

# DES ESPACES AUX ESPRITS

*L'organisation de la mort aux âges des Métaux dans le nord-ouest de l'Europe*

*Sous la direction de Anne Cahen-Delhaye et Guy De Mulder*

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# DES ESPACES AUX ESPRITS. L'ORGANISATION DE LA MORT AUX ÂGES DES MÉTAUX DANS LE NORD-OUEST DE L'EUROPE

**Sous la direction de Anne CAHEN-DELHAYE et Guy DE MULDER/  
Proceedings directed by Anne CAHEN-DELHAYE and  
Guy DE MULDER**

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de Wallonie, Direction générale de l'aménagement du territoire,  
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## PRÉFACE - PREFACE

En février 2012, se tenaient à Namur les vingtièmes rencontres du groupe de contact FNRS « Archéologie des Âges des Métaux ». C'est avec un intérêt tout naturel et un grand plaisir que le Service public de Wallonie (DGO4/Patrimoine/Direction de l'archéologie) avait accepté de prendre en charge l'organisation de deux journées d'échanges, dont une sous la forme d'un colloque international consacré au domaine de « l'archéologie funéraire entre le Rhin et la Seine ».

Les échanges entre les nombreux participants furent, comme à l'habitude, constructifs et nourris. Les débats générés autour de quelques synthèses furent alimentés par des études de cas autorisant questions et pistes d'interprétations nouvelles. Sont encore apparus les limites et les dangers d'une généralisation trop hâtive des phénomènes de peuplement, pour des périodes finalement faiblement documentées et dont les sites de références offrent parfois des contextes discutables sur le plan de la stratigraphie ou des ensembles fermés. Une nécessaire prudence est de mise quand il s'agit d'asseoir typologie et chronologie sur des données anciennes et rarement validées.

L'activité archéologique du SPW en rapport avec la Protohistoire ne se limite pas au contenu des trois communications qui furent présentées en 2012. Parmi les fouilles les plus récentes, on peut mentionner la nécropole de Gouvy « Hastape » (Lx), un important champ d'urnes à Hermalle-Sous-Argenteau (Lg), les marchets de l'époque de La Tène à Érezée/Soy (Lx), tout comme la découverte d'une tombe du premier âge du Fer à Suarlée (Namur) et celle, fortuite, d'éléments de parure à Sinsin (Nr).

L'analyse de ces sites fait partie des priorités de la Direction de l'archéologie et de ses services

extérieurs, tant pour ce qui concerne la fouille et l'étude que pour la conservation/restauration des artefacts découverts. Cela confirme tout l'intérêt que l'Administration régionale, souvent considérée comme simple acteur de l'archéologie préventive, porte à la recherche, protohistorique en particulier. Ces opérations récentes viennent utilement compléter les données anciennes. Nul doute que les études qui en découleront permettront de faire progresser la connaissance de notre territoire wallon, belge et plus largement du nord-ouest de l'Europe, pour les périodes protohistoriques.

À l'instar des Journées de contact Préhistoire, des Journées d'archéologie romaine ou d'*Archaeologia mediaevalis*, des « correspondants » ont été identifiés au sein de la Direction de l'archéologie (C. Frébutte, A. Guillaume, J.-P. Marchal, N. Mees). Ils sont chargés de relayer nos préoccupations et nos travaux vers les partenaires de l'archéologie belge et étrangère, mais aussi d'informer nos collègues en interne quant aux projets de recherche, de publications et de colloques menés sur cette période. C'est donc dans le cadre de cette dynamique positive que la collection « Études et Documents, Archéologie » a, très logiquement, ouvert ses pages à la publication des actes de ce colloque-anniversaire.

Au seuil de cette publication, qui prolonge les résumés publiés en février 2012 dans la série *Lunula. Archaeologica protohistorica*, il m'est un agréable devoir de remercier tous les partenaires de cette opération scientifique dont, évidemment, la Cellule Archéologie des Âges des Métaux et le Groupe de Contact-FNRS Études celtologiques et comparatives (G. Anthoons, I. Bourgeois, J. Bourgeois, V. Hurt, W. Leclercq, L. Van Impe, E. Warmenbol) et surtout Anne Cahen-Delhaye et Guy De Mulder qui ont piloté

le collationnement des textes et les relectures d'usage.

À l'heure où cette publication sortira de presse, l'année de l'archéologie sera lancée en Wallonie, à l'occasion des 25 ans de régionalisation de la compétence. Au sein du programme « Archéo 2014 », tous les publics, avertis ou non, trouveront autant d'activités les invitant à découvrir le patrimoine wallon, de la Préhistoire à nos jours, par le biais de visites de chantiers de fouilles, de balades archéologiques, d'expositions ou de colloques.

Les Journées annuelles de contact « Archéologie des Âges des Métaux » seront certainement un de ces rendez-vous scientifiques supplémentaires, organisé à Bruxelles en 2014.

Souhaitons leur « bon succès » et longue vie à Lunula !

Jean PLUMIER  
Directeur  
Direction de l'archéologie,  
Département du patrimoine/SPW

## AVANT-PROPOS - FOREWORD

ANNE CAHEN-DELHAYE & GUY DE MULDER

Depuis 1992, plusieurs archéologues spécialisés dans l'étude des âges des Métaux en Belgique organisent des rencontres et échanges d'informations sur les recherches récentes. Ainsi chaque année, une journée de communications, fixée un samedi d'hiver, permet de faire connaître les résultats des recherches récentes, tant en matière de fouilles et trouvailles que d'études. Les réunions se sont tenues respectivement à Bruxelles, en Wallonie et en Flandre, avec, à la clef, les actes de ces journées, publiés le jour même de la rencontre et intitulés : *Lunula. Archaeologia Protohistorica*. Cette collection de volumes qui comptabilisent chacun de 80 à 223 pages, reprend le contenu des dizaines de communications auxquelles s'ajoutent encore d'autres contributions sur les âges des Métaux, en Belgique essentiellement.

Pendant deux décennies, ces réunions ont rassemblé plus d'une centaine de participants chaque année, intégrant progressivement des chercheurs étrangers des pays limitrophes. La publication annuelle s'étoffa graduellement avec des articles plus nombreux et plus importants et devint une référence essentielle pour les chercheurs spécialisés dans ce domaine.

Pour marquer les dix premières années d'existence de notre groupe d'archéologie protohistorique, un colloque de deux jours avait été organisé en 2002 par Jean et Ignace Bourgeois et Bart Cherretté à Bruxelles, avec le soutien de l'Académie royale flamande des Sciences et des Arts de Belgique. Il fut consacré aux communau-

tés des âges du Bronze et du Fer dans le nord-ouest de l'Europe et plus particulièrement aux échanges ; les orateurs étrangers purent publier les synthèses présentées à cette occasion dans un volume paru l'année suivante qui contenait bon nombre de contributions dévolues aux habitats<sup>1</sup>.

Pour fêter dignement la vingtième rencontre de notre Cellule Archéologie des Âges des Métaux, nous avons voulu réitérer l'extension de notre colloque annuel, en organisant un colloque international d'un jour et demi, en plus d'un après-midi d'exposés sur l'archéologie protohistorique de Belgique<sup>2</sup>. Nous avons choisi une thématique consacrée à « l'Organisation de la mort aux âges des Métaux dans le nord-ouest de l'Europe », en mettant en évidence les synthèses des recherches des vingt dernières années.

Le Directeur de la Direction de l'archéologie du Département du patrimoine (SPW/DGO4) a accepté avec enthousiasme d'accueillir et de soutenir activement cette manifestation. Ainsi, pour réaliser ce colloque, nous avons bénéficié d'un appui important de la Direction de l'archéologie qui en a financé une bonne partie de l'organisation matérielle en nous offrant la mise à disposition d'un prestigieux bâtiment réservé aux colloques ainsi que les buffets. Mais surtout, nous avons bénéficié du concours de la cellule « Events » (SPW/DGO4), qui a assuré la gestion des inscriptions, qui a mis sur pied le site internet, en plus de nous accueillir et de nous offrir un encadrement très professionnel. À cet effet, nous tenons à remercier tout particulièrement Marc Schepers, Isabelle Henry et leur équipe pour leur contribution à l'organisation de cette

<sup>1</sup> BOURGEOIS J., BOURGEOIS I. & CHERRETTÉ B., 2003. *Bronze Age and Iron Age Communities in North-Western Europe*, Brussel (Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten), 300 p.

<sup>2</sup> Comme à l'accoutumée, les exposés et autres contributions ont fait l'objet d'une publication *Lunula. Archaeologia protohistorica*, XX, Beez (Namur/Namen) 24-25.02.2012, qui compte pas moins de 206 pages.

rencontre. Enfin, le Directeur de la Direction de l'archéologie du Département du patrimoine (SPW/DGO4), Jean Plumier, nous a offert de publier ce volume des Actes dans leur collection « Études et Documents, Archéologie ».

Nous tenons à remercier tous les collègues qui ont participé activement à ces journées par la présentation de leurs exposés devant un auditoire qui comptait quelque 130 participants. Parmi les orateurs, plusieurs spécialistes de France, des Pays-Bas et du Royaume-Uni ont accepté de faire le déplacement pour nous présenter la synthèse de leurs recherches qu'ils ont reprise dans ce volume.

C'est au nom de tous les collaborateurs de notre groupe d'archéologie protohistorique, et plus particulièrement Jean Bourgeois, Eugène Warmenbol et Véronique Hurt qui ont activement participé à la préparation et à l'organisation de ce colloque, que nous avons le plaisir de réunir treize contributions originales dans ce volume.

Since 1992 several Belgian archaeologists, specialised in the study of the Metal Ages, organise annual meetings to exchange information about the current research on this period. Every year, on a Saturday in the winter, this annual meeting offers the opportunity to present recent research. These meetings are held alternately in Brussels, Wallonia and Flanders and include the proceedings of these meetings, published the same day of the conference titled : *Lunula. Archaeologia protohistorica*. This collection of volumes, which counts between 80 to 223 pages in each volume, covers lectures presented at the conference as well as other papers about the Metal Ages, mostly in Belgium. Since more than two decades, more than 100 participants gathered every year for these meetings. Progressively, researchers from the neighbouring countries attended also these conferences. In the same time, the annual pub-

lication knew gradually a rise in the number of papers and became an important reference point for researchers of the Bronze and Iron Ages.

To celebrate the 10<sup>th</sup> anniversary of the functioning of our protohistoric group, a two-days conference was organised in 2002 in Brussels by Jean and Ignace Bourgeois and Bart Cherretté, supported by the Royal Flemish Academy of Belgium for Sciences and the Arts. This meeting was dedicated to Bronze and Iron Age societies in northwestern Europe and specifically to exchanges between these societies. The foreign speakers could publish their overviews, presented on this occasion, in a volume published the next year, which counted also a series of papers on settlements<sup>3</sup>.

To worthily celebrate the 20<sup>th</sup> meeting of our Cell Archaeology of the Metal Ages, we wished to repeat the extension of our annual meeting by organising an international conference of one and a half day accompanied in the afternoon by lectures on the protohistoric archaeology in Belgium<sup>4</sup>.

For this celebration of the 20 years of existence of our Contact Group, we have chosen a topic dedicated to « The organisation of death during the Metal Ages in northwestern Europe ». Different overviews of the research during the last 20 years on this topic were presented on this meeting.

The director of the « Direction de l'archéologie du Département du patrimoine (SPW/DGO4) » hosted us with enthusiasm and supported actively this meeting.

To organise this conference we benefited from a significant support from the « Direction de l'archéologie », who financed an important part of the practical organisation of this meeting. They offered us the use of a prestigious building, reserved for their seminars and also the catering. Especially, we were assisted by the cell « Events » (SPW/DGO4), who was respon-

<sup>3</sup> BOURGEOIS J., BOURGEOIS I. & CHERRETTÉ B., 2003. *Bronze Age and Iron Age Communities in North-Western Europe*, Brussel (Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten), 300 p.

<sup>4</sup> As usual, these lectures and other papers have been published in *Lunula. Archaeologia protohistorica*, XX, Beez (Namur/Namen) 24-25.02.2012, which counts no less than 206 pages.

sible for the registration and the creation and maintenance of a website. They welcomed us and offered us their professional support. Especially, we wish to thank Marc Schepers, Isabelle Henry and their team for their part in the organisation of this meeting. Finally, Jean Plumier, director of the « Direction de l'archéologie du Département du patrimoine (SPW/DGO4) », offered us the possibility to publish the proceedings of this meeting in their series « Études et Documents, Archéologie ».

We wish to thank all the colleagues who actively contributed at this meeting by the pre-

sentation of their papers before an audience of about 130 participants. Among the speakers, several experts from France, the Netherlands and the United Kingdom accepted to make the trip to present a synthesis of their research, which are included in this volume.

In name of all the collaborators of our Proto-historic Archaeology Group and specifically Jean Bourgeois, Eugène Warmenbol and Véronique Hurt, who actively participated in the preparation and the organisation of this meeting, we have the pleasure to present you in these proceedings 13 original papers.

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# INHUMATION BURIALS : NEW ELEMENTS IN IRON AGE FUNERARY RITUAL IN THE SOUTHERN NETHERLANDS

PETER W. VAN DEN BROEKE<sup>1</sup>

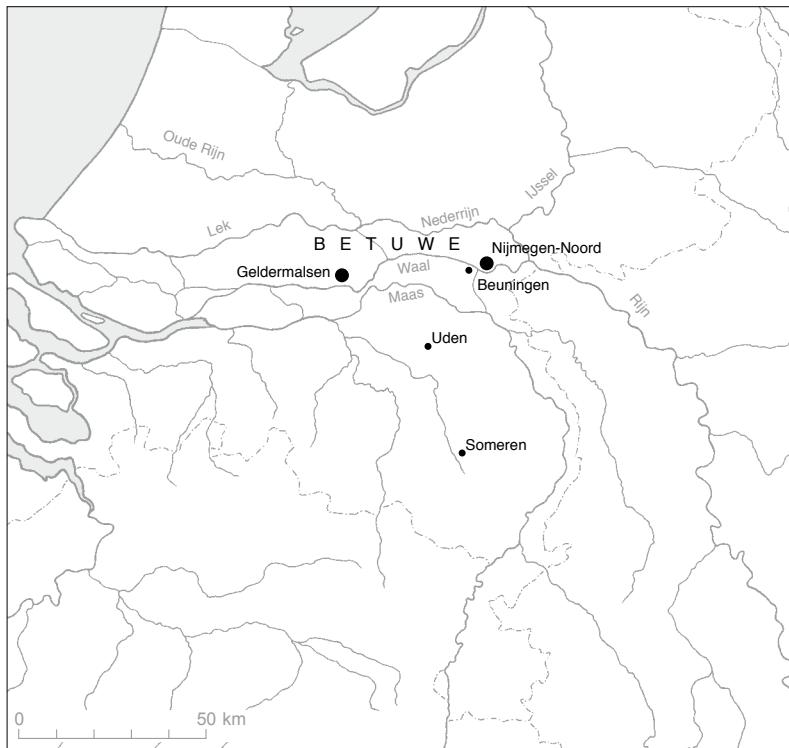
Fig. 104

Map of the central and southern Netherlands showing site clusters and individual sites with Early and Middle Iron Age inhumation burials.

Drawing : P. van den Broeke/R. Mols  
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Twenty years ago, when the first « Lunula-day » was organized in Brussels, the Iron Age urnfields of the Netherlands and lower Belgium were still exclusively populated with *cremated* inhabitants of that area. Today we know of some dozens of inhumation burials, most of them found in the river area in the central Netherlands. This contribution will focus on these newly discovered elements of Iron Age burial ritual. The primary concern will be to describe patterns in

geographical distribution and time range. And when it comes to the question what the explanation could be for these « aberrant » burials, it is of course tempting to discuss the possibility that we are not dealing here with local developments in burial customs, but with the burial ritual of immigrants. Although there are not, at the moment, definite answers to this question, here also some first thoughts about recent results of strontium isotope analysis on Iron Age skeletons are presented.



## 1. Geographical distribution of Iron Age inhumation burials

Since about 1100 BC, the beginning of the Late Bronze Age, for a millennium or more cremation became the standard ritual for disposal of the body after death. In an area comprising at least the northern and southern Netherlands<sup>2</sup>, lower Belgium and the adjacent parts of Germany, covering or interring cremation remains was the one and only burial tradition<sup>3</sup>. Depositing corpses in peat bogs, as was repeatedly performed in areas north of the Rhine (e.g. VAN DER SANDEN, 1995, 2005), cannot be considered to have been part of a common burial ritual. This practice seems to have been principally restricted to those considered offenders and to those who were sacrificed to the gods, statuses which may repeatedly have been combined in the same person.

<sup>1</sup> Gemeente Nijmegen, Bureau Archeologie en Monumenten, Postbus 9105, NL-6500 HG, Nijmegen ; courriel : p.van.den.broeke@nijmegen.nl.

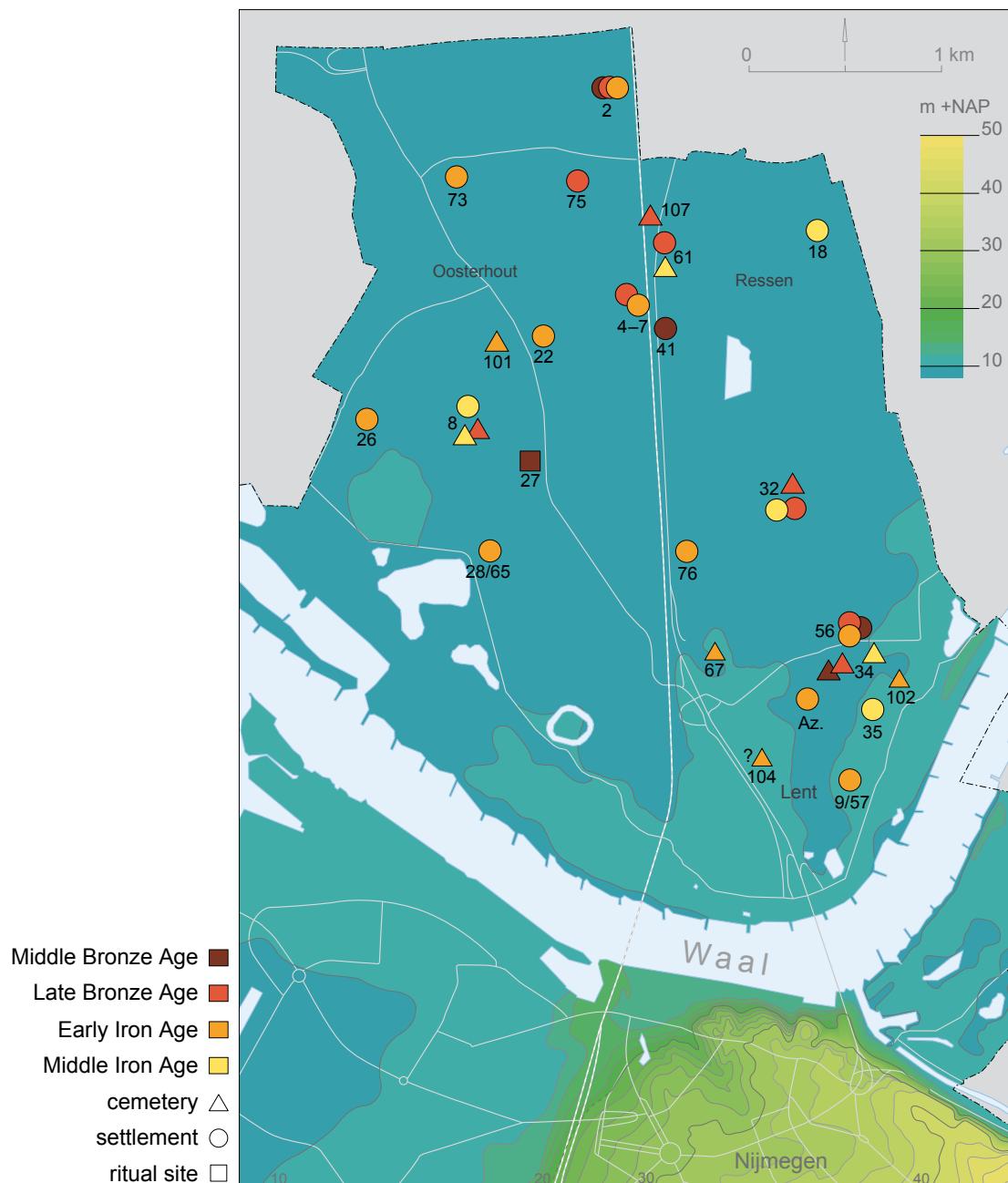
<sup>2</sup> But excluding the whole coastal zone of the western and northern Netherlands. A supposedly Late Iron Age cremation cemetery without urns at The Hague-Oude Waalsdorperweg eventually turned out to date from the transition Middle/Late Bronze Age, on basis of three recently produced <sup>14</sup>C dates for cremated bone (BULTEN, 2007 and pers. comm. E. Bulten, archaeological dept. municipality of The Hague).

<sup>3</sup> For general literature on this subject concerning the Netherlands see HESSING & KOOI, 2005. For inventories see GERRITSEN, 2001, app. 2 ; HIDDINK, 2003, bijlage 2. See VAN BEEK & LOUWEN, 2012 and VERLINDE & HULST, 2010 for recent additions of cemeteries on a regional scale. Special attention may also be devoted to the newly discovered cemeteries dating to the second half of the Middle Iron Age and to the Late Iron Age, a time span that was hardly known until now with respect to the burial ritual (e.g. GERRETS & DE LEEUWE, 2011 ; HIDDINK, 2003, table 1 ; HIDDINK, 2006 ; HIDDINK & DE BOER, 2011, esp. p. 135 ff. ; MEURKENS & TOL, 2011 ; TOL, 2009).

When considering the thousands of graves in the urnfields and younger cremation cemeteries in the above-mentioned regions, some dozens of inhumation burials are seemingly insignificant. It is, however, remarkable that some geographical clusters can be indicated and that inhumation burials constitute a fair share in comparison with the cremation burials in some cemeteries, even amounting to a fifty-fifty rate. Clustering in the Betuwe is so strong that we can postulate that each cemetery of more than minimal size dating from the Early Iron Age (800-500 BC) and the

first half of the Middle Iron Age (500-375 BC) here has one or more inhumation burials.

In the following part a survey will be presented of the hitherto known Iron Age inhumation burials that can be considered as regular burials, especially because they have been found in combination with cinerary graves. For a start, the attention will be turned to those burials that form regional clusters (fig. 104). They are situated in the northern extension area of the municipality of Nijmegen, as well as in the municipality of Geldermalsen. Both



lie in the Betuwe region, between the two main branches of the Rhine in the delta region, being Lek/Nederrijn (Lower Rhine) and Waal.<sup>4</sup>

## 2. Nijmegen-Noord

In the 1990's, the municipality of Nijmegen was allowed to extend its territory across the river Waal for the realisation of a building programme called « Waalsprong ». The village of Lent was the only population cluster in this northern part of Nijmegen, which also comprised the outskirts of the villages of Oosterhout and Ressen. The — still continuing — fieldwork of the municipal archaeological service relating to this building programme has yielded dozens of new settlements and cemeteries. In figure 105 only the excavated sites dating from the period Middle Bronze Age-Middle Iron Age have been plotted.

Fig. 106

Oosterhout  
« De Eeuwige Lente ».  
Double burial, in both  
cases possibly male.  
The grave pit could  
not be recognized.

Drawing : R. Mols  
© BAMN

In the Late Bronze Age burying cremation remains with or without an urn was the standard practice for the disposal of the dead here, resulting in urnfields of modest dimensions, with some dozens of pits as a maximum. In addition to the 4 Late Bronze Age urnfields without any inhumations

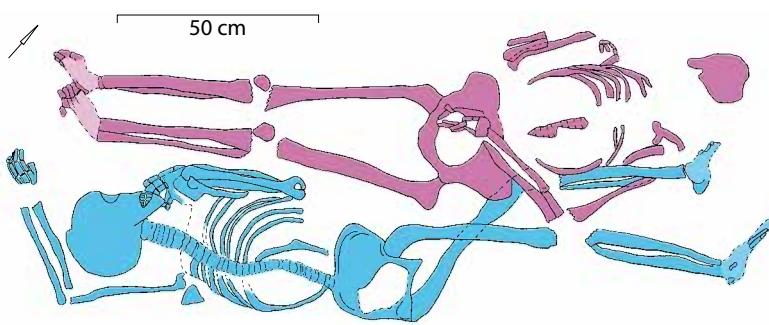
burials 5 cemeteries dating from the Early Iron Age and the beginning of the Middle Iron Age have been discovered. These Iron Age cemeteries contain at least some inhumation graves next to the cinerary graves. They are presented here in a nutshell, more or less in chronological order<sup>5</sup>. Emphasis is laid here on the grave goods, because they provide us with extra clues to recognize the cultural identity of the deceased when the question of immigration comes up for discussion.

### Oosterhout « De Eeuwige Lente » (site 101)<sup>6</sup>

In a completely documented cemetery from the earlier part of the Early Iron Age, not only 27 cremation burials have been excavated, but also 3 inhumation burials, situated in the western margin of the cemetery. Two of the deceased, possibly both males, had been buried in the same pit (fig. 106). The other grave contained the badly preserved skeleton of a gracile individual, aged 17-25 years, possibly female<sup>7</sup>. Just above the right hip lay an iron ring (outer diameter 6,5 cm), similar to the one belonging to the woman in grave 5 in the cemetery Lent « Lentseveld » shown in figure 110.

### Lent « Steltsestraat » (site 102)<sup>8</sup>

Fifteen Early Iron Age inhumation graves lay intermingled with 17 cinerary graves in a cemetery that probably has only partly been excavated until now (fig. 107). Among the inhumed persons was a 25-40 year old woman who had been buried face downwards, with a bronze spiral-ring on



<sup>4</sup> It should be added here that these branches already existed then, but had different courses (BERENDSEN & STOUTHAMER, 2001). Besides, there were many oxbows, which made the landscape less uniform than it is today, but a common characteristic, then and now, is the fact that the Betuwe region is a river plain between the remains of ice-pushed ridges.

<sup>5</sup> Between 1996 and 2004 in the Waalsprong area only fieldwork was financed. This resulted in a series of excavations still to be published. Most of the features presented here are therefore based on documentation of the Bureau Archeologie en Monumenten of the municipality of Nijmegen and author's observations during fieldwork. Overviews are presented in VAN DEN BROEKE (2002) and VAN DEN BROEKE & BALL (2012). The only cemetery dating to the second half of the Middle Iron Age, containing just cremation graves, has been discovered at site n° 8 in figure 105 (VAN DEN BROEKE, 2006).

<sup>6</sup> Unpublished. After a first fieldwork campaign a preliminary note was presented in VAN DEN BROEKE (2002, p. 27).

<sup>7</sup> Nearly all sex and age determinations of skeletons found in Nijmegen-Noord were performed by E. Smits (Smits Antropoligisch Bureau). In many cases, however, the outcome is still provisional (notably Lent « Steltsestraat »). For that reason sex and age determinations are only incidentally mentioned in this contribution.

<sup>8</sup> Only the two cremation graves from a second fieldwork campaign could be properly published (VAN DEN BROEKE, 2008). See also VAN DEN BROEKE (2002, p. 28 ; 2005) ; VAN DEN BROEKE & HESSING (2005).

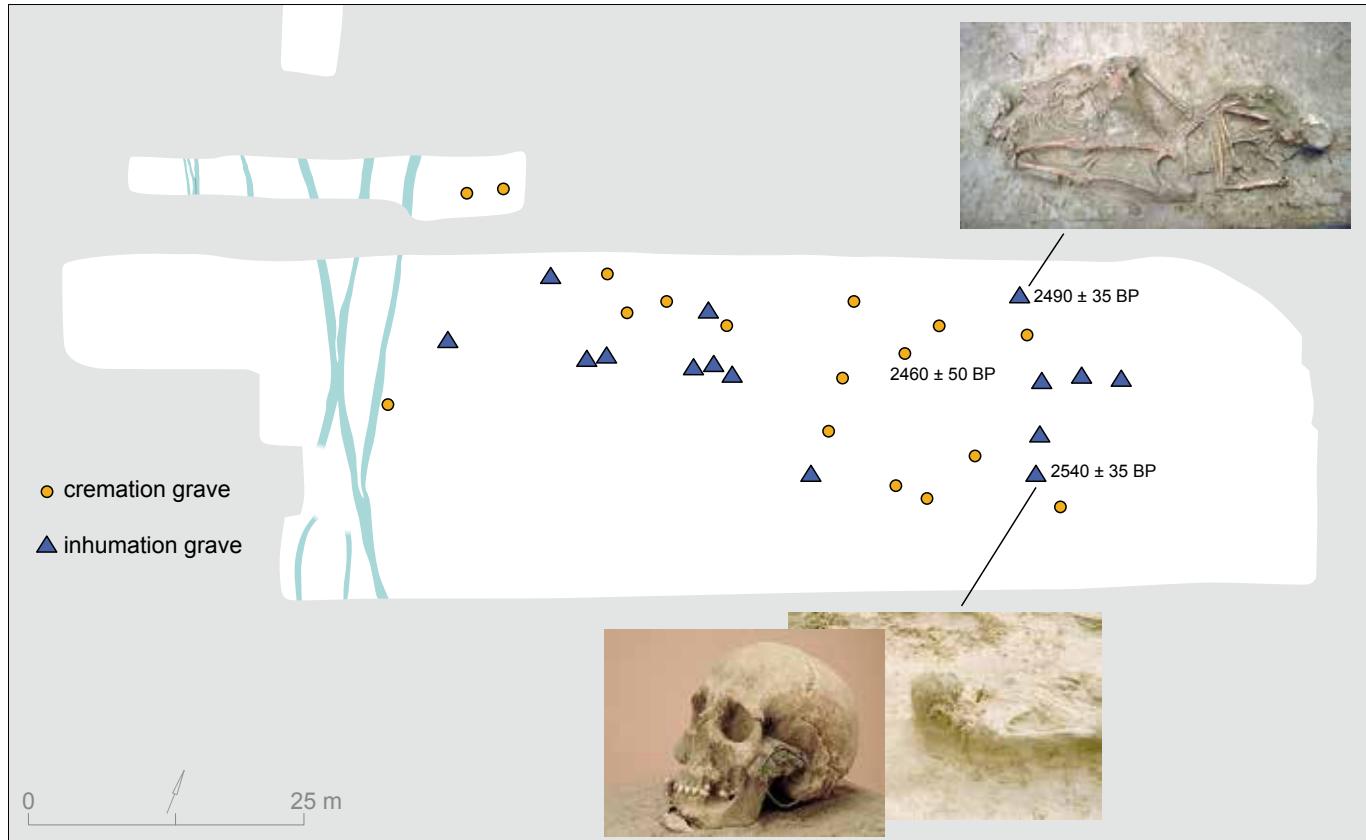


Fig. 107

Early Iron Age cemetery at Lent « Steltsestraat ».  $^{14}\text{C}$  dates from cremated bone (1  $\times$ ) and uncremated bone (2  $\times$ ).

Drawing and photographs : R. Mols ; photograph right lower corner C. Ginnap © BAMN

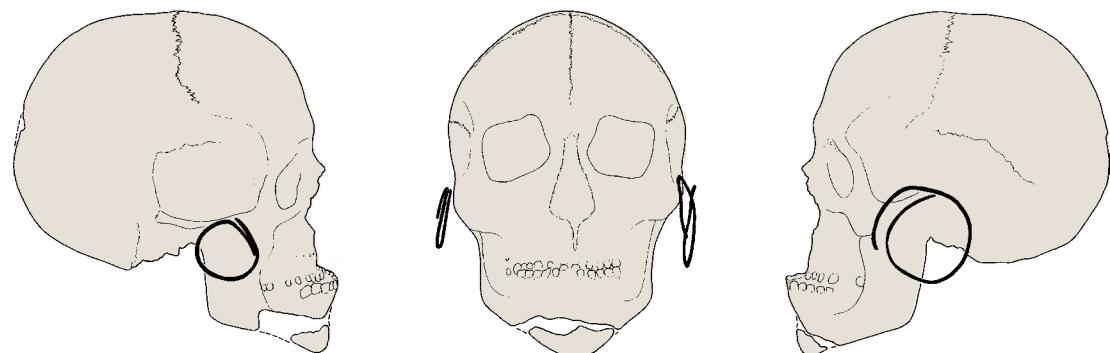


Fig. 108

Lent « Steltsestraat ». Early Iron Age woman with spiral-rings on both sides of the head.

Drawing : A. Simons © BAMN

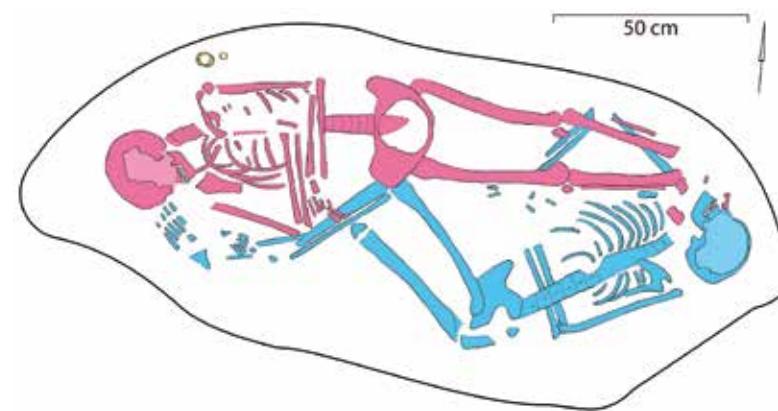


Fig. 109

Lent « Steltsestraat ». Burial of a man and a woman, about 25-35 years of age. The woman (red) was accompanied by three ornaments of twisted bronze wire, found near the left shoulder.

Drawing : A. Simons © BAMN

both sides of the skull (fig. 107 [bottom], 108). It is not sure that they have been worn as hair rings or earrings. They might as well have hung from a hood or a headlace (HEYNOWSKI, 1991, p. 45 ; 1992, p. 80-81). Similar ornaments, together with a smaller bronze ring, accompanied the woman who had been laid stretched on her back, after a man of about the same age (25-35) had been buried more or less face downwards in the same grave (fig. 107 [top], 109). Apart from a single small (finger ?) ring in the grave of possibly a woman, the remaining 12 inhumation burials are without any ornaments or other grave goods. Although sex and age determinations could not be carried out exhaustively until now, it is clear that only one or two children are among these burials.

#### Lent « Lentseveld » (site 67 ; VAN DEN BROEKE & DANIËL, 2011)

In a small cemetery that appears to have been excavated completely, there were four inhumation

burials among eight cremation graves<sup>9</sup>. At least two, but possibly all inhumed persons were females. One of the possible women was buried face down (grave 2). The female in grave 5 may originally have worn six head ornaments, four of which have been recovered (fig. 110). More intriguing than elegant is the iron ring lying above the left hip. It does not appear to have been an ornament, nor a buckle. It was constructed in an extraordinary way, as two D-shaped halves have been set together. Possibly some organic material, like textile, had been clamped between the two parts.

#### Ressen « Zuiderveld-noordoost » (site 61 ; BALL & DANIËL, 2010)

Here a first test trench has been dug through a site which comprises an Iron Age cemetery as well as a Late Bronze Age and native Roman settlement. One of the two inhumation graves may already date from the Early Iron Age (grave 2), although the <sup>14</sup>C date is not conclusive in this

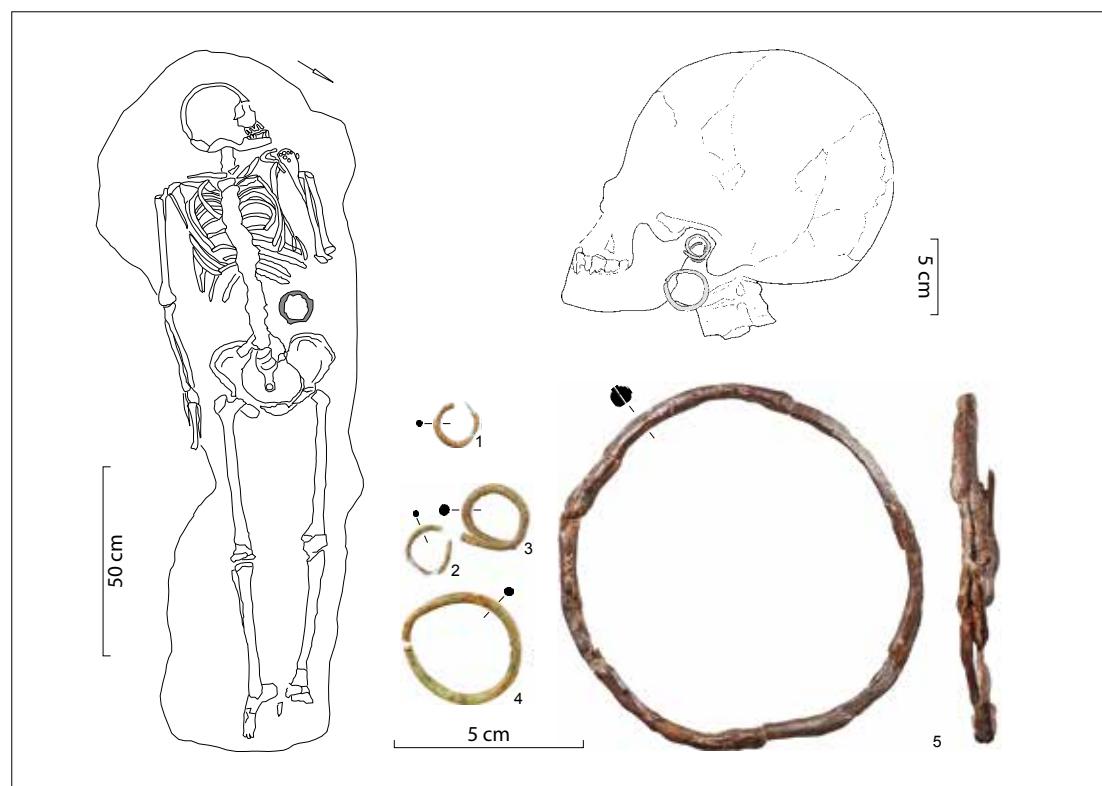


Fig. 110

Lent « Lentseveld ».  
Woman in grave 5  
with bronze head  
ornaments (1-4) and  
iron ring (5).

Photographs : R. Mols ;  
drawing skull :  
M. Verhoeven ; drawing  
skeleton : T. van der  
Weijden © BAMN

<sup>9</sup> It may, however, have included more cremation graves than the eight known pits. In several cases only the lowest part had been preserved. Other pits with cremation remains may have been completely destroyed. Corpses were interred at a lower level.

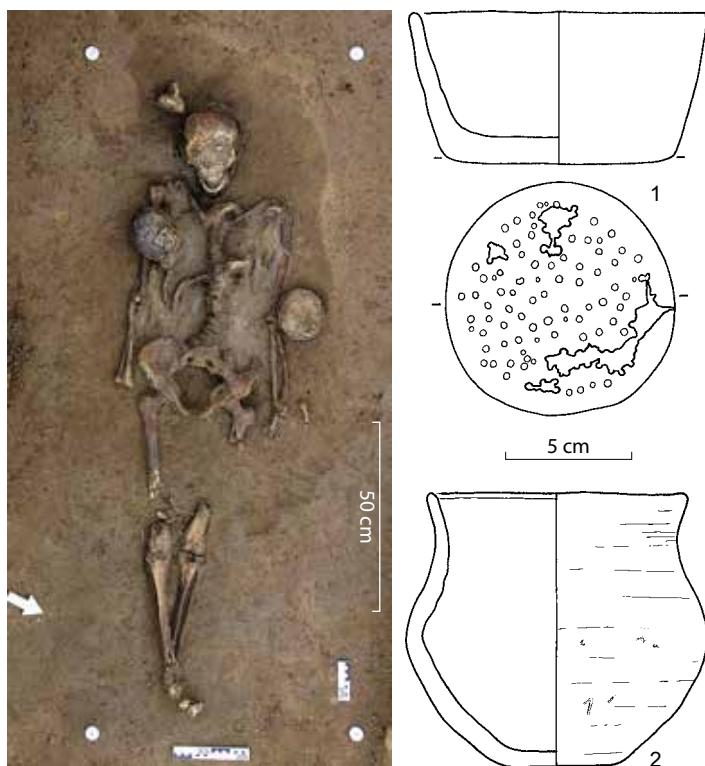


Fig. 111

Ressen « Zuiderveld-noordoost ». Female burial with two pieces of pottery as grave gifts. The left upper leg has been scattered by the digging of a post-hole.

Photograph : R. Mols ;  
drawing : A. Simons  
© BAMN

respect (table 6). Close to this man, however, half of a bronze Early Iron Age horse bit was deposited in a small pit. The woman in the other grave (grave 1) probably dates from about 400 BC. She was accompanied by two pieces of pottery, one of which may have been a cheese mould, a type of pottery introduced in the 5<sup>th</sup> century BC (fig. 111). This cemetery was still in use in the 4<sup>th</sup> or 3<sup>rd</sup> century BC, as can be concluded on basis of a <sup>14</sup>C date for one of the four cremation graves<sup>10</sup>.

### Lent « Laauwijkstraat-zuid » (site 34)<sup>11</sup>

The successor of the « Steltsestraat » cemetery may be the small one that was discovered at a distance of only 250 m, and dating from about the (6<sup>th</sup>-)5<sup>th</sup> century BC. The graves were in an area where, about a century earlier, granaries

N°	Site	Context	Sample material	Laboratory n°	Result	Calibrated (2 σ)
<b>Nijmegen-Noord</b>						
1	Lent « Lentseveld »	grave 2	bone collagen	GrA-47313	2510 ± 35 BP	791-519 calBC
2	Lent « Lentseveld »	grave 6	bone collagen	GrA-47272	2455 ± 40 BP	756-411 calBC
3	Lent « Lentseveld »	grave 5	bone collagen	GrA-47271	2425 ± 40 BP	752-401 calBC
4	Lent « Steltsestraat »	grave 8.2	bone collagen	GrA-18410	2540 ± 35 BP	801-541 calBC
5	Lent « Steltsestraat »	grave 2.2	bone collagen	GrA-18408	2490 ± 35 BP	780-417 calBC
6	Ressen « Zuiderveld »	grave 2	bone collagen	GrA-45271	2485 ± 40 BP	774-416 calBC
7	Ressen « Zuiderveld »	grave 1	bone collagen	GrA-45274	2360 ± 40 BP	732-372 calBC
8	Lent « Laauwijkstraat-zuid »	grave 5.P10	bone collagen	GrA-11992	2350 ± 50 BP	747-232 calBC
9	Lent « Schoolstraat »	grave 1	bone collagen	GrA-18397	2490 ± 35 BP	780-417 calBC
<b>Geldermalsen</b>						
10	Geldermalsen « Middengebied »	grave 4	bone collagen	UtC6094 2475	2475 ± 38 BP	767-415 calBC
11	Meteren « De Plantage »	inhum. burial 2	bone collagen	SUERC-37117	2470 ± 30 BP	763-416 calBC
12	Meteren « De Bogen »	burial 5	bone apatite	GrA-16055	2360 ± 50 BP	750-258 calBC
13	Meteren « De Bogen »	burial 5	dental enamel	GrA-16517	2300 ± 50 BP	508-203 calBC
14	Meteren « De Bogen »	burial 6	bone apatite	GrA-14294	2320 ± 30 BP	482-233 calBC
15	Meteren « De Bogen »	burial 6	dental enamel	GrA-16057	2280 ± 60 BP	506-178 calBC
16	Uden « Slabroekse Heide »	inhum. burial 1	charcoal	GrA-48681	2470 ± 35 BP	763-415 calBC
17	Uden « Slabroekse Heide »	inhum. burial 1	charcoal	GrA-51473	2465 ± 30 BP	760-414 calBC
18	Uden « Slabroekse Heide »	inhum. burial 1	charcoal	GrA-51471	2430 ± 30 BP	750-403 calBC
19	Uden « Slabroekse Heide »	inhum. burial 1	charcoal	GrA-32776	2430 ± 15 BP	729-409 calBC
20	Uden « Slabroekse Heide »	inhum. burial 1	charcoal	GrA-51443	2425 ± 30 BP	749-402 calBC
21	Uden « Slabroekse Heide »	inhum. burial 1	charcoal	GrA-51475	2425 ± 30 BP	749-402 calBC

<sup>10</sup> 2235 ± 35 BP for cremated bone. The pit also comprised an iron belt hook.

<sup>11</sup> Only provisionally published (e.g. VAN DEN BROEKE, 2002, p. 22 ; see also VAN DEN BROEKE & HESSING, 2005).

had been standing, and where afterwards, in the Roman period, ditches had been dug (fig. 112). This cemetery consisted of at least five cremation burials and four skeletons. One of these graves again comprised a double burial, in this case the upper deceased lying face downwards, with her or his left arm lying flexed on the neck. Below

and crosswise to this individual lay a man of 40-60 years old (fig. 113). His skull shows three bronze ornaments in a way that is still unparalleled (fig. 114), but explicit enough to have his appearance illustrated (fig. 115). Apart from two plait-rings he wore an earring that may even have been rolled in his auricle.

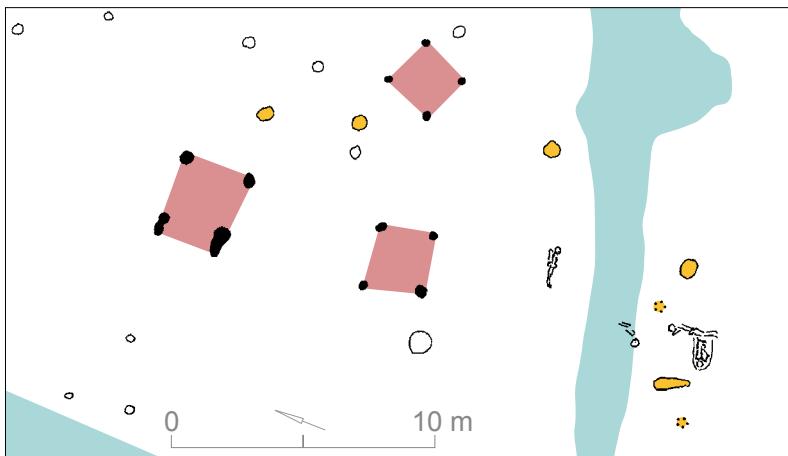


Fig. 112

Small (Early-)Middle Iron Age cemetery at Lent « Laauwijkstraat-zuid » with cremation graves (orange) and inhumation graves among the features of older granaries. In the Roman period one of the skeletons has been disturbed when a ditch was dug (blue).

Photograph : R. Mols  
© BAMN

Fig. 113

Lent « Laauwijkstraat-zuid ». Double burial.  
Photograph : © BAMN

Fig. 114

Lent « Laauwijkstraat-zuid ». Skull of the lower burial, with bronze ornaments.

Drawing : A. Simons  
© BAMN

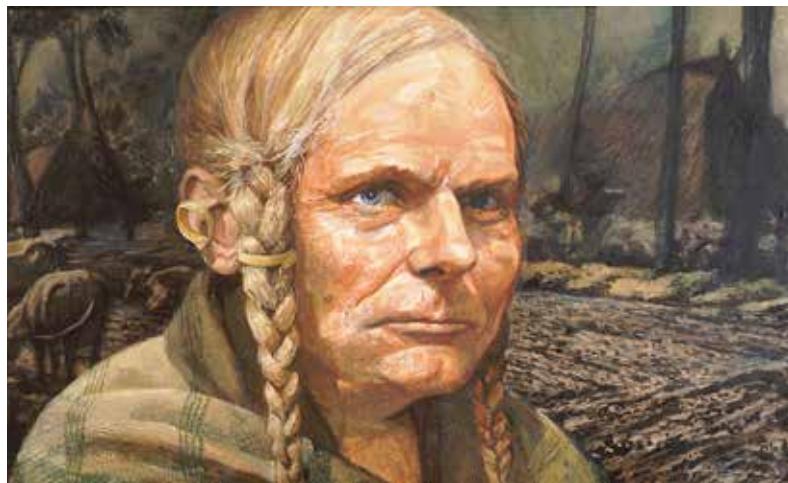


Fig. 115

Lent « Laauwijkstraat-zuid ». Artist's impression of the Middle Iron Age man with ornaments.

Drawing :  
© Kelvin Wilson

In this context it is also appropriate to mention a single burial from Lent « Schoolstraat » (site 104)<sup>12</sup>. It is a flexed burial from a small civil building trench. This grave may be part of a cemetery, as there is an old newspaper-article, mentioning the find of a skeleton at the opposite site of the street.

### 3. Geldermalsen

Prehistoric settlements as well as barrows have been found in this municipality in the context of the archaeological research conducted along the scheduled track of the *Betuweroute*, a railway line that intersects the Betuwe region from west to east. Beside these works, excavations relating to domestic building programmes have had similar results. Until now no Late Bronze Age cemeteries are known in the whole Rhine delta west of Nijmegen-Noord, which leaves us without information about the developments in funerary ritual in this area.

#### Geldermalsen « Middengebied » (HULST, 1999)

This cemetery, also known as Geldermalsen « Murman », was the first one with inhumations that was discovered in the Netherlands (1992). Together with 16 cremation burials seven graves

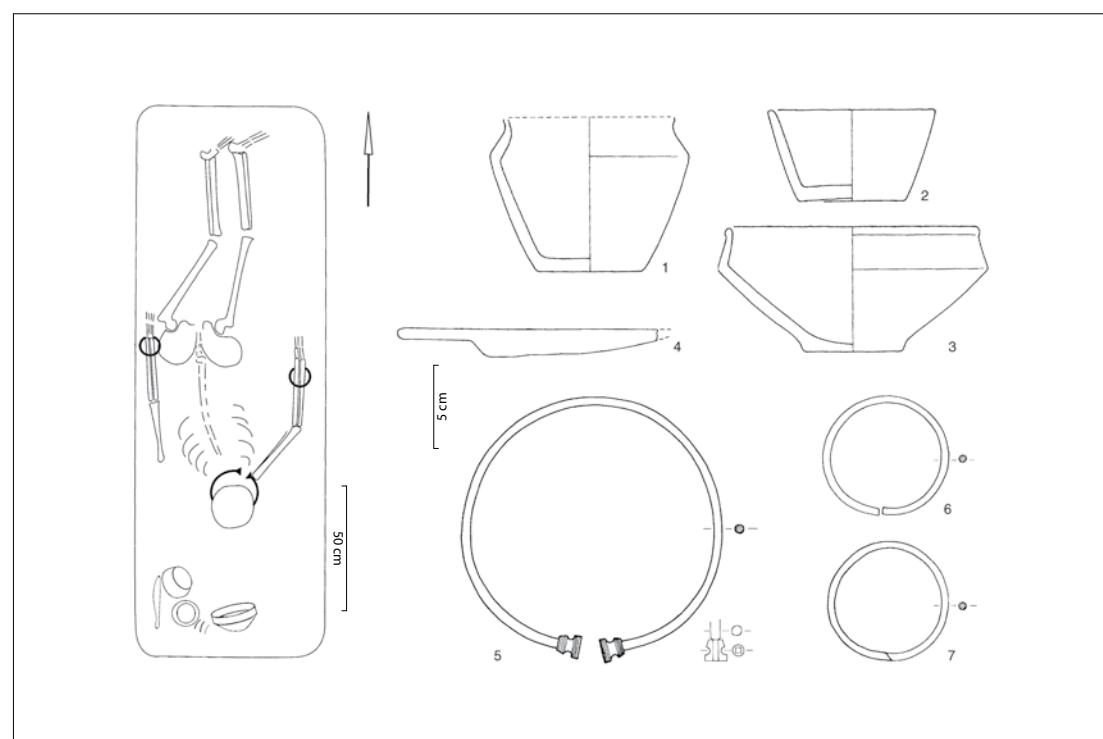


Fig. 116

Geldermalsen « Middengebied ». Burial 1, containing the skeleton of a woman. 1-3 : pottery ; 4 : iron knife ; 5-7 : bronze torc and bracelets (adapted from HULST, 1999, p. 45, fig. 4).

<sup>12</sup> Provisionally published in VAN DEN BROEKE (2002, p. 29).

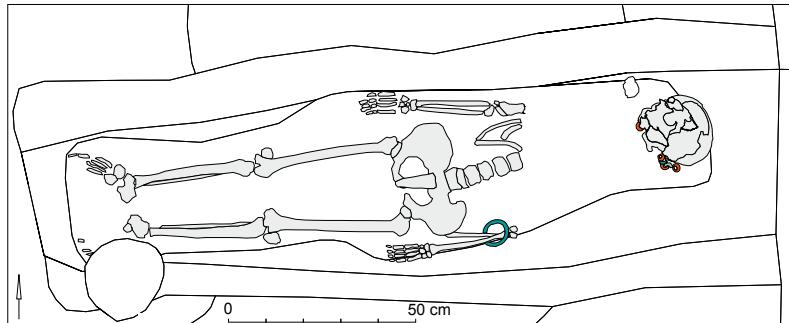


Fig. 117

Meteren « De Plantage ». Find situation of the female burial. The chest and upper arms have recently been disturbed (adapted from JEZEER, 2011, p. 14, fig. 3 ; © ADC).

containing skeletons were excavated, spatially more or less separated from the cremation pits. All graves are thought to date from the Middle Iron Age. They were adults of both sexes and also children. The individuals were deposited in the grave pits in varying postures.

The most remarkable burial is that of a woman of about 34-40 years old, accompanied by a — for Dutch standards — large number of grave goods (fig. 116). She wore a bronze neck-ring and had a bronze bracelet round each wrist. Three ceramic vessels, an iron knife and a pig's rib had been placed near the woman's head. The pottery shows the strong northern French influences characteristic of the ceramic tradition of the southern part of the Netherlands around the 5<sup>th</sup> century BC, which is known as Marnian pottery.

Only one of the other inhumation burials was accompanied by grave goods. A young person (9-15 years of age) in grave 3 had an iron torque around the neck, a bronze ring with an amber bead in the middle of the face, an indeterminable iron fragment beside the right upper arm and a ceramic spindle whorl between the thighs.

Fig. 118

Meteren « De Plantage ». Head ornaments, composed of bronze and amber (from JEZEER, 2011, p. 12, fig. 1 ; © ADC).

### Meteren « De Plantage »<sup>13</sup>

In a cemetery with 47 cremation graves two inhumation burials were also present. One of these appeared to be of Middle Bronze Age (or early Late Bronze Age) date<sup>14</sup>. The other one is



<sup>13</sup> Provisionally published by JEZEER (2011). Site report : JEZEER & VERNIERS, 2012.

<sup>14</sup> 2940 ± 30 BP. Information on this and other dates was kindly provided by W. Jezeer (Archeologisch Diensten Centrum, Amersfoort). Middle Bronze Age inhumation burials are common phenomena in the Central Netherlands (DRENTH & LOHOF, 2005).

an Iron Age woman aged 30-40 years (fig. 117). Apart from a bronze bracelet on the left arm, she wore head decoration of an unusual kind, at least for northwestern Europe (fig. 118). The ornaments were found in two clusters, on either side of the skull. The seven strips of bronze, six of which bore amber beads, will have been earrings, or possibly hair-rings (fig. 119). It is probable that this grave dates from about the 5<sup>th</sup> century BC (Middle Iron Age).

**Meteren « De Bogen »**  
**(MEIJLINK, 2001 ;**  
**MEIJLINK & KRANENDONK, 2002)**

Two young persons probably dating from the Middle Iron Age were the last individuals to be buried in a barrow that had been used from Late Neolithic times on. Not much was left of the skeleton of the 9-12 year old child in grave 5, but it still had a tin bead and bronze wire containing a bead (amber ?), possibly an earring. The juvenile of about 15-18 years of age in grave 6 had a cattle molar in both (tied ?) hands.

#### 4. Other sites

In the river area there is one more cemetery in which both Iron Age cremation and inhumation burials have been found<sup>15</sup>. It is located 10 km west of Nijmegen, in the municipality of Beuningen. The urnfields on the southern cover sands, on the other hand, contain inhumation burials on a very modest scale. Until now only two inhumation burials have been found there, both in the province of North Brabant. This scarcity cannot be fully ascribed to the acidity of the sandy soil, thereby stimulating the degradation of the skeletons. The mere dimensions of empty burial pits destined for inhumation burials should be a clue to the excavating archaeologist.

**Beuningen « Ewijk », Keizershoeve II**  
**(Blom et al., 2012)**

In a cemetery with at least 14 cremation graves, some of which were enclosed by a ditch, four inhumation burials were found close to each other. Although no grave goods are known and <sup>14</sup>C dates have not been produced, the presence of a square ditch monument, an intersection and some pottery in cremation graves make a Middle Iron Age date more probable than an Early Iron Age date.

**Someren « Waterdael »**  
**(KORTLANG, 1999)**

In an urnfield containing 185 graves and/or burial monuments at Someren, one inhumation burial has come to light. Although little more than a vague silhouette of the deceased had survived in the sandy soil, the burial could nevertheless be dated around the first half of the Middle Iron Age on the basis of the Marne-style bowl that was placed in the grave.

**Uden « Slabroekse Heide »**  
**(JANSEN et al., 2011<sup>a/b</sup> ;**  
**JANSEN & LOUWEN, in prep.)**

More spectacular is the inhumation burial from an urnfield in the heathland near Uden, despite the fact that here, too, only little of the skeleton itself has remained.

Amidst dozens of grave monuments with circular ditches of different dimensions was a burial pit that can hardly have been covered with a barrow (fig. 120). At the bottom of the pit, entrenched almost 2 m deep, and partly filled with charred oakwood, a person had been buried, lying stretched on the back.

The combination of ornaments and other belongings (fig. 121-122) is unprecedented in the context of the burial ritual in the Netherlands : two

<sup>15</sup> In the eastern part of the Betuwe (Huissen) one other inhumation burial has been found that possibly dates from the (Early) Iron Age. It concerns an isolated burial of a two years old child, which does not seem to have been buried in a formal cemetery (ALMA & VAN BENTHEM, 2008).

Fig. 120

Northwestern part of the urnfield at Uden « Slabroekse Heide », with Early Iron Age inhumation burial marked red (adapted from JANSEN *et al.*, 2011<sup>b</sup>, fig. p. 115 ; © Faculty of Archaeology Leiden University/Archol bv).



Fig. 121

Uden « Slabroekse Heide ». Grave goods from Early Iron Age inhumation burial. Apart from an iron pin (left) and an amber bead these are bronze objects (from JANSEN *et al.*, 2011<sup>b</sup>, fig. p. 110 ; © Faculty of Archaeology Leiden University/Archol bv).



Fig. 122

Uden « Slabroekse Heide ». Reconstruction of the buried person (from JANSEN *et al.*, 2011<sup>b</sup>, fig. p. 111 ; © Faculty of Archaeology Leiden University/Archol bv).

bronze ankle rings, three bronze omega-shaped armrings, a long iron pin, as well as a smaller bronze one, an amber bead and two bronze plait-rings. Tweezers combined with a nail-cleaner, also found in the grave, are characteristic for the Hallstatt culture and a unique set in the Netherlands<sup>16</sup>.

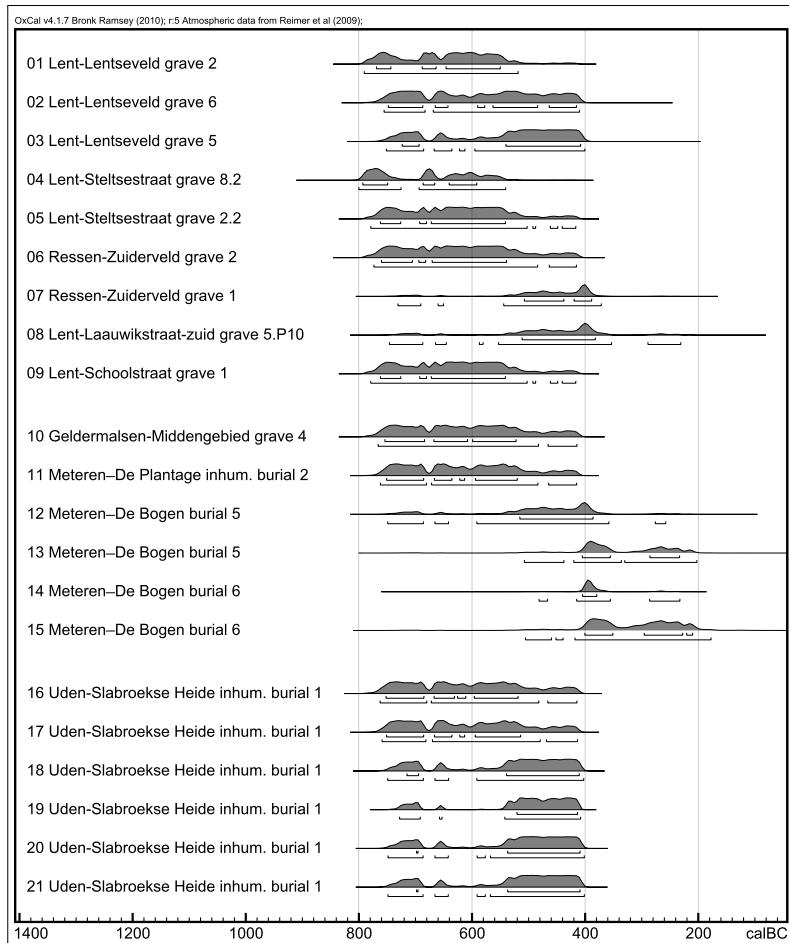
<sup>16</sup> These toilet articles are considered crucial by the authors in the discussion which status this person had in gender terms, as it generally – but not in every case – occurs in male graves.

## 5. Chronology

Considering the period during which the practice of inhumation burial took place, it is obvious that in the area of the *Niederrheinische Grabhügelkultur* there is no clear trace of this type of funerary ritual in the three centuries of the Late Bronze Age (1100-800 BC)<sup>17</sup>. From the foregoing paragraph it may already be concluded that the Early Iron Age and the first half of the Middle Iron Age are envisaged here. Now the moment has come to try and reduce the time span of the inhumation ritual, by combining <sup>14</sup>C dates with the characteristics of the cremation graves in the same cemeteries and the typochronology of grave goods found with the inhumation burials.

Fig. 123

Calibrated <sup>14</sup>C dates for regular Early and Middle Iron Age inhumation burials in the Netherlands, arranged by site (cluster) and date BP (OxCal v4.1.7 ; BRONK RAMSEY, 2010 ; adapted by R. Mols, BAMN).



There is a set of <sup>14</sup>C dates available that convinces us that the chronological emphasis lies in the period between 800 and 400 BC (table 6 and fig. 123, 124)<sup>18</sup>. And there is little doubt that this type of funerary ritual was practiced around 400 BC, considering grave 1 of Geldermalsen « Middengebied ». As a corollary of the uncertainties created by the « Hallstatt plateau » in the calibration curve it is, however, hard to discriminate within the range covered by most of the <sup>14</sup>C dates, from ca. 800 to 400 BC. A few dates (n<sup>rs</sup> 1, 4, 5 and 9) do however suggest that this practice originated in the Early Iron Age. There are, moreover, indications that the emphasis within the Early Iron Age lies in the second half of that period (650-500 BC). This hypothesis is based primarily upon the character of the cremation graves in the same cemeteries as the inhumation graves, especially the way in which pottery was used in the cremation ritual. They indicate dissimilarities that can be interpreted chronologically, as will be elaborated below.

It is common knowledge that in the later prehistory of the southern Netherlands there is a trend starting in the Late Bronze Age with cemeteries with a fair amount of urn graves, beside clean concentrations of cremated bone and ending in the Late Iron Age with cemeteries showing a dominance of cremation graves with hardly more than dispersed pyre remains, deposited in a pit or just covered with a small barrow (HESSING & KOOI, 2005). At least in Nijmegen-Noord an intermediate phase can be indicated during which pottery of urn size was placed at or near the pyre, and remaining sherds accompanied the ashes into the burial pit. This phase may provisionally be dated around 650/600-550/500 BC. Gently S-shaped pots in Harpstedt-style were rather frequent then. The cemetery of Lent « Lentseveld » is a perfect example, whereas in Lent « Steltsestraat » at least one unburned pot was present beside some burned pottery (fragments) in other cremation graves. Burned frag-

<sup>17</sup> For burial 3 in the barrow of Meteren « De Bogen » there are, however, two <sup>14</sup>C dates, both  $2760 \pm 60$  BP (bone apatite and dental enamel), as well as  $1510 \pm 90$  BP (!; bone collagen). See LOHOF, 2003 ; MEIJLINK, 2001 and – on the other hand – LANTING & VAN DER PLICHT, 2001-2002, p. 198-201 for dissimilar interpretations concerning these and two other dates related to this same burial ( $3150 \pm 45$  and  $3070 \pm 45$  BP ; cereals) and concerning the attribution of a Middle Bronze Age rapier to this burial.

<sup>18</sup> In case of Meteren « De Bogen » bone collagen samples of two burials from the barrow did not meet the expectations. In case of burial 6 this sample gave  $1480 \pm 60$  BP (MEIJLINK, 2001, table 1), which date is too aberrant to be included in table 6.

Fig. 124

Calibrated  $^{14}\text{C}$  dates for regular Early and Middle Iron Age inhumation burials in the Netherlands, arranged by calibrated date [OxCal v4.1.7 ; BRONK RAMSEY, 2010 ; adapted by R. Mols, BAMN].

ments of pottery of smaller sizes have been found in cinerary graves of the younger cemetery of Lent « Laauwijkstraat-Zuid » (supposedly ca. 550/500-400/375 BC). In this case, however, the image of the average pottery size may be biased as a result of the limited number of cremation graves, as in a larger cemetery with just cremation burials in Wijchen, lying 10 km southwest of Nijmegen-Noord, the 5<sup>th</sup> century BC burned pottery spectrum, primarily represented by fragments, shows a variety of dimensions (VAN DEN BROEKE, 2011)<sup>19</sup>.

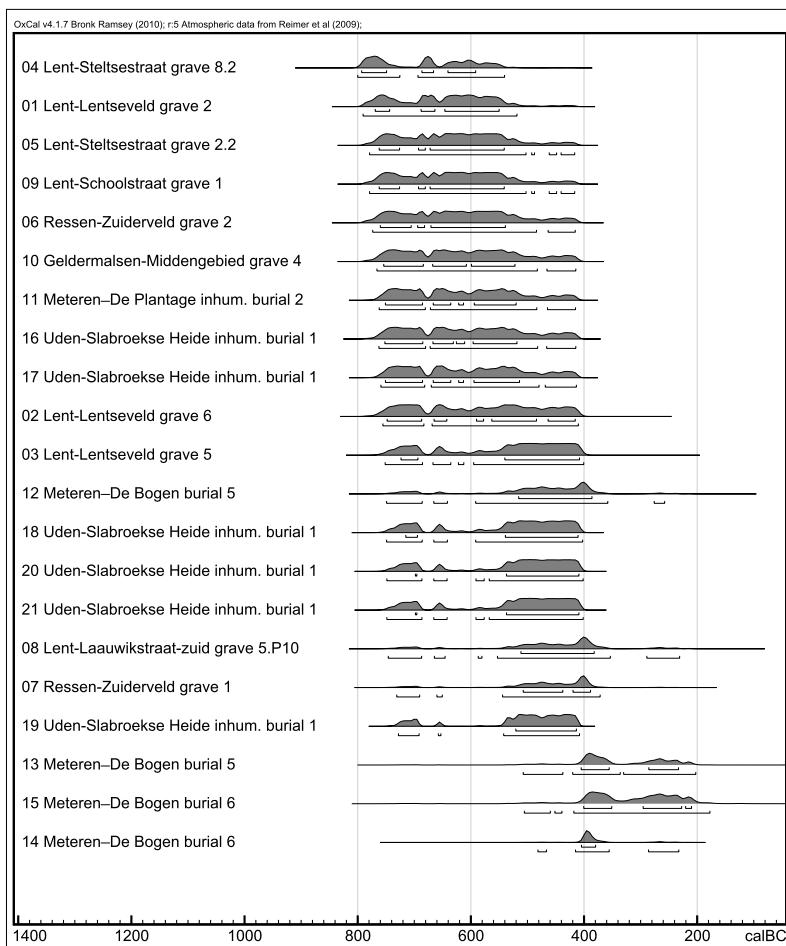
In Nijmegen-Noord there is only one Early Iron Age cemetery in which all or nearly all grave pottery consists of unburned vessels

(18 items). Combined with the morphological pottery features this indicates a date around 800-650 BC. This is the above-mentioned site of Oosterhout « De Eeuwige Lente ». Here, next to 27 cremation graves only three inhumation burials were present. This low number, and probably their marginal position in the cemetery, too, may be interpreted as a strong indication that the inhumation burials were a relatively late phenomenon<sup>20</sup>, as the undoubtedly younger cemeteries in the north of Nijmegen show a more balanced mix of inhumation and cremation graves.

Another clue to the chronological position of the inhumed persons within the Early Iron Age can be found in the spiral rings of Lent « Steltsestraat » (fig. 108, 109). In the region of the *Hunsrück-Eifel Culture*, where several sets of these have been found near skulls in inhumation graves, these are dated to Ha D, and exceptionally to the beginning of LT A (HEYNOWSKI, 1992, p. 82).

In the river area up till now inhumation burials dating to the Early Iron Age can only be indicated in Nijmegen-Noord. Most of the 30 cases even seem to date from this period. On the other hand it must be said that west of Nijmegen hardly any Early Iron Age cemeteries have been discovered, although occupation was not scarce then. The urnfield of Wijk bij Duurstede « De Horden », comprising 73 cremation burials, is the only one south of the former main branch of the river Rhine (HESSING, 1989). It may therefore be only a matter of time before Early Iron Age inhumation burials turn up west from Nijmegen.

The richly dressed lady (?) in the urnfield of Uden « Slabroekse Heide » is the only inhumation burial outside Nijmegen-Noord that appears to date from the Early Iron Age. As the excavation report is still in progress, a more precise date is yet to come.



<sup>19</sup> In this cemetery unburned pottery is only present in supposed ceremonial pits without human remains.

<sup>20</sup> One of the skeletons of the double burial has been  $^{14}\text{C}$  dated. The sample appeared to be short of collagen. Therefore the resulting outcome of  $3150 \pm 390$  BP (GrA-21291) cannot be considered a reliable date (pers. comm. J. van der Plicht, CIO Groningen). It has therefore not been included in table 6, although the  $2\sigma$  range covers the Early Iron Age, too.

Considering the length of time during which this type of burial was practiced, it can provisionally be estimated to have lasted about three centuries (700/650-400/375 BC). After that time in Flanders, the Netherlands and the adjoining part of Germany no inhumation burials in regular cemeteries can be indicated until the Roman Period.

## 6. Patterns

Apart from the clustered geographical distribution and chronological emphasis presented above, some other patterns can be discerned. They relate to grave monuments and grave goods.

Firstly it must be emphasized that inhumation graves are never more elaborate than cremation graves in the same cemetery. Flat graves without peripheral structure seem to have been standard, at least in Nijmegen-Noord<sup>21</sup>, and it is striking that even the (exceptionally deep dug) burial pit of the richly dressed individual of Uden may not have been covered by a barrow, contrary to those surrounding her (?).

When looking for patterns it is also clear that child burials are underrepresented in the Nijmegen region, but not in Geldermalsen « Middengebied », and even among the four burials in Beuningen there is one of a child (4-6 years of age).

Concerning grave goods two points can be made. The first one is that pottery did not accompany the dead into the grave before the Middle Iron Age (Geldermalsen « Middengebied », Ressen « Zuiderveld », Someren « Waterdael »). A second pattern that can be discerned is that head decoration was more standard than other body ornaments, and is in most cases found with women. But ornaments as such were not standard for female burials in general. The fact that the three ornaments that accompanied the woman of the double burial in the Lent « Steltse-

straat » cemetery (fig. 109) were not on her corpse, but had been deposited next to her shoulder, may indicate that a woman's ornaments always went with her into the inhumation grave. That would mean then that most interred women did not possess any (HEYNOWSKI, 1992, p. 130). Nonetheless the cremation graves in the same cemeteries are even poorer. But here our picture will be distorted by a major factor that diminishes the chances of recovery. Most ornaments found in inhumation graves are rather fragile. In case of the cremation ritual, nothing or just small drops of bronze may remain of the former ornaments, which may have been overlooked or even neglected by the mourners, especially by the time — in the course of the Iron Age — when only a small part of the remains of the pyre was deposited in the pit.

## 7. Locals or non-locals ?

The crucial question posed in case of a phenomenon which is so deviating from the standard, is if we discern here a variant of the funerary ritual that has been elaborated within the local communities. The most obvious alternative would be that the inhumation burials represent persons from regions where inhumation was a normal funerary practice. Here the arguments pleading for one or the other explanation based on formal appearance will be outlined.

The cemetery of Petershagen « Ilse » (Kreis Minden-Lübbecke) in Westphalia, which is dated to the 6<sup>th</sup> century BC, may be considered an exemplary case for migration, or at least travelling. In a region with cremation as the standard in disposal of the dead, a cemetery exclusively containing skeletons is an anomaly, especially when at least 17, and maybe all 20, burials are female (BÉRENGER, 2000<sup>a</sup>; 2000<sup>b</sup>; 2001; 2005). Moreover, many of their ornaments are exotic artifacts. Five skeletons underwent research on strontium isotopes, and it turned out that three of these women did not originate from the region

<sup>21</sup> In case of Beuningen the relation between two of the inhumation graves and the circular ditch around them is dubious. In Meteren « De Bogen » both inhumations burials were secondary burials in a Late Neolithic barrow.

where they had been buried ([www.lwl.org/pressemitteilungen/mitteilung.php?urlID=16194](http://www.lwl.org/pressemitteilungen/mitteilung.php?urlID=16194) [2006]). Combining the isotope data with the personal ornaments, southern Germany, Alsace and Switzerland have been suggested as homelands. The other two analyzed individuals are thought to be of local origin, possibly belonging to a later generation.

When compared with the situation in Petershagen, it is striking that all known cemeteries from the Early Iron Age and the beginning of the Middle Iron Age in the Betuwe region show a combination of inhumation and cremation burials<sup>22</sup>. It should, however, be noted that in the cemeteries of Geldermalsen « Middengebied » and Oosterhout « De Eeuwige Lente » the inhumation burials do not lie intermingled with the cremation burials. On the other hand, in four cemeteries in Nijmegen-Noord they were found mixed (fig. 107). As the cinerary graves are of indigenous character, this suggests that the inhumed persons were part of these same local communities. Considering the fact that this funerary ritual was performed for about three centuries, this appears to be an argument in favor of local variation in burial practices. The underlying motive could have been that in certain periods not only material culture known from other regions was accepted, but also funeral practices, despite its more emotional content. The fact that only a segment of the communities took part in this change is not unprecedented<sup>23</sup>. It is, therefore, conceivable that the head dress with spiral rings from Lent « Steltsestraat » (fig. 108) was not that of a migrated woman from that region, but was based upon imitation of the Middle Rhine dress, as was the way of burial<sup>24</sup>. On the other hand, it is very improbable that a type of decoration that is not represented between the *Hunsrück-Eifel* region and Nijmegen-Noord (HEYNOWSKI, 1992, map 34) would have become a popular dress in this region just by adaptation.

When regarded from France, the peculiar assemblage in grave 1 at Geldermalsen « Middengebied » will easily give way to the hypothesis that it reflects migration, as has indeed been the case (LEMAN-DELERIVE, 2005 ; 2007). It should, however, be realized that in the 5<sup>th</sup> century a very strong cultural influence from northern France (and southern Belgium) spread over the whole of Belgium and the southern and central parts of the Netherlands. This is especially manifest in pottery products. Although the above-mentioned burial is reminiscent of the most common form of burial practised in the Marne-Aisne region in northern France in the period 450-375 BC (dress, ceramic vessel shape, iron knife, pig's rib) it may, theoretically, also be considered an intensive cultural adaptation (VAN DEN BROEKE & HESSING, 2005). Torques and bracelets are present in regional cinerary graves as well (e.g. VAN DEN BROEKE, 2001, fig. 16 ; HEIRBAUT, 2011, fig. 10.3 ; WESSELINGH, 1993, fig. 9), just like sets of (burnt) pottery in Marne-style (VAN DEN BROEKE, 2011). Calcinated animal bones between human cremation remains are not scarce either, although it cannot always be determined if they stem from meat gifts (e.g. HEIRBAUT, 2011, p. 88 ; TUIJN & VISSERS, 2004, p. 58). And we know of some contemporary grave inventories which look even more exotic than the one from Geldermalsen « Middengebied », but which are supposed to belong to the local elite, as these deceased were cremated. One of these is the rich burial from Overasselt (SWINKELS, 2011), with, among other things, a bronze *situla* and drinking cup, an iron horsebit and five iron spearheads (fig. 125). Another example is the cremation burial from Nijmegen, with parts of the only two-wheeled Iron Age chariot known from the Netherlands (BLOEMERS, 1986).

In my opinion the inhumation burial of Uden « Slabroekse Heide » is the only one that is outstanding enough to be qualified at face value as that of an immigrant. This is not just because

<sup>22</sup> Supplementary only an Early Iron Age cemetery at Bemmel can be mentioned (BREDIE, 1978). The rescue activity which resulted in the find of several urns, is, however, incomparable to the regular excavations that have been dealt with earlier.

<sup>23</sup> E.g. during the Middle Bronze Age A in the northeastern part of the Netherlands (DRENTH & LOHOF, 2005, p. 436).

<sup>24</sup> It should, however, be mentioned that in the Middle Rhine area both the twisted version of *Spiralringe* and the circular shape in profile seem to be rare or absent, as may be inferred from the drawings of smooth spiral rings, and the rhombic to oval shape in profile that is mentioned by HEYNOWSKI (1992, p. 80).

Fig. 125

The grave inventory from the early Middle Iron Age cremation burial found in Overasselt (from SWINKELS, 2011, fig. p. 136 ; © Museum Het Valkhof).



this burial is the only inhumation burial in a common urnfield, but the set of ornaments and the toilet set is so extraordinary for Dutch standards, that this combination strongly suggests a Central European origin. The similarity with the woman in grave 15 of Petershagen (BÉRENGER 2000<sup>b</sup>, Abb. 8) even strengthens this opinion<sup>25</sup>.

Rhine area this approach, combined with the use of  $^{18}\text{O}/^{16}\text{O}$  and other stable isotope ratios, has already proved useful in case of Mesolithic and Neolithic burials (SMITS & VAN DER PLICHT, 2009 ; SMITS *et al.*, 2010).

Recently the first results have come available for samples from several of the Iron Age skeletons that have been mentioned above, as well as for animal samples that were supposed to reflect local conditions (fig. 126)<sup>26</sup>. Figure 126 is remarkable by the fact that almost half of the set of human samples exceed local values, some even extremely far. In all five cemeteries which contained two or more sampled skeletons, at least one of the individuals shows a  $^{87}\text{Sr}/^{86}\text{Sr}$  ratio which suggests a non-local origin. In case of Beuningen this pertains to at least three out of four inhumation burials. Among the other outliers is the woman in grave 1 from Geldermalsen « Middengebied » (fig. 116). On the other hand the woman with head decoration from Meteren « De Plantage » is not divergent on strontium. Neither are the probably earlier women with head ornaments from Lent « Steltsestraat » (fig. 108) and Lent « Lentseveld » (fig. 110). Unfortunately the burial from Uden « Slabroekse Heide » was too heavily degraded for sampling.

## 8. Incipient answers

The only means by which the migration hypothesis — or at least the mobility hypothesis — can be reliably tested, seems to be stable isotope analysis. As has been mentioned above, this approach was already applied in the case of the Petershagen cemetery.

For tracing mobility, stable isotopes of strontium in human skeletal material, are frequently measured. The  $^{87}\text{Sr}/^{86}\text{Sr}$  ratio reflects local geological conditions. By the intake of locally available water, as well as the vegetal and animal diet, the strontium isotope ratio in the human body reflects local conditions. Teeth enamel is especially useful in this respect, as it reflects the conditions during childhood. For the Lower

<sup>25</sup> And note the presence of nail cleaner and tweezers in the same Westphalian cemetery (BÉRENGER, 2000<sup>a</sup>, fig. at p. 249 ; 2001, Abb. 3).

<sup>26</sup> KOOTKER, 2012, based on GEERDINK, 2012.

Despite the preliminary nature of these analyses and considering the fact that the range of local strontium values from the Lower Rhine area will have to be detailed, we may guess that especially the strongly deviant samples indicate that both in the Early Iron Age and the first half of the Middle Iron Age people moved into the eastern river area of the Netherlands. Where they exactly came from is still unclear. But would the bare fact that they came from far away regions be sufficient reason for the local communities where they landed, not to cremate but to inhum them, even if cremation would have been appropriate in their homeland? This is rather unlikely. It is more probable that they were treated according to ancestral traditions. This implies either that one or more persons with the same cultural background could arrange the burial and supply the grave inventory conforming to this standard, or that the immigrant had expressed his or her final wish in time to the local survivors.

It has been established that samples from areas within the Netherlands which differ geologically, vary rather strongly on strontium ratios (KOOTKER, 2012). In case of inhumation burials from the river clay area it is, however, not very likely that these persons originated from, for instance, the adjacent coversand area. The nearest regions where inhumation burial was practised more than incidentally, or was even standard, were the Middle Rhine area on the one hand, and northern France/southern Belgium on the other hand. In the Middle Rhine area, including the Rhein-Sieg-Kreis, this type of burial became a common phenomenon only during a later stage of the *Hunsrück-Eifel-Kultur I*, in the second half of the 6<sup>th</sup> century BC, and diminishing again in the 4<sup>th</sup> century BC (JOACHIM, 2006; NORTMANN, 2006). In northern France inhumation burials were common from at least the end of the 6<sup>th</sup> century BC, in the Marne region (CHARPY, 1998), while in the Belgian Ardennes this type of burial was introduced about half a century later by the Early La Tène communities that constructed chariot graves there (CAHEN-DELHAYE, 1998<sup>a</sup>; 1999<sup>b</sup>).

Given the recent strontium analyses, there is now enough reason to suppose that the woman in grave 1 from Geldermalsen « Middengebied », showing Marnian traits and ranking among the highest values in figure 126 (GEERDINK, 2012), has indeed a southern origin.

## 9. Motives behind mobility

Now that we discern a repeated influx of people during a period of about three centuries, we may ask ourselves the question what was the *impetus* behind these movements. A second question must be how to explain the inhumation burials of persons who appear to have grown up locally. The possible answer to this second question, namely that we deal here with descendants of immigrants, may be solved by future DNA research on well-preserved skeletal material. But the primary question still remains: what reason is there behind the appearance of a considerable number of people from other regions — obviously lying in southern and southeastern directions? Here I will outline some first thoughts on the rather puzzling new situation that has been created by strontium analyses.

First of all we may postulate that long-distance mobility has been a rather normal phenomenon in late prehistoric Europe. A vivid case is presented by the Greek Herodotus, living in the 5<sup>th</sup> century BC. In his Histories he mentions the Hyperboreans, people on the northern fringe of Europe, who are said to convey offerings wrapped in wheat straw to [the cult centre at the Greek island of] Delos. Initially this was by direct transfer by two maidens, protected by five men, but for reasons of safety this later on was restricted to indirect transfer (Histories, book IV, 33).

Apart from envoys and their guides, we may imagine traders, warriors, raiders, hostages and even slaves as categories of people that could be far away from their homeland (e.g. SCARRE & HEALY, 1993)<sup>27</sup>. But, in my opinion, these cate-

<sup>27</sup> In case of the Petershagen cemetery it has been proposed that the buried females or their (missing) spouses were long-distance traders (BÉRENGER, 2000<sup>b</sup>; 2005).

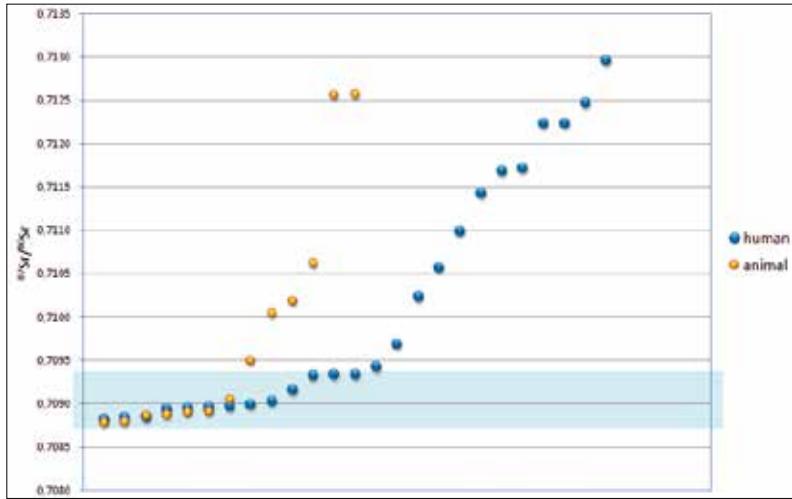


Fig. 126

Distribution of the  $^{87}\text{Sr}/^{86}\text{Sr}$  ratios of 25 Iron Age inhumation burials and 13 animals from the Netherlands.

The horizontal stroke marks the local  $^{87}\text{Sr}/^{86}\text{Sr}$  range (adapted from KOOTKER, 2012, p. 34, fig. 7, based on GEERDINK, 2012 ; © L. Kootker).

gories are hard to identify with the inhumation burials of the character that we know by now. We should rather focus on the possibility of spouses from remote areas, or real migrations of small groups.

Spouses may be thought of in incidental cases, but when groups of people, encompassing men, women and children are present in cemeteries, movements of groups are more likely. Considering migrations, what could be the reason for relatively substantial movements, at least into the micro-region of Nijmegen-Noord ? It has been concluded above that the inhumation burials are clustered in the river area in the Central Netherlands. Concerning economic potentials, this region must have been very well suited for a pastoral economy, especially cattle breeding (e.g. BRINKKEMPER & VAN WIJNGAARDEN-BAKKER, 2005 ; ROYMAN, 1995). This could in itself be a reason for moving in, provided the new inhabitants were accepted by the local population. People moving in with their herds could also explain the unexpected high strontium values for several

animal samples from the area, the six highest values of which stem from pig (4 x), cattle (1 x) and dog (1 x) (GEERDINK, 2012). It can hardly be expected that there was long-distance meat trade or trading of breeding pigs at a considerable scale in a « pastoral paradise ».

All the same, in case of migrating people we would expect to be able to discriminate archaeologically between indigenous and foreign settlements or at least house plans with the associated material remains. And although until now only a restricted number of Iron Age settlements have been excavated between Waal and Rhine, there are no pertinent indications of foreign settlement<sup>28</sup>.

An alternative explanation, in the same economic sphere, for high strontium ratios obtained from cattle and humans could be transhumance. The seasonal pasturing of cattle (or sheep) herds coming from remote areas moreover has a less disrupting effect on existing occupation than settling human groups have. And it also fits the observation that until now there are no settlements showing a deviant material culture<sup>29</sup>. On the other hand this explanation is incongruent with high strontium ratios for pig, because even if pig meat would have been brought along as food, it is improbable that it would have included jaws<sup>30</sup>. And would so many herders have lost their lives in the Betuwe that they explain the rate of inhumation burials in the cemeteries of Nijmegen-Noord ? Here it should be emphasized that the Betuwe is markedly devoid of weapon graves, contrary to the area south of the river Waal<sup>31</sup>. And transhumance neither accounts for the inhumation burials with low strontium ratios, which may reflect descendants of earlier settlers.

<sup>28</sup> The yard of an exceptional Early Iron Age construction at Elst « Parklaan » entailing a considerable quantity of pottery fragments did not contain conspicuous material culture, and next to a supposed four-post building lay a single cremation (!) burial (PRANGSMA, 2005). See BLOM & ROESSINGH, 2010 ; DANIËL & VAN DEN BROEK, 2012 ; HESSING, 1989 ; MILOJKOVIC & SMITS, 2002 ; SIER & KOOT, 2001 for other Iron Age settlement sites of some importance. Beside these sites several Iron Age settlement sites of lesser stature have been published.

<sup>29</sup> See VAN GIJN & WATERBOLK, 1984 for the remains to be expected for Iron Age transhumance in the northern part of the Netherlands.

<sup>30</sup> Pig teeth were used as samples for the analyses (GEERDINK, 2012).

<sup>31</sup> Apart from the already mentioned elite graves of Overasselt and Nijmegen « Traianusplein », there are several other graves with iron spearheads (FONTIJN, 1996, 2012).

## 10. Conclusion

The former statement about supposed local origins is the first one to be debated, because it is obvious that a more diverse set of stable isotopes should be analyzed, including at least  $^{18}\text{O}/^{16}\text{O}$ . Strontium values within the range of presumably Lower Rhine origin (fig. 126) have also been found for a vast area around Lake Constance in southern Germany (OELZE, 2012, fig. 7.1), to mention just a single result.

And even if migrating groups make the best — but certainly not the perfect — fit with the archaeological findings presented above, we still have to explain why these people were buried in several cemeteries mixed with cremation graves of presumably local signature. This situation is different from the one in the above-mentioned cemetery of Petershagen. Do we perceive here an assimilation of indigenous and foreign people, the migrants sticking to the funerary ritual of their homelands, probably for more than one generation ? At least it should be borne in mind that several centuries later in the same area a

process of inconspicuous assimilation must have taken place when a branch of the *Chatti* appears to have mixed with local groups, resulting in the tribe of the Batavians (especially ROYMANS, 2004).

If comparable processes had occurred some centuries earlier, we could also imagine individual migrants that had integrated in society in such a profound way that they wished to be buried according to local customs, that is : cremated. Would we still recognize them archaeologically<sup>32</sup> ? Or, to state it more directly : do the exotic inventory of the Early Iron Age chieftain from Oss (FOKKENS & JANSEN, 2004), the equally exotic wagon burial from Wijchen « Wezelscheberg » (PARE, 1992, p. 219-220), as well as the already mentioned elite burials from Nijmegen and Overasselt reflect immigrants as well ?

It appears that treating the new phenomenon of Iron Age inhumation burials in the Lower Rhine area, also creates the risk of turning the clock of archaeological interpretation back some fifty years<sup>33</sup>.

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<sup>32</sup> Bone ashes do not have good prospects as samples for strontium analyses (pers. comm. L. Kootker, Vrije Universiteit Amsterdam).

<sup>33</sup> When preparing this contribution I received essential information and illustrations from several persons. For that reason I want to thank Paul Franzen (Bureau Archeologie en Monumenten gemeente Nijmegen), Coen Geerdink (Archeodienst bv), Richard Jansen (Universiteit Leiden/Gemeente Oss), Willem Jezeer (ADC, Amersfoort), Lisette Kootker (Vrije Universiteit, Amsterdam), Louis Swinkels (Museum Het Valkhof, Nijmegen) and Wouter Vos (Hazenberg Archeologie, Leiden). And most I owe to Eugene Ball (BAAC, 's-Hertogenbosch), who spent relatively much of his scarce spare time to polish my English.

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# DES ESPACES AUX ESPRITS

*L'organisation de la mort aux âges des Métaux dans le nord-ouest de l'Europe*

À l'occasion de la vingtième rencontre de la Cellule Archéologie des Âges des Métaux fut organisé un colloque international d'un jour et demi, en plus d'un après-midi d'exposés sur l'archéologie protohistorique de Belgique qui a été publié dans la revue *Lunula*. Réalisé avec le soutien de la Direction de l'archéologie du Département du patrimoine, ce colloque s'est tenu à Namur les 24 et 25 février 2012. Il a abordé une thématique consacrée à « l'Organisation de la mort aux âges des Métaux dans le nord-ouest de l'Europe », en mettant en évidence les synthèses des recherches des vingt dernières années. Les actes présentés dans ce volume rassemblent treize contributions sur les pratiques funéraires des âges du Bronze et du Fer tant en Belgique, qu'aux Pays-Bas, en France et au Royaume-Uni. Celles-ci fournissent autant d'études originales sur plusieurs régions d'Europe occidentale.

At the 20th annual meeting of the Metal Ages Archaeological Group a day and a half international conference has been organised, combined with an afternoon dedicated to lectures on protohistoric archaeology in Belgium. These papers have been published in the journal *Lunula*. This international conference took place in Namur on 24 and 25 February 2012, supported by the Archaeological Management (« Direction de l'archéologie ») of the Heritage Department. The theme of this conference was « The organisation of death during the Metal Ages in north-western Europe ». On this occasion different overviews of the archaeological research during the last twenty years were presented. The proceedings, presented in this volume, collect thirteen papers on the funerary rituals during the Bronze Age and the Iron Age in Belgium, the Netherlands, France and the United Kingdom. These papers deliver new and original information on different regions in Western Europe.

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