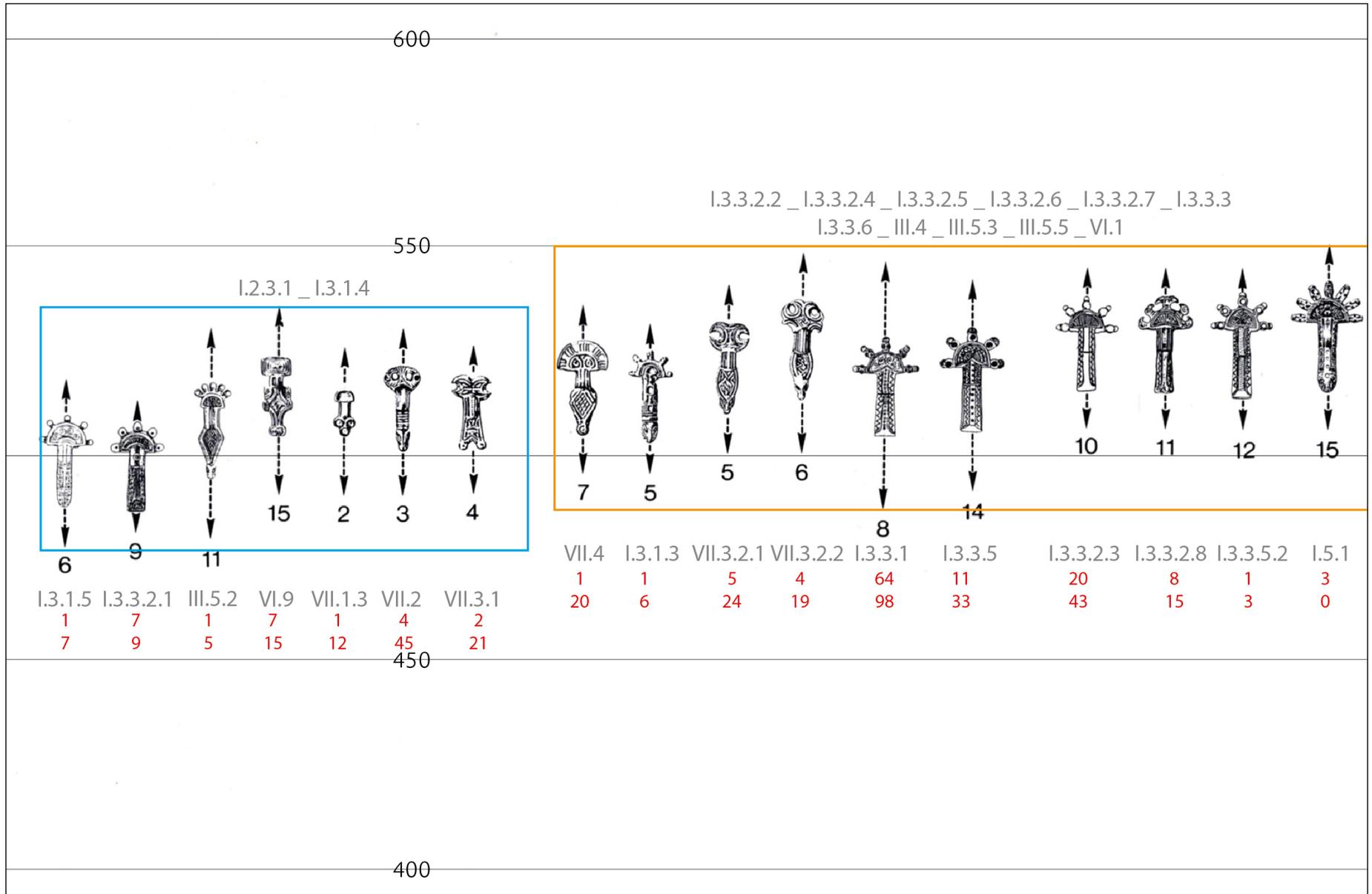
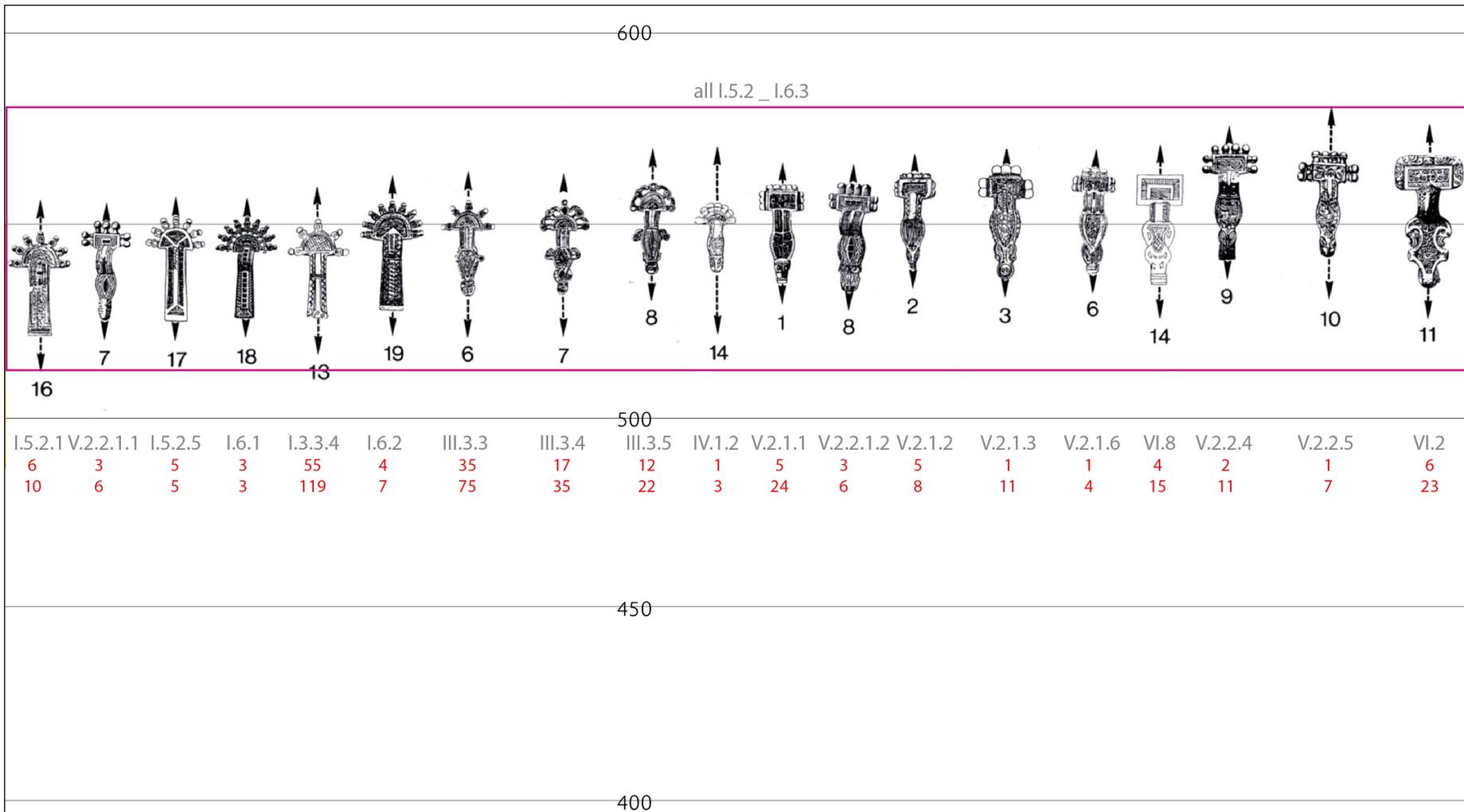


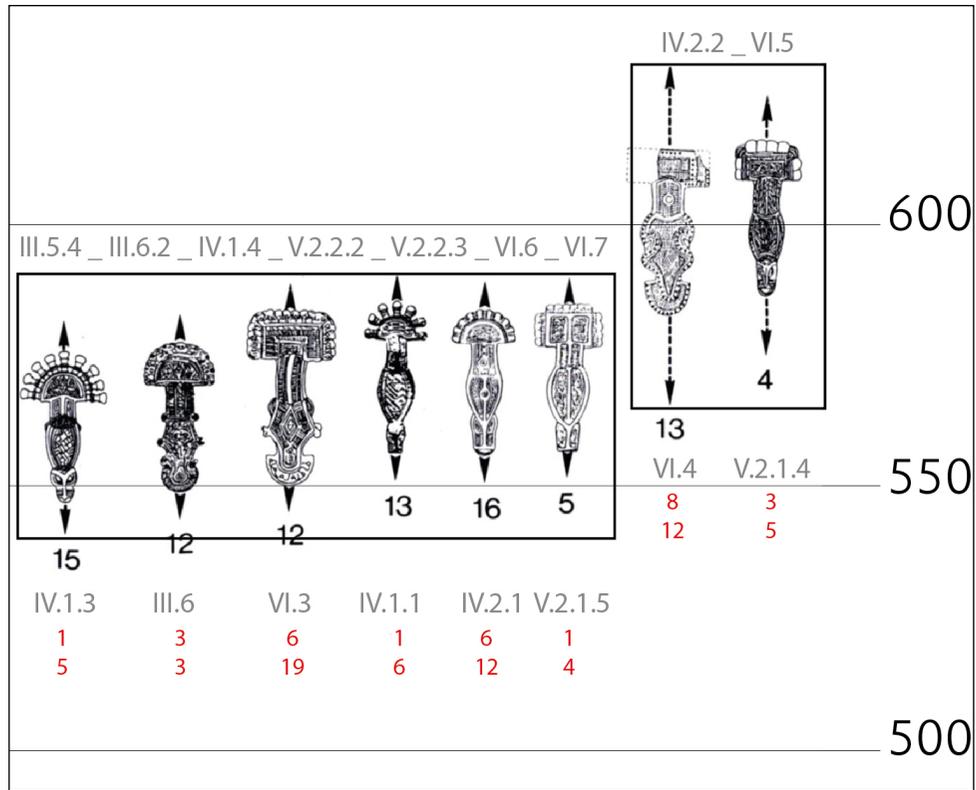
Image created by the Rural Riches project on the basis of Koch 1998. Enlargements of the scheme are on the pages below.

Bow brooches Typology and dates: Koch 1998

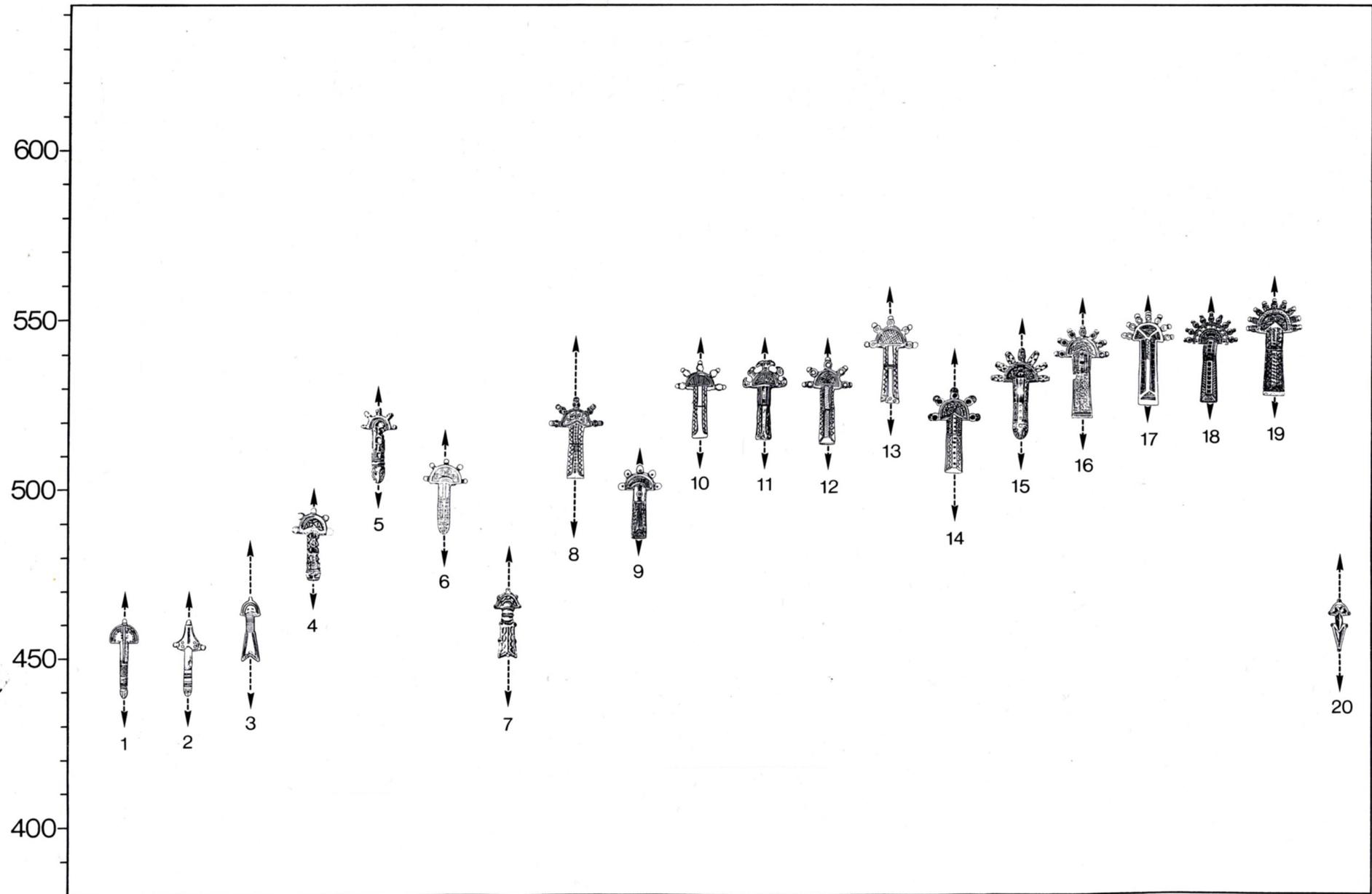




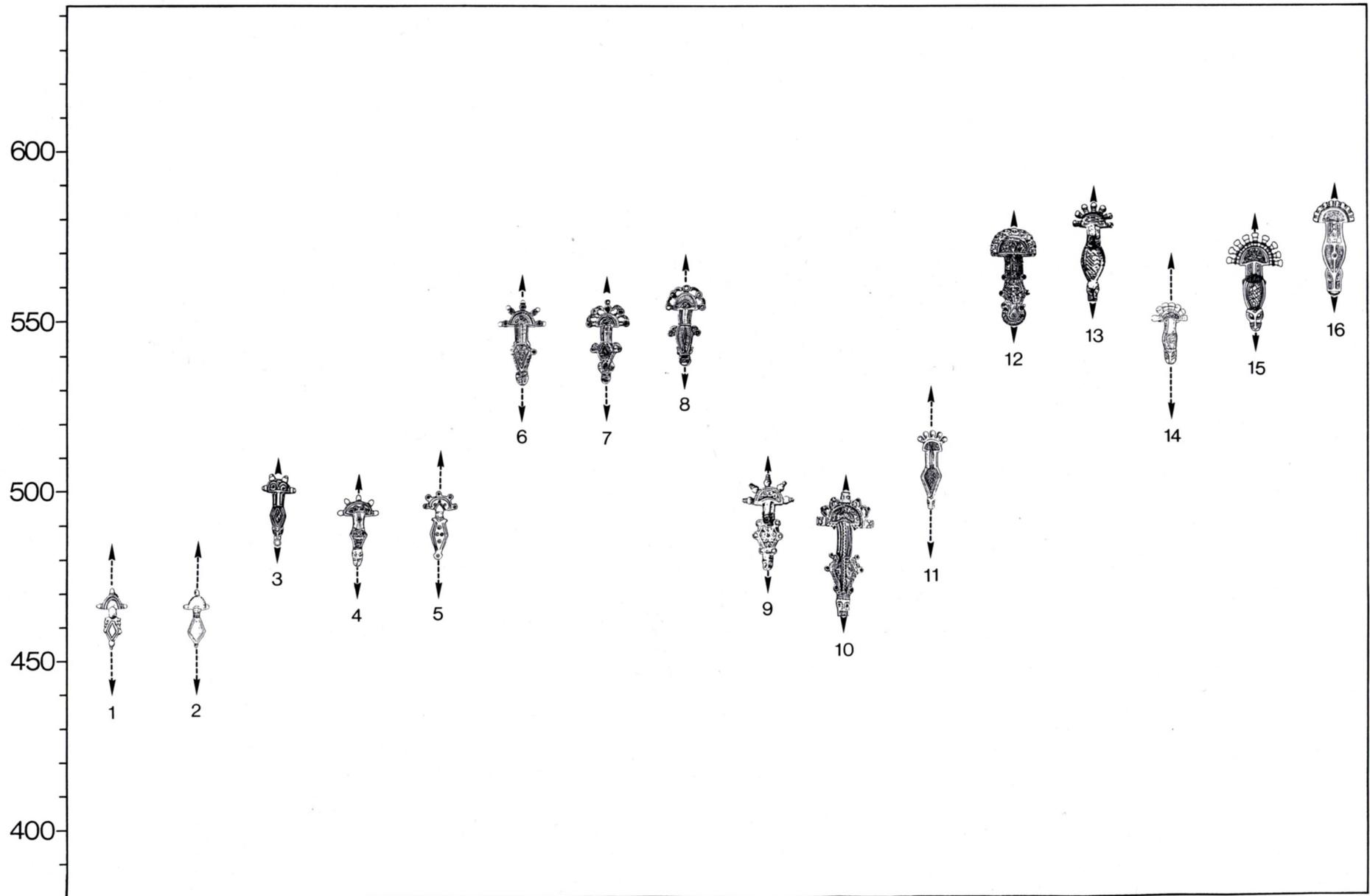




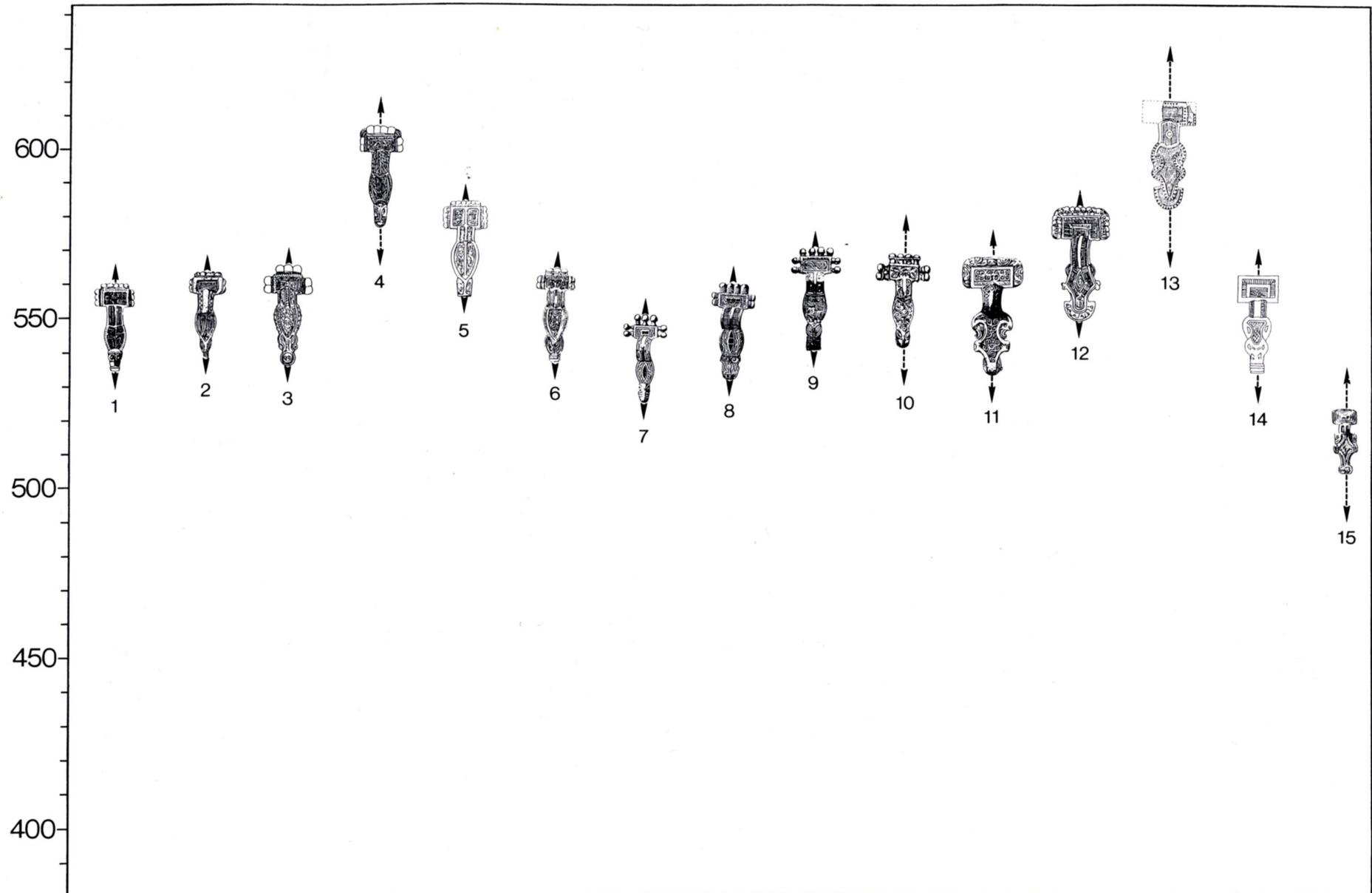
Koch 1998, Typentafel 1, Brooches of type I and II



Koch 1998, Typentafel 2, Brooches of type III and IV



Koch 1998, Typentafel 3, Brooches of type V and VI



Koch 1998, Typentafel 4, Brooches of type VII, VIII, IX

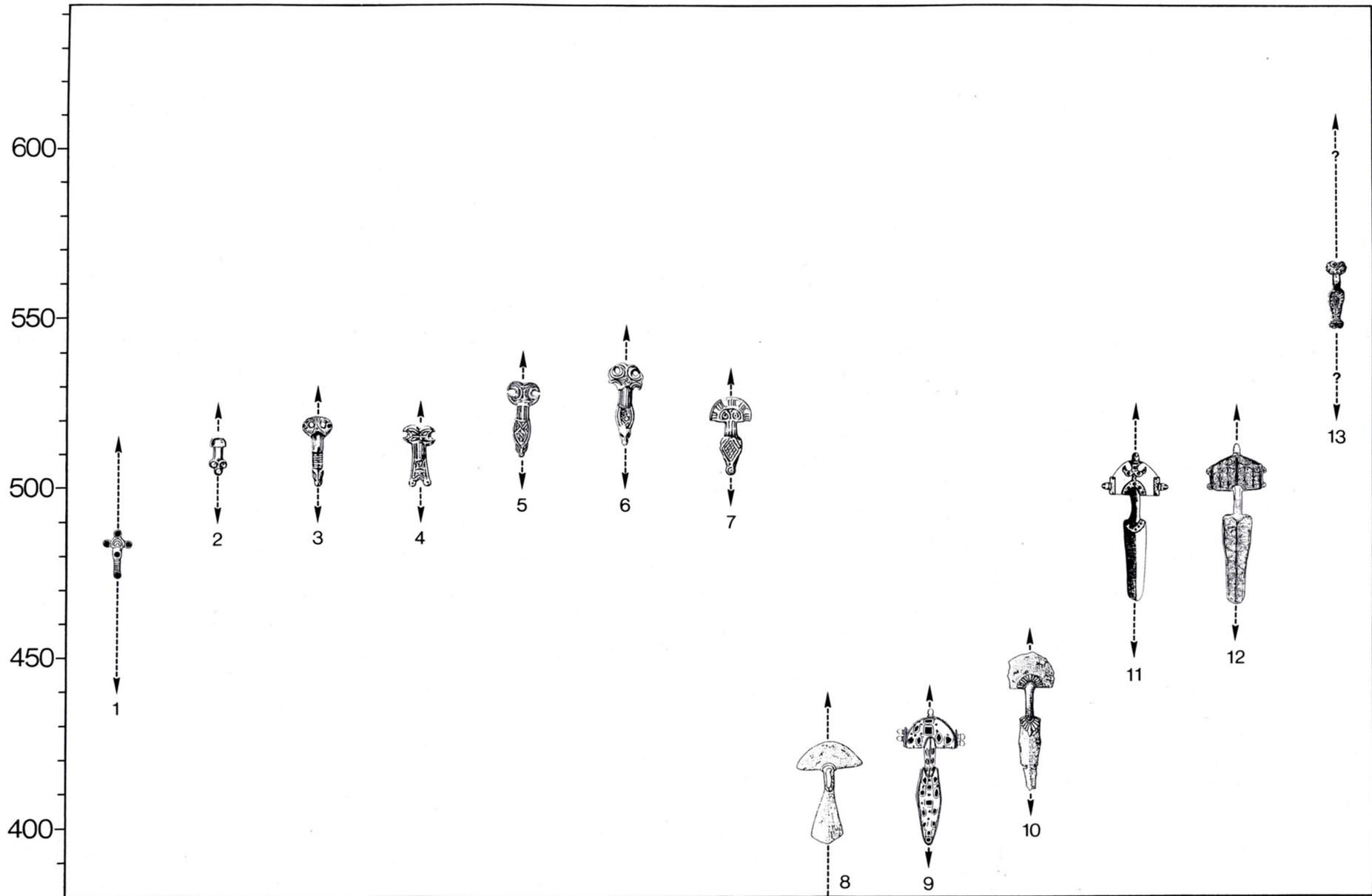


Table with **all** types by Koch

Blue: type indications used in the database.

Yellow: counts in these fields not given, taken together in a count of a higher order sub-type.

Pink: more than 10 specimens in the count.

Green: more than 20 specimens in the count.

Light brown: dates not in the *Typentafel* but from the text

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
I									
	I.1								
		I.1.1				2	14	430-470	
		I.1.2				2	21	430-470	
	I.2								
		I.2.1				4		450-500	
		I.2.2				6	18	430/40-480/90	
		I.2.3						440-550	General date based on individual dates
			I.2.3.1			3	3	490-530/40	
			I.2.3.2			3	3	460-550	
			I.2.3.3			2	2	450-500	
			I.2.3.4			2	2	440-470/80	
			I.2.3.5			2	2	440-460	
			I.2.3.6			2			Singular specimens, no date
	I.3								
		I.3.1							
			I.3.1.1			1		460/70-500	

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
			l.3.1.2			3	13	460/70-500	
			l.3.1.3			1	6	490/00-530	
			l.3.1.4			2		490-520	
			l.3.1.5			1	7	470/80-510/20	
		l.3.2				4	6	480/90-480	
		l.3.3							
			l.3.3.1					480/90-540/50	
				l.3.3.1.1					
					l.3.3.1.1.1	8	8	490-530/40	
					l.3.3.1.1.2	4	4		
				l.3.3.1.2					
					l.3.3.1.2.1	6	9		
					l.3.3.1.2.2	4	6		
				l.3.3.1.3					
					l.3.3.1.3.1	7	11		
					l.3.3.1.3.2	9	34		
					l.3.3.1.3.3	1	1		
				l.3.3.1.4		9	13		
				l.3.3.1.5			12		
					l.3.3.1.5.1	4			
					l.3.3.1.5.2	2			
				l.3.3.1.6		3			
				l.3.3.1.7		1			
				l.3.3.1.8					
					l.3.3.1.8.1	2			
					l.3.3.1.8.2	1			

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
					l.3.3.1.8.3	1			
					l.3.3.1.8.4	1			
					l.3.3.1.8.5	1			
			l.3.3.2						
				l.3.3.2.1				480-510	general date on the basis of individual types
					l.3.3.2.1.1	7	9	480-510	
					l.3.3.2.1.2	2		480-510?	
				l.3.3.2.2		6	10	500-550	
				l.3.3.2.3				500/10-540/50	
					l.3.3.2.3.1	13	37		
					l.3.3.2.3.2	4	6		
					l.3.3.2.3.3	2			
					l.3.3.2.3.4	1			
				l.3.3.2.4				500-550	general date on the basis of individual types
					l.3.3.2.4.1	12	16	500-530 (550)	
					l.3.3.2.4.2	9	20	500-550	
					l.3.3.2.4.3	3		no date	a container group of 3 different brooches
				l.3.3.2.5		4	12	500-550	
				l.3.3.2.6		4	5	500-550	
				l.3.3.2.7		3		500-550	
				l.3.3.2.8			15	500/10-540/50	
					l.3.3.2.8.1	4			
					l.3.3.2.8.2	2			

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
					l.3.3.2.8.3	1			
					l.3.3.2.8.4	1			
			l.3.3.3					490/500-550/60	general date on the basis of individual types
				l.3.3.3.1					
					l.3.3.3.1.1	7		500-550/60	
					l.3.3.3.1.2	2		500-550/60	
				l.3.3.3.2		7		500-550/60	
				l.3.3.3.3		5	8	500-550	
				l.3.3.3.4		2		500-550	
				l.3.3.3.5					
					l.3.3.3.5.1	4	12	500-530 (550)	
					l.3.3.3.5.2	9	25	500-550	
				l.3.3.3.6		4		500-550	
				l.3.3.3.7		2		490/500-550	
			l.3.3.4					510/20-560	
				l.3.3.4.1		30	55		
				l.3.3.4.2		25	64		
			l.3.3.5					490-540	
				l.3.3.5.1			28		
					l.3.3.5.1.1	5			
					l.3.3.5.1.2	2			
				l.3.3.5.2		1	3	500/10-540/50	
				l.3.3.5.3		2	2		
				l.3.3.5.4		1			

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
			l.3.3.6					490-550/60	general date on the basis of individual types
				l.3.3.6.1		1		(500) 525-550/60	
				l.3.3.6.2		2		490-520/30?	
				l.3.3.6.3		3		490/500-550/60	
	l.4								problematic dates, maybe not in database
		l.4.1				1	7	500-600	
		l.4.2				1		490/500-520/30	
	l.5								
		l.5.1						500/10-550	
			l.5.1.1			2			
			l.5.1.2			1			
		l.5.2						500/10-550/60	general date on the basis of individual types
			l.5.2.1			6	10	510-550/60	
			l.5.2.2			4	4	500-550/60	
			l.5.2.3			1	1	500-550	
			l.5.2.4			5	6	510-550/60	
			l.5.2.5					520-550/60	
				l.5.2.5.1		2	2		
				l.5.2.5.2		3	3		
			l.5.2.6			1	15	500-550/60	
			l.5.2.7			2		500-550	
	l.6							510/20-550/60	general date on the basis of individual types

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
		I.6.1				3	3	520-550/60	
		I.6.2					7	520-560	
			I.6.2.1			2		510/20--550/60	
			I.6.2.2			2		510/20--550/60	
		I.6.3				2	2	500-550/60	container group of singular brooches
II								440-500	general date on the basis of individual types
	II.1					5	22	440-480	
	II.2					1	12	440-500	
III									
	III.1								
		III.1.1						440-480/90	
			III.1.1.1			6	12		
			III.1.1.2			2	2		
		III.1.2					23	440-480/90	
			III.1.2.1			3			
			III.1.2.2			5			
			III.1.2.3			2			
			III.1.2.4			2			
		III.1.3						440-500/20	general date on the basis of individual types
			III.1.3.1			1		435/45-480/90	
			III.1.3.2			2		450/60-500	
			III.1.3.3			1		480-520	

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
		III.1.4						430/40-520	general date on the basis of individual types
			III.1.4.1			1		560/70-520	
			III.1.4.2			1		440/50-500	
			III.1.4.3			1		430/40-560/70	
	III.2							480-510	general date on the basis of individual types
		III.2.1				2	6	480-510	
	III.3								
		III.3.1				11	20	470-510	
		III.3.2				8	20	470-510	
		III.3.3						520-560/70	
			III.3.3.1			5	33		
			III.3.3.2			29	39		
			III.3.3.3			1	3		
		III.3.4					35	520-560/70	
			III.3.4.1			12			
			III.3.4.2			4			
			III.3.4.3			1			
		III.3.5				12	22	530-570	
		III.3.6						470-510	
			III.3.6.1						
				III.3.6.1.1		7			
				III.3.6.1.2		2			
			III.3.6.2			4			
			III.3.6.3						

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
				III.3.6.3.1		2	8		
				III.3.6.3.2		3	6		
				III.3.6.3.3		1	2		
				III.3.6.3.4		2	3		
			III.3.6.4			4			
			III.3.6.5			2			
	III.4							500-550	
		III.4.1				2			
	III.5								
		III.5.1				2	3	460-500/10	
		III.5.2				1	5	470-530	
		III.5.3				1		490/500-550	
		III.5.4				1		540/50-580	
		III.5.5				1		500-550	
	III.6							540-580	general date on the basis of individual types
		III.6.1				2	3	540-580	
		III.6.2				1		500-560/70	dating very problematic
IV									
	IV.1								
		IV.1.1				1	6	550-590	
		IV.1.2				1	3	520-570	
		IV.1.3				1	5	540-580	
		IV.1.4				1		540/50-600	
	IV.2								
		IV.2.1						550-590	

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
	VI.1					3		500-550	
	VI.2					6	23	520/30-570/80	
	VI.3					5	19	540/50-590	
	VI.4					8	12	510/20-630	
	VI.5					1		550-610/20	
	VI.6					1	2	540-575	
	VI.7					11		550-570	
	VI.8					4	15	520/30-570	
	VI.9							490-530/40	
		VI.9.1				5	13		
		VI.9.2				2	2		
	VI.10					3		various dates	container group
VII									
	VII.1								
		VII.1.1				12	40	440-510/20	
		VII.1.2				1	8	470-500	
		VII.1.3				1	12	490-520/30	
	VII.2							490-530	
		VII.2.1				3	17		
		VII.2.2				2	28		
	VII.3								
		VII.3.1				2	21	490-520/30	
		VII.3.2						500-550	general date on the basis of individual types
			VII.3.2.1			5	24	500-540	
			VII.3.2.2			4	19	500-550	

Main type	first sub-type	second sub-type	third sub-type	fourth sub-type	fifth sub-type	West Francia	Fundliste	Date	Remarks
	VII.4					1	20	490/500-530/40	
VIII									
	VIII.1					10		380-440	
	VIII.2								
		VIII.2.1				1		390-440	
		VIII.2.2				1			
	VIII.3					16	18		
		VIII.3A						400/10-460	
		VIII.3B						450-520/30	
	VIII.4					5	9	450/60-520/30	
	VIII.5					1		difficult to date	
IX						11	22	?	Domburg brooches
X									container group
	X.1					1			
	X.2					1			

How to record brooches in the database?

To fill the Rural Riches database with brooches the following steps have to be taken:

* First: the site

One has to find **the site** in the database on which the brooch was discovered. If no site can be found that matches the site on which the brooch is found you first have to create a site-record. If you only want to record a brooch it is not necessary to fill in the entire tab with site data, this can be done later. The coordinates and administrative data need to be recorded, as well as the type of site and the literature.

* After you found a site or created one, go to the tab Contexts and Material culture in the tabs line of the site.

* Then: Context

The context in which a brooch or an ensemble of brooches was found, may already have been recorded. In that case you find the context (grave) in the list of contexts.

If you do not see the context (grave) in which your brooch was found you have to create the context: 'add a new context'. Then fill in as much fields as you can. Fill in from the reference list the type of the context (Bottom field). This will in most cases be a grave. The context has to be chosen from a reference list. If brooches cannot be related to a specific context and are stray finds from this site, create a context number with 'unknown' as context type. Some recorders used one context to record all single finds of a certain category (brooches, pottery) on a site. If a pair of brooches is mentioned it is better to create a new context. Others have created new 'unknown' contexts for each single find. In the end this seems to be the most preferable method.

* Then: ensemble

The brooch may be a singular brooch in the context (grave) or may be part of an **ensemble** of for instance a pair of (more or less) identical brooches (a pair of bow brooches) or even part of an ensemble of three or four brooches (so-called *Vierfibeltracht*).

In the context form you can see whether there is already an ensemble of brooches in that context. If so, you can add finds (individual brooches). Most likely there is not yet an ensemble of brooches. **You always have to create an ensemble of brooches**, even when there is only one brooch.

See next page for 'Find'.

* Then: find.

Each brooch in a grave is a find in an ensemble. A number of characteristics of that brooch has to be recorded. To do so you have to create a Find, by clicking on 'Add a new find.

If brooches have been found as single finds, the identification in the find form is: single find 1-1 and single find 1-2 in case of a pair of brooches. The first figure is the number of the context ('unknown'), the second an ordinal number of the find in that context (of single finds).

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