Fragmenting the Chieftain : a practice-based study of Early Iron Age Hallstatt C elite burials in the Low Countries

Vaart, S.A. van der

3 Dating elite burials

In their classic work Lanting and Mook (1977, 9) list the "royal graves of Oss and Wijchen types" as one of the cultural phenomena of the Early Iron Age in the southern Netherlands, which by their definition starts when the *Niederrheinnische Schrägrandurne* first appear. These burials are still seen as one of the key features of the Early Iron Age (though this chapter argues that some sword-graves in the dataset date to the Late Bronze Age, see below). The precise dating of these graves, however, is problematic. There is little consensus regarding their exact age in existing publications, in particular with regard to the most elaborate and famous burials. However, accurate dates (also in an absolute sense) are needed both to determine how the elite funerary practice evolved in the Low Countries (see also Chapter 5) and to relate the events and developments taking place in the Netherlands and Belgium to things happening in the rest of Europe (*cf.* Rebay-Salisbury 2016, Ch. 1). Only once their chronology is established will it be possible to determine whether the elite burials appear in the archeological record of the Low Countries before or after there is material evidence of contact with the Hallstatt Culture of Central Europe (see also Chapter 5), as well as how they relate temporally to developments elsewhere.

A number of factors make it difficult to narrowly date these burials. First, the constant development and changes of existing Hallstatt Chronologies together with the research history of the Dutch and Belgian elite burials have resulted in a large range of dates given in publications (*e.g.* Roymans 1991; Warmenbol 1993). In some cases establishing the original source of a given date is key. For instance, several dates of Dutch and Belgian graves ultimately trace back to Modderman's (1964) publication of the Chieftain's burial of Oss in which an antenna dagger still is listed in its burial inventory (it does not contain a dagger, see Sections C3.1 and C26.2). As an antenna dagger is a *leitfunde* for the Hallstatt D phase, the graves in question were dated quite late in the Early Iron Age. In other cases detailed knowledge of a specific burial is needed to note that a published date may not apply to the whole complex.[5]

Also, as the reigning views on how to sub-divide the Early Iron Age into chronological phases have changed, so have the precise dates associated with certain sub-phases. The result being that 'phase Hallstatt C' can mean different things when used by different scholars (and it is not always clear what exactly is meant). Not only have the phases shifted in terms of their precise dating, new phases have been introduced and discarded, sometimes several times over. Section 3.2 therefore considers how this research history

5 For example, at Weert-Boshoverheide T.O, six urn burials were found in a long barrow, three of which also contained the remains of bronze swords (see Section C34.6). These finds have been lost for several decades or more, and depictions exist only for fragments of two swords (Fig. C34.5). One of the depicted swords can be identified as a Gündlingen type sword (Section C2.3.1.3). The other depicted sword fragment shows no diagnostic features. The excavator (Ubaghs 1890, 212) describes the third sword only as in poor condition and heavily melted. No information is given on any diagnostic features. The date for the long barrow as a whole therefore always is based on only one of the swords found in it.

and the concomitant developments of chronologies have influenced the dating of the Dutch and Belgian burials.

Another difficulty of Early Iron Age chronology is a problematic segment of the calibration curve known as the Hallstatt plateau. Fluctuations in atmospheric ^{14}C-levels between 800 and 400 BC make it difficult to narrow down ^{14}C -dates between 2550 and 2400 BP any more specifically than those 400 years based on ^{14}C-dating alone (De Mulder 2011, 127–8; Hajdas 2008, 16; Reimer *et al.* 2004; Van der Plicht 2004). The chronology of later prehistory in the Low Countries is therefore based on ^{14}C-dates, dendrochronology, stratigraphy and the typology of ceramics and metal objects. Also, organic material suited to ^{14}C-dating was preserved in only a few elite burials. Where it survives, the high status of these burials within museum collections and depots makes getting permission to ^{14}C-date (*i.e.* destroy) samples difficult. Section 3.3 presents the ^{14}C-dates available, of which two were conducted as part of the current research.

The paucity of (narrow) ^{14}C-dates means that most elite burials can only be dated through typochronology. One must, however, be careful which scheme one employs. A typochronology developed for one cultural context may not be applicable to a different cultural context as the life histories and depositional trajectories may not be the same (see below). Another thing to be aware of is that most of the existing typochronologies of the objects found in the elite burials were developed in and for Central Europe. This research therefore makes use mainly of the most recent typochronologies as developed by P.-Y. Milcent (2004; 2012) and M. Trachsel (2004), the latter is of particular interest as he uses Dutch and Belgian finds as well as those from Central Europe to work out a "finely structured relative chronology for the Hallstatt and Early La Tène period" and tests this "against the absolute dates provided by natural sciences" (Trachsel 2004, 337).

3.1 Depositional trajectories and life histories of objects

The depositional trajectories of objects depend on and are influenced by a wide array of social variables, such as age, gender and individual mobility, that are constantly negotiated and changing, and which can affect both the timing and/or distribution of archeological deposition (*e.g.* Arnold 2012, 91; Olivier 1999, 124–5; Vandkilde 2007, 134). Single objects or categories of object are "subject to socially determined scalar forces that intersect with one another and may result in different depositional rhythms" (Arnold 2012, 87). Ornaments considered the personal property of the wearer, for example, generally will be deposited at a different rate than objects considered communally owned or heirlooms. As such, the kinds of objects used to establish a typochronological scheme can affect in what contexts that scheme can be used. A typochronology developed for settlement finds, for example, may not be applicable to burial finds (Arnold 2012, 87). While this does not mean that such typochronologies cannot be used, they need to be applied with care. As most of the typochronologies for the types of objects found in the elite burials were developed based on funerary finds this is generally not a problematic factor for the current study. But one must remain aware that graves can be an amalgamation of materials from different origins that were incorporated into the burial at multiple moments in time (as demonstrated for example by Olivier (1999) for the *Fürstengrab* of Hochdorf).

3.2 History of Hallstatt C/D dating and changing chronologies

There are numerous chronologies for the Early Iron Age, and especially in last 30 years there have been changes in the relative and absolute chronology of this phase in Central Europe, France *and* in the Low Countries.[6] It is important to consider the history of Hallstatt C/D (Ha C/D) dating as the ever-changing chronologies influence the (precise) dating of the burials in the Catalogue. As the start and finish dates of a certain phase or period change, so do the dates associated with the statement that a burial dates to that phase or period. For example, when Roymans (1991) states that something dates to the Hallstatt C phase, this means something different in an absolute sense than when Trachsel (2004) does. For this reason I summarize the main changes that have taken place in Hallstatt C/D dating.

The Iron Age of Central Europe was divided into two major periods by H. Hildebrand (1874): the Hallstatt, or Early Iron Age, and the La Tène, or Late Iron Age. O. Tischler (1881; 1885) in turn sub-divided the Hallstatt period into the older Hallstatt Phase C or Sword Phase (characterized by male burials with swords) and the younger Hallstatt Phase D or Dagger Phase. The chronology that is still used in modified form today was created by P. Reinecke (1965 [1911]). He divided the Early Iron Age into phases Hallstatt A through D. His Hallstatt C phase (the main period of interest to this research) was based primarily on the bronze or iron long double-edged swords that we now classify as Mindelheim swords (see Sections 3.4.1.2 and C2.3.1.2). G. Kossack (1959) later divided Hallstatt C and D into two sub-phases each based on south German cemeteries and the

6 *E.g.* Burgess 1979, 271–3, Fig. 15A; De Mulder 2011; Fontijn 2002; Hennig 2001; Kossack 1959; 1970; Lanting/Van der Plicht 2001/2; Milcent 2004; 2012; Müller-Karpe 1959; O'Connor 1980; Pare 1991; 1992; 1996; 1999; Trachsel 2004; Warmenbol/Leclercq 2009; Zürn 1952.

relative chronology of the ceramics, weaponry and certain types of jewelry found there (he later summarized his chronology; Kossack 1970). His 'early Hallstatt C1 horse-gear' in particular are still considered *Leitfunden* for the early Hallstatt period (Fig. 3.1; Kossack 1954; Pare 1992, Ch. 10; Trachsel 2004, 52–61).

Various scholars since have divided each of these phases further into a variety of sub-periods and sub-phases or introduced other terms (see Fig. 3.2).[7] Not only do the sub-periods change between the various schemes, the dates relating to the various phases can differ (sometimes considerably) between the various chronologies (see Fig. 3.2).[8] Moreover, most of these chronologies are based on and reflect developments elsewhere in Europe, rather than developments in the Low Countries. Also, the terminology and dating can differ per region (see for example De Mulder 2011, fig. 5.3 or Fontijn 2002, fig. 1.4 for comparative overviews) and relating the different periods and phases can be challenging.

3.2.1 The problematic Gündlingen/ Wheringen phase

For dating the elite burials from the Low Countries matters get complicated and problematic from the early 1990s onwards when C.F.E. Pare (1991, 3; 18; 1992, 315–7; pl. 95B–97A) used a wagon burial from Wehringen to argue that there was a transitional chronological horizon (ca. 800–720/700 BC) between Hallstatt B3 and Hallstatt C1.[9] This Gündlingen phase (also known as the Wehringen phase; Fontijn/Fokkens 2007, 356; Friedrich/Hennig 1995) was introduced as characterized by Gündlingen swords (and type 1wagons) and predating the classic Hallstatt C1 phase with Mindelheim swords and rich horse-gear (Fig. 3.1; as defined by Kossack 1954; 1957; 1959; 1970). Later Pare (1992, 138) questioned whether this Gündlingen horizon could be "consolidated as a true chronological phase" due to an insufficient number of transitional ensembles emblematic of this Gündlingen phase, but maintained that certain "transitional ensembles" can be dated prior to the Hallstatt C1 phase (before 775 BC). This phase also is known as Hallstatt C0 (for example in Hennig's (2001, 85–6; 88–9; tab. 1) chronology of Bavarian Swabia, the region where the Wehringen grave is located).

The Gündlingen/Wehringen phase was first picked up in the Dutch and Belgian research tradition by N. Roymans (1991, 20), when he stated that "*Pare* [1991] *has convincingly demonstrated that a new chronological horizon can be defined between this phase* [Ha B2/3] *and Ha C, in which the bronze Hallstatt swords of the Gündlingen type are a diagnostic feature*". The Gündlingen phase features in many later publications, but there appears to be some (unintended linguistic) ambiguity as to whether it should be seen as the earliest part *of* the Hallstatt C phase/Early Iron Age, or whether it dates *before* the Hallstatt C phase. The result is that precise dates can differ. Moreover, it is not always clear which 'option' authors are employing, making it difficult to relate an author's dating of a burial as 'Hallstatt C' to years as this phase can start up to a hundred years later if the Gündlingen phase is seen as preceding Hallstatt C (Fig. 3.2). More recent chronologies have rejected the Gündlingen phase (Milcent 2004; 2012; Trachsel 2004) and it is also not used in the current study. In this research 'Hallstatt C' (*i.e.* Ha C1–2) equals the 8th and first half of the 7th century BC (see below; Fig. 3.5).

3.2.2 Hallstatt C as a chronological phase and an archeological style

The manner in which the word 'Hallstatt' currently is used can also lead to ambiguity. The term 'Hallstatt' in reference to these rich Early Iron Age burials derives from the excavation of a cemetery with over a thousand rich burials near the village of Hallstatt, Austria by J.G. Ramsauer in the mid-19th century. Originally this term was associated with an archeological culture and style of objects. As noted above, in the early 20th century Reinecke (1965 [1911]) introduced the term *Hallstatt period*. Since then the two meanings of the word have become intertwined and the term 'Hallstatt ' currently is used in (Dutch and Belgian) archeology both to indicate a style of object or burial and to indicate that said object or burials dates to the Hallstatt period (for example Pare's (1992) use of the term "Hallstatt wagon" throughout his classic work on wagons and wagon-graves).

The adjective 'Hallstatt ' has an attractive vagueness in that it roughly delineates both a style and chronological period. This can be seen in the effort required to relate the term to years in certain publications, but also by the avoidance of defining what a 'Hallstatt burial/object' truly is. It can be used to refer to items that were imported

7 *E.g.* Milcent 2004; Müller-Karpe 1959; Pare 1991; 1992; Torbrügge 1991; Trachsel 2004.

8 A number of authors (Baitinger 1999, 197–201; Lanting/Van der Plicht 2001/2, 123; Nebelsick 2000a, 68; tab. 3; Pare 1992, 146) for example argued against recognizing Kossack's (1959) Hallstatt C2 as a separate phase, instead seeing it as part of Hallstatt D. Hennig (2001, 91; tab. 1) in contrast retains Hallstatt C2 for Bavarian Swabia.

9 Pare (1991, 3; 18; 1992, 315–7 no. 145, pl. 95B–97A) argued that the wagon burial in Barrow 8 of the Hexenbergle group at Wehringen, Lkr. Augsburg, Bavaria was typologically transitional between Hallstatt B3 and Hallstatt C. He argued that the wagon in this grave was closer to Late Bronze Age urnfield wagons than those characteristic of Hallstatt C, and the Gündlingen sword and winged chape were unusual for Hallstatt C wagon-graves in Bavaria (and in general are not associated with rich Hallstatt C1 horse gear over a wider area). Pare has since been vindicated by a felling date of 778 ± 5 BC for timber from the wagon and the burial chamber (Hennig 2001, 263).

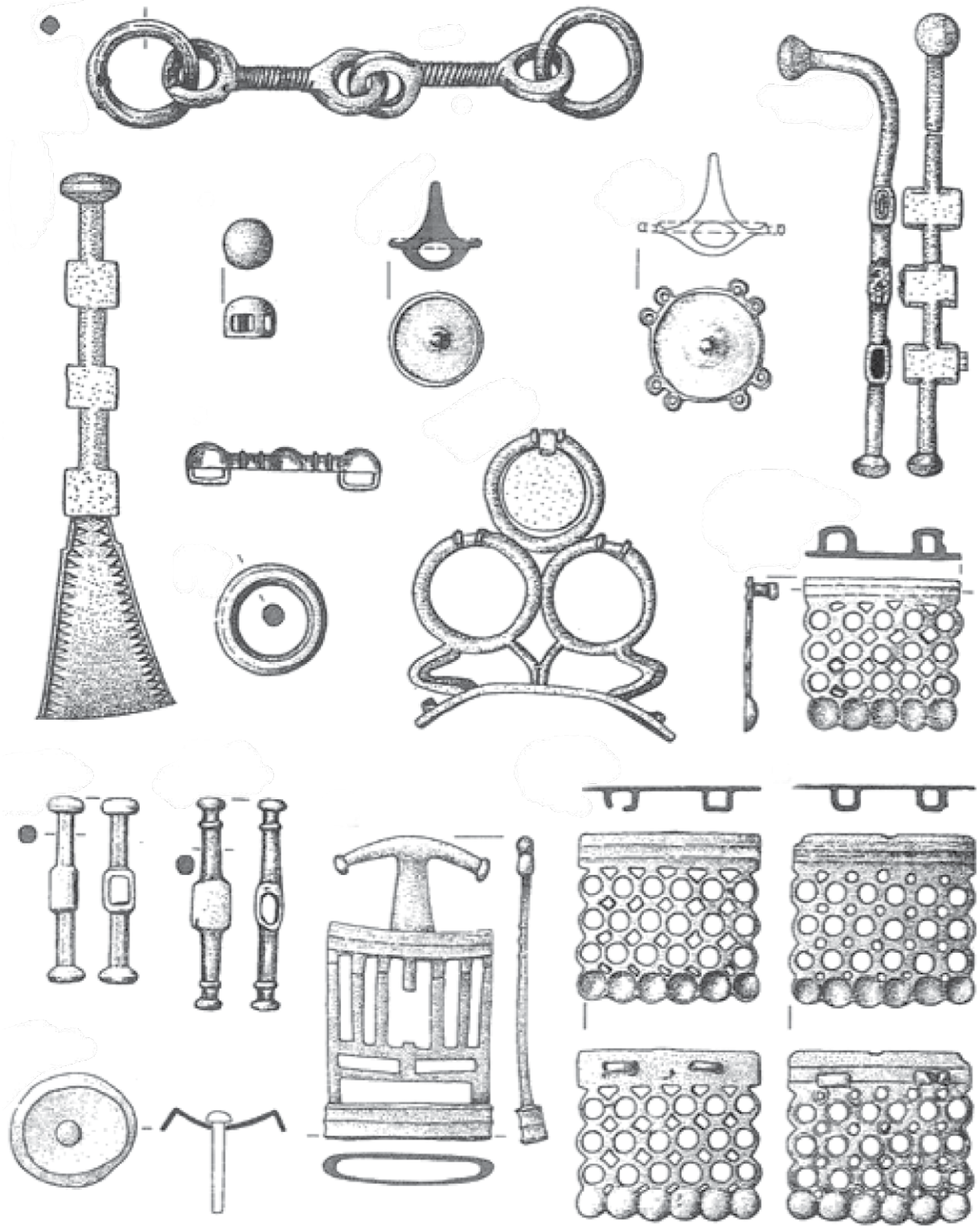


Fig. 3.1 Kossack's (1954) 'early Ha C1 horse-gear'. Figure after Pare 1992, fig. 100.

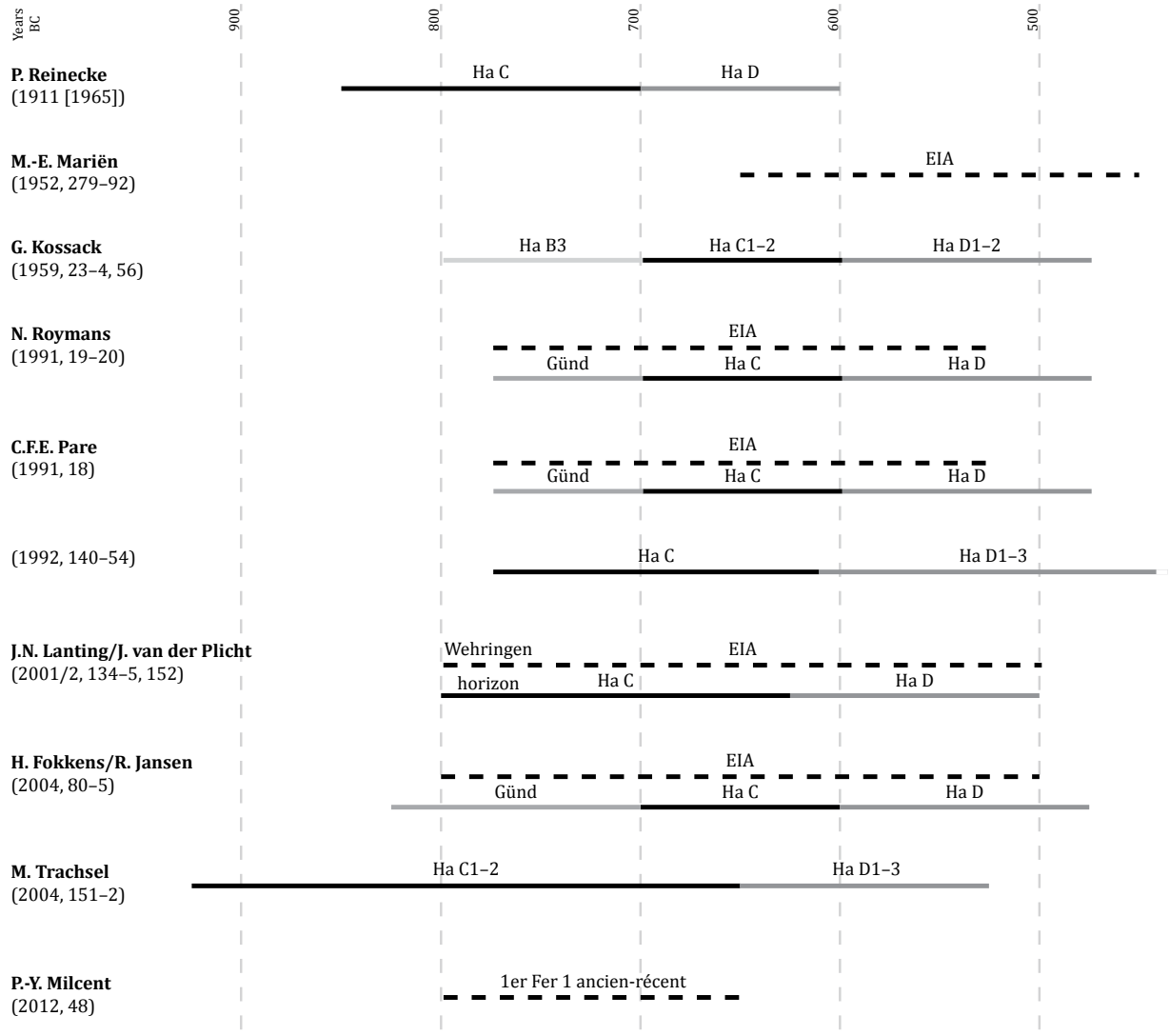


Fig. 3.2 A number of chronological schemes used to date Dutch and Belgian elite burials. Sources listed in figure.

from the Hallstatt Culture, but also to (possibly) locally made objects that resemble imports. The close connection between the Hallstatt 'style' and period also is revealed by the fact that finds dating between 800–500 BC that do *not* contain 'Hallstatt-style objects' almost never are referred to as dating to the Hallstatt C or D period in the Low Countries.

3.3 ^{14}C-dating the Low Countries elite burials

Accurately ^{14}C-dating the Dutch and Belgian Early Iron Age elite burials is hampered by the fact that no organic material suitable for ^{14}C-dating survives from most of them. Even in those cases that suitable material has survived, samples have been dated only rarely (seven burials have been ^{14}C-dated). There are several reasons for this. Prior to accelerator mass spectrometry ^{14}C-dating and the ability to date cremated bone, suitable samples were non-existent. When organic material survives in these burials it almost always is highly fragmented. Even now that minuscule samples can be dated, obtaining them remains problematic as the museums and depots that house these high status finds are often reluctant to part with even small samples. The expense also plays a role.

Prior to this research, suitable samples from only six burials had been ^{14}C-dated. Two ^{14}C-dates were performed as part of the present research for the Chieftain's grave of Oss. This section presents and discusses these dates and their calibrations (with OxCal v4.3.2, all at the 2σ range) are presented and discussed (Fig. 3.3). Table 3.1 lists the lab/date number, the uncalibrated and calibrated dates and source for each ^{14}C-date. Particular attention is paid to the exact

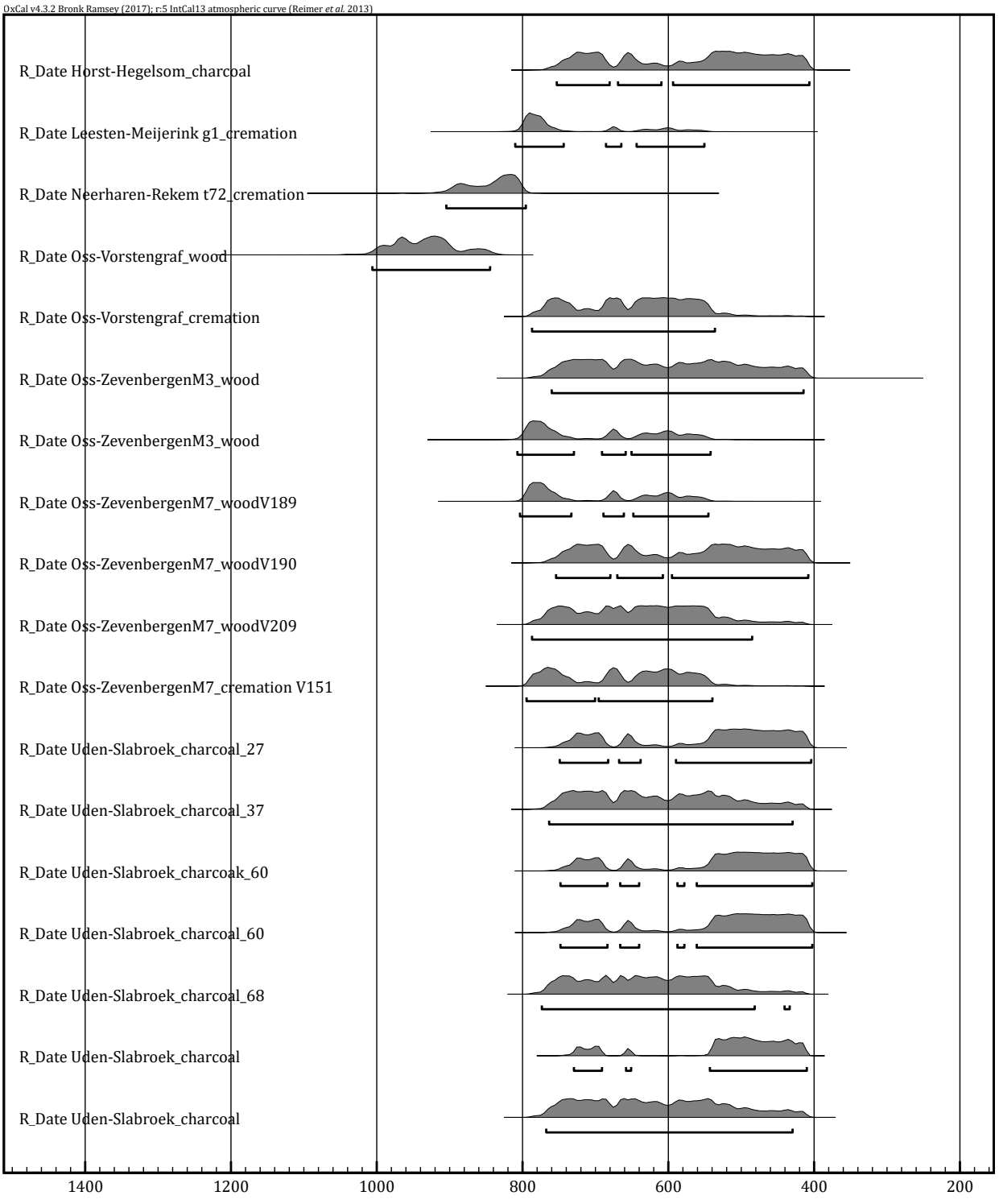


Fig. 3.3 The calibrated the ^{14}C-dates (with OxCal v4.3.2 at the 2σ range). The sources of the given dates are listed in Table 3.1.

source of the date and its relation to the burial event. The dates are discussed in alphabetical order of site name. The ^{14}C-dates, however, do not always narrowly date a burial as the calibrated dates predominantly hit the Hallstatt plateau (with the exception of Neerharen-Rekem t.72's very early date; Section C25.3) and by themselves provide only broad dating ranges. The typochronological dates of a number of key objects and sites are used below to narrow down the date ranges to likely timespans.

Site_material_number	Date number	^{14}C-date	Calibrated date	Source of the ^{14}C-date
Horst-Hegelsom_charcoal	GrN-10761	2440 ± 35 BP	754–681 cal BC (23.0%), 670–610 cal BC (12.8%) and 594–407 cal BC (59.6%)	Lanting/van der Plicht 2001/2, 174
Leesten-Meijerink g1_cremation	GrN-49737	2570 ± 35 BP	811–744 cal BC (67.3%), 686–665 cal BC (7.0%) and 644–551 cal BC (21.1%)	Van Straaten/Fermin 2012, 91–3
Neerharen-Rekem t72_cremation	GrA-17787/ 19062	2675 ± 40 BP	905–796 cal BC (95.4%)	Lanting/van der Plicht 2001/2, 174
Oss-Vorstengraf_wood	GrA-55555	2785 ± 30 BP	1007–854 cal BC (95.4%)	Section C26.3
Oss-Vorstengraf_cremation	GrA-55551	2500 ± 30 BP	788–537 cal BC (95.4%)	Section C26.3
Oss-Zevenbergen M3_bark side	GrA-27852	2460 ± 40 BP	761–415 cal BC (95.4%)	Van Wijk *et al.* 2009, 102
Oss-Zevenbergen M3_heartwood side	GrA-27851	2555 ± 40 BP	808–730 cal BC (47.7%), 692–659 cal BC (11.4%) and 651–543 cal BC (36.4%)	Van Wijk *et al.* 2009, 102
Oss-Zevenbergen M7_charcoal central find assemblage V189	GrA-41260	2550 ± 35 BP	804–734 cal BC (48.5%), 690–662 cal BC (11.2%) and 649–546 cal BC (35.7%)	Fontijn *et al.* 2013d, 115–6
Oss-Zevenbergen M7_charcoal central find assemblage V190	GrA-41261	2445 ± 35 BP	755–680 cal BC (24.4%), 671–608 cal BC (14.6%) and 596–409 cal BC (56.4%)	Fontijn *et al.* 2013d, 115–6
Oss-Zevenbergen M7_charcoal central find assemblage V209	GrA-41264	2490 ± 35 BP	788–486 cal BC (95.4%)	Fontijn *et al.* 2013d, 115–6
Oss-Zevenbergen M7_cremation V151	GrA-50085	2520 ± 35 BP	795–701 cal BC (31.7%) and 696–540 cal BC (63.7%)	Fontijn *et al.* 2013d, 115–6
Uden-Slabroek_charcoal_27	GrA-51471	2430 ± 30 BP	750–683 cal BC, 668–639 cal BC (6.6%) and 590–405 cal BC (69.2%)	Section C32.3
Uden-Slabroek_charcoal_37	GrA-51473	2465 ± 30 BP	764–430 cal BC (95.4%)	Section C32.3
Uden-Slabroek_charcoal_60	GrA-51443	2425 ± 30 BP	749–684 cal BC (17.6%), 667–641 cal BC (5.5%), 588–579 cal BC (0.9%) and 562–403 cal BC (71.4%)	Section C32.3
Uden-Slabroek_charcoal_69	GrA-51475	2480 ± 30 BP	774–482 cal BC (94.9%) and 441–434 cal BC (0.5%)	Section C32.3
Uden-Slabroek_charcoal	GrA-32776	2430 ± 15 BP	730–692 cal BC (12.1%), 659–652 cal BC (1.7%) and 544–411 cal BC (81.6%)	Section C32.3
Uden-Slabroek_charcoal	GrA-48681	2470 ± 35 BP	768–430 cal BC (95.4%)	Section C32.3

Tab. 3.1 The available ^{14}C-dates and their calibrations (with OxCal v4.3.2, all at the 2σ range) of burials in the dataset.

3.3.1 Horst-Hegelsom

Lanting and Van der Plicht (2001/2, 174) give a ^{14}C-date of 2440 ± 35 BP for a charcoal sample taken from the pit in the gap in the ditch running around the burial of Horst-Hegelsom (Chapter C16). They question the relationship between this pit and the burial as they claim this pit to be only a dip in the soil profile. However, Willems and Groenman-van Waateringe (1988, 17) describe this pit as being a distinct feature filled with large chunks of charcoal, leading them to argue that a fire had burned in it (see also Chapter C16 and Fig. C16.2). It therefore seems unlikely that this was only a dip in the soil profile (especially since Lanting and Van der Plicht appear to base their statement only on Willems and Groenman-van Waateringe 1988). It may be worthwhile to also have a sample of the cremation remains ^{14}C-dated, but this has not yet been done. The given ^{14}C-date calibrates to ca. 750–400 BC (Fig. C16.4; Tab. 3.1). The date for the Horst-Hegelsom burial is narrowed down to a likely date range with typochronology below.

3.3.2 Leesten-Meijerink g.1

The cremation remains from the Leesten-Meijerink grave (see Chapter C18) were dated 2570 ± 35 BP; Van Straaten/Fermin 2012, 91–3), which calibrates to ca. 810–550 BC (Fig. C18.4; Tab. 3.1). The date for this burial is narrowed down to a likely date range with typochronology below.

3.3.3 Neerharen-Rekem t.72

Lanting and Van der Plicht (2001/2, 174) give a ^{14}C-date for cremation remains from Neerharen-Rekem t.72 of 2675 ± 40 BP (see Section C25.3). The given date calibrates to ca. 905–795 BC (Fig. C25.3; Tab. 3.1).

3.3.4 Oss-Vorstengraf

As part of this research two samples were selected from the Chieftain's burial of Oss and submitted for ^{14}C-dating (see Section C26.3; Fig. C26.11). These were a fragment of the human cremation remains and a piece of wood that were found in the bronze urn upon excavation. Both were made available by the National Museum of Antiquities in Leiden. Physical anthropologist and cremation expert S. Lemmers

selected a long bone fragment that was sufficiently calcinized for ^{14}C-dating from the cremation remains. This cremation fragment gave a date of 2500 ± 30 BP, which calibrates to ca. 790–540 BC (Fig. C26.11; Tab. 3.1).

Together with wood and charcoal experts E. van Hees and C. Vermeeren a wooden fragment suitable for ^{14}C-dating was selected from this burial. The sample selected for dating was possibly alder (*Alnus*), but certainly was not oak (*Quercus*) or beach (*Fagus*). While it could be that the fragment was contamination, this seems unlikely given the find context, see Chapter C26). It therefore probably derives from an objects interred with the Chieftain. The only (known) wooden artifacts from this burial are the fragmented remains of a grooved bowl (*OV.33*) and the grip of the Mindelheim sword (*OV.06*). As the fragmented bowl is made of oak this cannot be the source of the dated sample. A newly discovered wood sample from the sword handle was also analyzed by Van Hees and Vermeeren, and they determined that this was likely *not* oak and this in theory could therefore be the source of the dated sample. It is also possible that the fragment derives from something else that has not survived. The wood fragment gave a date of 2785 ± 30 BP, which calibrates to ca. 1005–855 BC (Fig. C26.11; Tab. 3.1). As discussed below, the typochronological dates of the grave goods indicate that this date is too early to relate to the time of burial. It could be that the early date is due to old-wood-effect or the dated wood fragment could be from an object that was already old at the time of the Chieftain's burial. Preference therefore is given to the ^{14}C-date obtained from a fragment of the Chieftain's cremation remains (see above).

3.3.5 Oss-Zevenbergen M.3

Two samples taken from the oak plank in the center of Oss-Zevenbergen M.3 (see Section C27.1.3) were ^{14}C-dated. C. Vermeeren sampled roughly ten year rings at the heartwood side of the plank and at the bark side. She estimated that there were ca. 130 (± 20) year rings between the two samples. The bark side sample gave a date of 2460 ± 40 BP and the heartwood side sample gave a date of 2555 ± 40 BP (Tab. 3.1; Van Wijk *et al.* 2009, 102). The felling date of the tree from which the plank was cut was calculated by using the Gap function in Oxcal, which allows you to enter the number of years between two samples (Fig. 3.4). This yielded a calibration of ca. 675–415 BC. Mound 3 most likely dates to one of these timespans.

3.3.6 Oss-Zevenbergen M.7

Several samples from Oss-Zevenbergen M.7 were ^{14}C-dated: a charcoal fragment, two charcoal twigs (to minimize the margin of error) and a fragment of cremation remains from the urn (Fig. C27.5; Section C27.2.3; see also Fontijn *et al.* 2013d). Charcoal twigs V189 (V = find no.) and V190 yielded dates of 2550 ± 35 BP and 2445 ± 35 BP, which give calibrated dates of ca. 805–545 BC and ca. 755–410 BC. Charcoal fragment V209 gave a ^{14}C-date of 2490 ± 35 BP that calibrates to ca. 790–485 BC. The fragment of cremation remains from the urn (V151) yielded a ^{14}C-date of 2520 ± 35 BP that calibrates to ca. 795–540 BC (Tab. 3.1). The date for the Mound 7 burial is narrowed down to a likely date range with typochronology below.

3.3.7 Uden-Slabroek g.1

Six charcoal samples from the planks that made up the Uden-Slabroek burial chamber and the charcoal filling the burial cut from this grave have been ^{14}C-dated (Fig. C32.5; Section C32.3). They all yielded ^{14}C-dates around 2450 ± 30 BP, each of which calibrates to approximately the

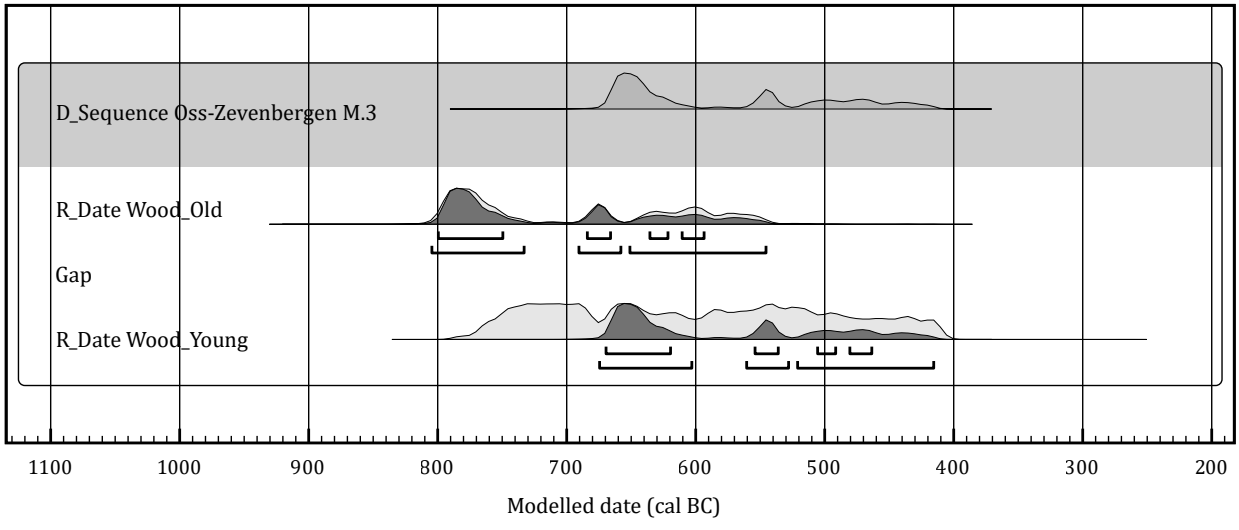


Fig. 3.4 The calibrated ^{14}C-dates (with OxCal v4.3.2 at the 2σ range) of samples of wood and Gap analysis from Oss-Zevenbergen M.3.

8th through the 5th centuries BC (see Tab. 3.1). The date for this burial is narrowed down to a likely date range with typochronology below.

3.4 Dating through typochronology

Due to the limited number of ^{14}C-dates available and the wide date ranges that they generally provide due to the Hallstatt plateau, it is primarily through typochronology that the elite burials can be dated. In the past there has been wariness towards dating the Low Countries burials and their imported grave goods in this manner as the typochronologies of the kind of horse-gear, wagon components, weaponry and bronze vessels found in the Dutch and Belgian elite burials are based primarily on their area of origin in Central Europe. For a long time it was unclear how finds in that area relate to those found in the Low Countries, especially temporally.

In the past Pare (1992, 139–40), for example, cautioned against using early Hallstatt C1 horse harness components (Fig. 3.1) to date the burial of Wijchen because these presumably were produced locally after they had gone out of fashion in southern Germany and Bohemia. He stated that graves with several types of early fittings are located almost exclusively in southern Germany and Bohemia and that outside this area burials generally only contain a single type of 'early' fitting, indicating that people from the hinterland likely imitated or acquired them from the central area of distribution (even though Pare (1992, 170) himself argued that the Wijchen wagon was likely made in Central Europe and imported to the Low Countries). However, there are no indications that these wagons and horse-gear elements were produced in the Low Countries (see also Section 6.3), and there are also Dutch and Belgian burials with multiple early fittings. The Chieftain's grave of Oss, for example, yielded early Platenitz horse-bits, a *Tutulus*, yoke rosettes and toggles as well as number of other bronze ornaments, that all can be assigned to Kossack's early Hallstatt C1 horse-gear (Figs. 3.1 and 4.7). Especially when viewed in light of the destructive and highly selective nature of the Low Countries elite burial practice (see Chapters 5 and 7), it would appear that Kossack's classic early Hallstatt C1 horse-gear can in fact be used to date a number of Dutch and Belgian elite burials early in the Hallstatt C phase (see below).

It furthermore appears that a number of sword burials, in particular those with Gündlingen swords and certain types of chapes, actually date very early when compared to developments elsewhere in Northwest and Central Europe. Neerharen-Rekem t.72, with its three early types of bronze Gündlingen swords (App. A2.3; Section C2.3.1.3), for example ^{14}C-dates to the 9th century BC, even though such swords and chapes are traditionally dated to the 8th century BC (Milcent 2012, Fig. 9.A; Pare 1992, 138; Stöllner 2002, 119–20), with Trachsel (2004, 118–24) as an exception dating them slightly earlier (to the second half of the 9th century as well).

3.4.1 Dating the Low Countries elite

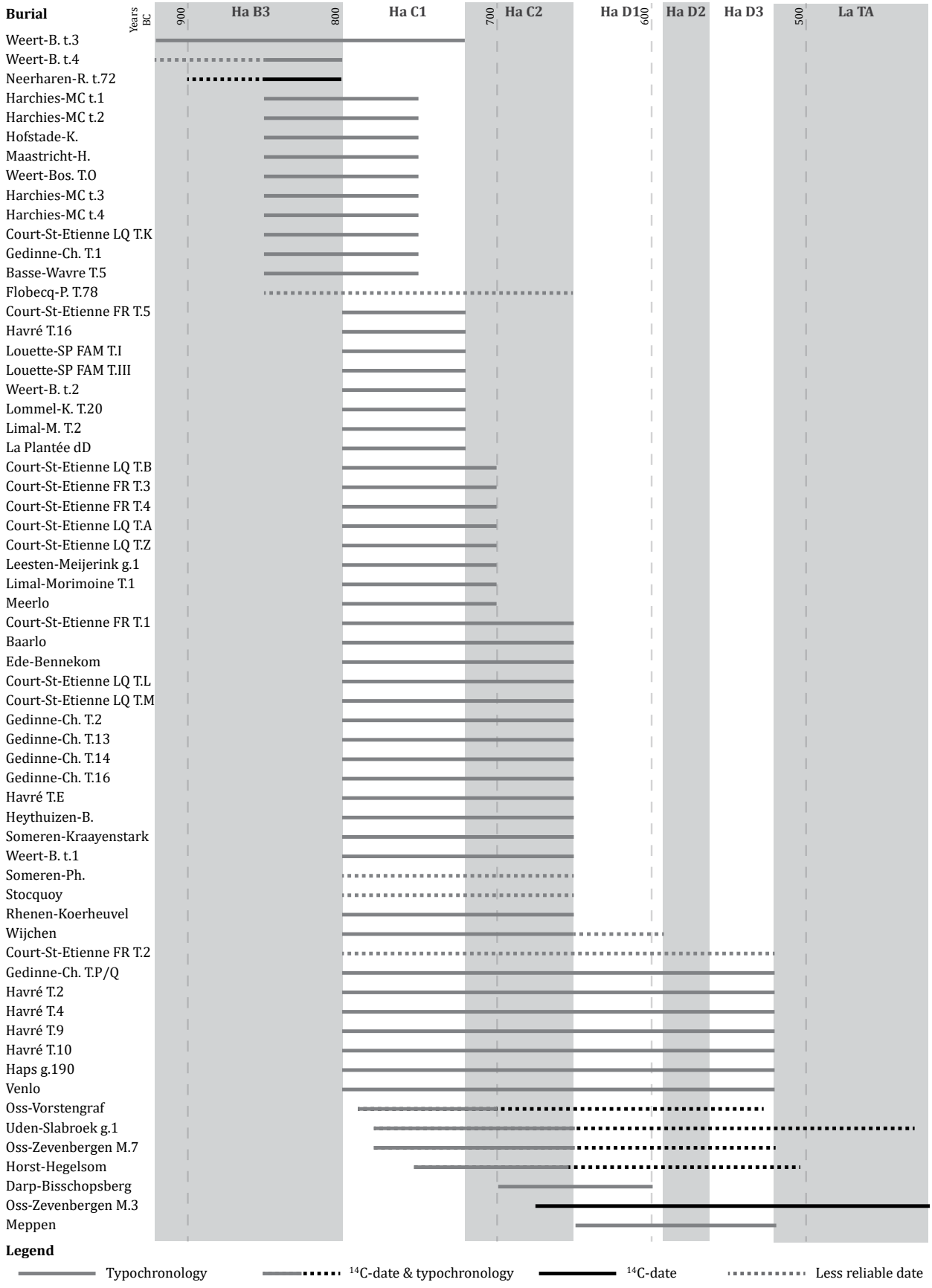
In the following I discuss the dating of the burials by roughly grouping them based on their content and (mainly typochronological) corresponding date (Fig. 3.5). The corresponding sections in the Catalogue provide more details on the dates ascribed to individual burials. The following is based on a small dataset with generally poor find contexts and any new finds or ^{14}C-dates may change it.

3.4.1.1 Gündlingen and early chape burials

Typochronologically a type Viehofen/A2 chape (*CSE-LQ. UC.48*) from an unknown flat grave at Court-St-Etienne La Quenique and a type Beutelortband/Han-sur-Lesse chape found at Weert-Boshoverheide t.4 are some of the earliest finds in the Catalogue (Milcent 2012, 48; Trachsel 2004, 112–3). These types of chapes generally are found with early Gündlingen type swords, like those found in Harchies-Maison Cauchies t.1 and t.2, Hofstade-Kasteelstraat, Maastricht-Heer and Neerharen-Rekem t.72 (App. A2.3). As noted above, while Gündlingen swords generally are dated to the 8th century BC, in the Low Countries the 9th century ^{14}C-date of the Neerharen-Rekem burial with Gündlingen swords indicates that earlier ones in fact can date to the (second half of the) 9th century BC as well (*cf.* Trachsel 2004, 117–24). For this reason burials with these blades and the accompanying chapes (Basse-Wavre T.5, Court-St-Etienne La Quenique T.K, Gedinne-Chevaudos T.1 and Harchies-Maison Cauchies t.3 and t.4 and Weert-Boshoverheide T.O, in addition to those already mentioned) are dated ca. 850–750 BC in this research (Fig. 3.5). As will be discussed further in Chapters 5 and 7, an early date for the Gündlingen sword burials appears consistent with developments seen in the elite burial practice.

3.4.1.2 Iron (Mindelheim) sword burials

It is generally agreed that the Mindelheim type swords evolved from the Gündlingen type, with the latter starting in the 9th century, followed by a period where they were both in use, with then the Mindelheim type continuing after the Gündlingen type went out of style (Section C2.3.1.2; Milcent 2004, Ch. 2; Pare 1991; 1992; Stöllner 2002, 119–22; Trachsel 2004, 107–44). Mindelheim swords usually are dated to the Hallstatt C period, or roughly the (second half of the) 8th and first half of the 7th century BC (with some 30–50 years difference in the start and end dates given by various authors; *e.g.* Milcent 2012, Fig. 9.A; Trachsel 2004, 124–31).


Burial
Years BC
900
Ha B3
800
Ha C1
700
Ha C2
Ha D1
600
Ha D2
Ha D3
500
La TA
Weert-B. t.3
Weert-B. t.4
Neerharen-R. t.72
Harchies-MC t.1
Harchies-MC t.2
Hofstade-K.
Maastricht-H.
Weert-Bos. T.O
Harchies-MC t.3
Harchies-MC t.4
Court-St-Etienne LQ T.K
Gedinne-Ch. T.1
Basse-Wavre T.5
Flobecq-P. T.78
Court-St-Etienne FR T.5
Havré T.16
Louette-SP FAM T.I
Louette-SP FAM T.III
Weert-B. t.2
Lommel-K. T.20
Limal-M. T.2
La Plantée dD
Court-St-Etienne LQ T.B
Court-St-Etienne FR T.3
Court-St-Etienne FR T.4
Court-St-Etienne LQ T.A
Court-St-Etienne LQ T.Z
Leesten-Meijerink g.1
Limal-Morimoine T.1
Meerlo
Court-St-Etienne FR T.1
Baarlo
Ede-Bennekom
Court-St-Etienne LQ T.L
Court-St-Etienne LQ T.M
Gedinne-Ch. T.2
Gedinne-Ch. T.13
Gedinne-Ch. T.14
Gedinne-Ch. T.16
Havré T.E
Heythuizen-B.
Someren-Kraayenstark
Weert-B. t.1
Someren-Ph.
Stocquoy
Rhenen-Koerheuvel
Wijchen
Court-St-Etienne FR T.2
Gedinne-Ch. T.P/Q
Havré T.2
Havré T.4
Havré T.9
Havré T.10
Haps g.190
Venlo
Oss-Vorstengraf
Uden-Slabroek g.1
Oss-Zevenbergen M.7
Horst-Hegelsom
Darp-Bisschopsberg
Oss-Zevenbergen M.3
Meppen
Legend
Typochronology
14C-date & typochronology
14C-date
Less reliable date

As the Gündlingen swords appear to be relatively early in the Low Countries, the Mindelheim swords could be early as well (early in the 8th century BC), or it could be that the use of Gündlingen swords continued longer here. The ^{14}C-date derived from the cremation remains of the Chieftain's burial of Oss, which reveals that it could be as early as ca. 790 BC, does not contradict an early 8th century date for this burial as indicated by the typical early Hallstatt C1 horse-gear found in it. The burial of Horst-Hegelsom also yielded a Mindelheim type sword and a ^{14}C-date that calibrates to ca. 750–400 BC (Fig. C16.4; Tab. 3.1). This research therefore dates burials with Mindelheim type swords – such as Court-St-Etienne La Ferme Rouge T.1, Court-St-Etienne La Quenique T.L and T.M, Gedinne-Chevaudos T.2, T.13 and T.14, Havré T.E and Someren-Kraayenstark to ca. 800–650 BC (Fig. 3.5). The iron sword from Heythuizen-Bisschop was too degraded to identify it as a Mindelheim type sword, though given the associated pottery this seems plausible (Section C14.3). The burials of Someren-Philipscamping and Stocquoy are reported to contain Mindelheim swords, or at least iron Early Iron Age swords (see Sections C30.3 and C31.2).

3.4.1.3 Early horse-gear (and iron swords)

A number of burials most likely can be dated to the early 8th century BC based on the horse-gear they contain. This 'early' horse-gear was defined by Kossack (1954) and is still used to identify early Hallstatt C(1) burials (*e.g.* Pare 1992, Ch. 10). There are eight burials that contain *Leitfunde* for Kossack's phase Hallstatt C1. These are Court-St-Etienne La Ferme Rouge T.3 and T.4, Court-St-Etienne La Quenique T.A, Limal-Morimoine T.1, Meerlo, Oss-Vorstengraf, Rhenen-Koerheuvel and Wijchen (Fig. 3.1), and especially those with multiple early horse-gear fittings likely date early in the 8th century BC (*cf.* Trachsel 2004, 52–61; see the Catalogue).

Four of the eight burials with characteristic early horse-gear also contain iron Mindelheim type swords (Court-St-Etienne La Quenique T.A, Limal-Morimoine T.1, Meerlo, Oss-Vorstengraf), and this combination indicates that these burials most likely date to the 8th century BC. This is consistent with the *Schräghals*-urn found in Meerlo. An 8th century date for Oss-Vorstengraf is also consistent with the type of bronze bucket found there (which predominantly date Hallstatt C1, though they also occur in Hallstatt C2; Prüssing 1991, 49–52) and the ^{14}C-date derived from the Chieftain's cremation remains (Section 3.3.4). The Chieftain's burial of Rhenen-Koerheuvel contains the same type of bronze bucket as the Oss-Vorstengraf burial. It was found together with an early rein-knob (and *phalera*) as well as linchpins and hub fittings that indicate that Rhenen-Koerheuvel most likely dates later in the Hallstatt C1 phase, though it could also be Hallstatt C2. Court-St-Etienne La Ferme Rouge yielded early Hallstatt C1 horse-bits (*cf.* Kossack 1954; Pare 1992, Ch. 10) of the same type as found in the Chieftain's burial of Oss and Limal-Morimoine T.1, which indicate that this burial most likely also dates to the 8th century BC (Section C6.2.4.2; Trachsel 2004, 53). This is consistent with the (early) Hallstatt C date ascribed to the antenna sword (Sievers 1982, 18; Trachsel 2004, 137) and the axe type. The Oss-Zevenbergen M.7 burial also yielded horse-gear and yoke decorations and is dated to ca. 780–650 BC based on ^{14}C-dates and typochronology (Section C27.2.3; see also Fontijn *et al.* 2013d, 115–6). The Wijchen burial, with its early horse-gear and slightly later wagon is dated to the earlier Hallstatt period, possibly to the Hallstatt C2–D1 transition (Pare 1992, 139–40; 151; Trachsel 2004, 53; 371) – a date that is consistent with the early axe and Hallstatt period ribbed bucket. The burial of Court-St-Etienne La Quenique T.B yielded numerous early horse-gear elements that likely date to the (early) 8th century BC (Trachsel 2004, 52; Section C6.3.3.2). Weert-Boshoverheide t.2 yielded a single horse-gear element (or possibly scabbard element) that most likely dates to the Hallstatt C1 phase, and the single piece of horse-gear found in Weert-Boshoverheide t.1 is dated Hallstatt C1–2 (Trachsel 2004, 464–6). A number of characteristic early horse-gear components (*CSE-LQ.UC.28–33*) found within Court-St-Etienne La Quenique likely

Fig. 3.5 (previous page) The dates ascribed to the burials in the dataset. See Section 3.4.1 and the Catalogue.

come from the same grave date and most likely date to the 8th century BC (see Section C6.3.10).

3.4.1.4 Personal appearance

Objects related to physical appearance, such as ornaments, razors and toiletry items frequently are found in burials from the Late Bronze and Early Iron Ages. They are found both in urnfield graves and in the richest burials in the Catalogue. The burials in the dataset characterized only by ornaments, razors and toiletry items all date Hallstatt C1 or early in the Early Iron Age (see Catalogue). The razors from Court-St-Etienne La Ferme Rouge T.5, Havré T.16, Limal-Morimoine T.2, and Louette-St-Pierre Fosse-Aux-Morts T.I and T.III indicate that the burials they were found in likely date to the (early) Hallstatt C1 phase (Trachsel 2004, 142–3). The burials of Gedinne-Chevaudos T.P/Q, Havré T.2, T.4, T.9 and T.10 and Limal-Morimoine T.2 all are dated as most likely early in the Early Iron Age based on the tweezers and toiletry sets they contain and Lommel-Kattenbos T.20 probably dates to the Hallstatt C1 period based on the razor, tweezers and *Schräghals*-urn it yielded (Section C20.3; see also Warmenbol 1988, 255). The urn burial from Weert-Boshoverheide t.3 contained a bracelet that is similar to the ones found in Slabroek and likely dates to the Late Bronze Age or to the Hallstatt C1 phase (Section C34.4).

Exceptional burials with elaborate ornament sets: Leesten-Meijerink and Uden-Slabroek

There are also burials that emphasize personal appearance through the inclusion of jewelry, such as Leesten-Meijerink and Uden Slabroek which both contained rich ornament sets. As discussed above, both were also ^{14}C-dated, yielding dates that hit the Hallstatt plateau, but by adding the typochronological date of the grave goods it is possible to narrow down the likely date ranges. The type of urn and the *Ringaugenperlen* combined with the ^{14}C-date derived from the cremation remains indicate that the Leesten-Meijerink burial most likely dates to the 8th century BC (Section C18.3; Van Straaten/Fermin 2012, 93).

The calibrated ^{14}C-dates of the charcoal samples from Uden-Slabroek all approximately fall in the range of 780–430 BC, but the typochronology of the grave goods helps narrow this down to a likely date range (see also Section C32.3). The bracelets with everted terminals resemble Late Bronze Age bracelets found in hoards (though they have no exact parallel in the Low Countries). The hatched decoration on the matching bracelets is frequently found on Late Bronze and Early Iron Age bracelets (*e.g.* Fig. 5.3; Dyselinck/ Warmenbol 2012, 60–1; Fontijn 2002, Fig. 9.5). The Slabroek toilet set not only appears to be a parallel for a number of other Early Iron Age toiletry items discussed above, it likely was deposited in a leather pouch with an amber closing bead. This practice has close parallels in for example the Hallstatt C Frankfurt-Stadtwald *Fürstengrab* (Fischer 1979; Willms 2002). The bronze anklets are known as *Hohlwulsten* or *Wulstringen* (Schacht 1982) and usually are dated to the Early Iron Age (Butler/Steegstra 2007/8; Van Impe *et al.* 2011). Bronze hair rings (of different designs than the ones from Slabroek) have been found in several Early and Middle Iron Age inhumation graves around Nijmegen (Van den Broeke 2002; 2011). In short, incorporating the typochronological dates of the grave goods indicates that this burial most likely dates Hallstatt C1–2 phase (see also Section C32.3).

3.4.1.5 Bronze vessels

The four intact Early Iron Age bronze vessels found in the Low Countries as single finds can be dated to likely date ranges through typochronology (see the respective sections in the Catalogue for more details). The bucket of Baarlo is of the same type as those found in Oss-Vorstengraf and Rhenen-Koerheuvel. These buckets predominantly date to the Hallstatt C1 phase, though they can also be from the Hallstatt C2 period (Prüssing 1991, 49–52). Situlae like the one of Ede-Bennekom are dated to the older Hallstatt C phase by Prüssing (1991, 60–71, taf. 25) but can also date to the whole Hallstatt C phase. According to Stöllner (2002, 145–6) vessels like the one from Venlo can date both to the Hallstatt C and D period, but are most common in Hallstatt C. Meppen is one of the few burials from the dataset that appears to date to the later Hallstatt D phase (Kimmig 1964; see Section C24.3).

3.4.1.6 Other

There are also a number of graves that do not fall into the groups discussed above, or cannot be narrowly dated (see the respective sections in the Catalogue for more details). The knives from Court-St-Etienne La Ferme Rouge T.2 for example are not narrowly diagnostic and this burial therefore is dated Hallstatt C1–D3. Gedinne-Chevaudos T.16 is dated Hallstatt C1–2 based on the pottery and spearhead. Haps could be one of the later burials included in this study and is dated Hallstatt C1–D3. La Plantée des Dames T.4 contains a bronze button that most likely dates it to Hallstatt C1. Lastly, Oss-Zevenbergen M.3 has quite a long date ^{14}C-range of ca. 675–415 BC and some hard to identify artifacts, and for this reason is included here rather than with the bronze sword burials (though this burial did yield an unusual bronze sword fragment, see Section C27.1.3).

3.5 Conclusion

This chapter proposed a chronological sequence of the Early Iron Age elite burials in the Low Countries based on new (calibrations of) ^{14}C-dates and typochronologies.

It was argued that accurately dating these burials has been hampered in the past by complex and ever-changing (typo)chronologies. In particular the introduction and shifting date range of the Gündlingen/Wehringen phase (Section 3.2.1) has complicated matters. This research argues that such a phase is not represented in the Dutch and Belgian elite burials and that we should abandon the term (as do Milcent 2004; 2012; Trachsel 2004). In Section 3.2.2 it also was discussed how the habit of using 'Hallstatt C' both to indicate a chronological phase and an archeological culture group (or artifacts deriving from that culture) has led to (an attractive) vagueness in the meaning of the term.

The proposed chronological sequence of the Early Iron Age elite burials in the Low Countries indicates that most of our burials are probably earlier than previously thought. A large number appear to date to the 8th and first half of the 7th century BC (*i.e.* Hallstatt C1–2), with some (possibly) being even earlier and some later. The new dating of these burials has brought the burials with Mindelheim swords chronologically closer to those with Gündlingen swords. Where before it was thought that there was a large chronological gap between them, it now appears that they overlapped. As will be discussed further in Chapters 5 and 7, this is consistent with the continuity in burial practice customs observed.

The new, and often earlier, dates proposed have interesting consequences with regard to how we should envision the role of the Low Countries in Early Iron Age Northwest and Central Europe. It appears, for example that the custom of identifying the dead as elites in burials may have arisen prior to any archeologically visible contact with Central Europe. The majority of the elite burials in fact appear contemporaneous with the Hallstatt C *Fürstengräber* of the Central European Hallstatt Culture, rather than with the later (and quite different) Hallstatt D burials, which means we should re-examine how we envision the relationship that existed between the Low Countries and Central Europe at this time (see Section 7.3).

Lastly, a word of warning – as also stated above, the proposed chronological sequence is an attempt to make the dating of the elite burials in the Low Countries as accurate and transparent as possible. However, I stress that it is based on a small dataset and may need to be adjusted to incorporate any new finds, ^{14}C-dates or relevant typochronologies.