Tracking down the story of the discovery of the Vix princely burial: new results

By Bruno Chaume, with a contribution by Bernard Dedet

To …
the lady on my mind …

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Introduction

Ever since Sigmund Freud and Agatha Christie, police investigations and archaeology have become intertwined. For the princely burial of Vix, many grey areas remain in the chain of events that unfolded after its discovery in December 1952 and subsequent excavation in January / February 1953. This has led us to a re-examination of the sequence of operations, the accuracy of the plan of the burial, the architecture of the monument, and what we know of its immediate surroundings. It is essential to fully understand all these aspects if renewed excavations of the mound erected over the grave – let us recall that the barrow was not examined in 1953 – are to take place as is hoped. We therefore reopen here the case-file so that the burial and its monument can be examined again in the future.

It may seem surprising to return, 65 years after the event, to the circumstances that led to the uncovering and subsequent exhumation of the burial of the “Lady of Vix”, especially as this subject was addressed not so long ago by Claude Rolley in his work on the princely burial of Vix which he edited and published in 2003 (Rolley 2003c). The sparse documentation left by René Joffroy, who directed the excavations in 1953, probably explains why so few new facts are available in this publication. Claude Rolley (2003a; 2003b; 2003c, and Moulhérat / Rolley 2003, 21–28) reviews the state of research and essentially repeats, give or take a few details, the explanations offered by the original excavator; the main virtue of C. Rolley’s publication is that it puts in approximate order the factual data that R. Joffroy left behind, accompanied by a frequently pertinent critical commentary.

In 2009, 2010, and 2011, I was given access to new archival material recovered by R. Joffroy’s heirs from the family home in Châtillon-sur-Seine1. These archives contain no manuscript notes: they consist of some 60 monochrome photographs of varying quality

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1 René Joffroy’s photographic archives were leant to us by his heirs (his daughter and daughter-in-law) in small consignments, so that they could be digitised and permanently archived. Dominique Geoffroy carried out this digitisation at the Maison des Sciences de l’Homme (MSH) at the University of Dijon. This institution has supported the programme of digitising and archiving the entire photographic collection associated with the Joffroy excavations in Vix. All these documents are stored in a bespoke database managed by the MSH. Once encoded, the photographic archive will become ac-
taken at the time of the excavations by various witnesses who took part in the operations or who simply followed their progress. In addition to these excavation records, the results of geophysical surveys conducted by Harald von der Osten-Woldenburg (Chaume 2001, 213–221; von der Osten-Woldenburg 2011) and a team from the German Archaeological Institute (DAI), the latter under the direction of Friedrich Lüth, should be taken into consideration. They reveal some previously entirely unknown elements of the mound’s structure. These surveys have also yielded key information on the immediate surroundings of the princely barrow that merit reporting.

Ever since the first published accounts of René Joffroy — those of 1953a, 1953b, 1953c, 1954, 1957, 1958, and 1962 in particular — our understanding of the excavations of the princely burial of Vix has hardly progressed, given that no new elements have surfaced. Studies have so far largely focused on the grave goods and their implications for the north-south exchange network between the Hallstatt communities and the Greeks and Etruscans. The sex of the skeleton and the deceased’s position within society have also been much debated. For this aspect, readers are referred to the chapters in Claude Rolley’s volume on the princely burial of Vix (2003c), which review all the hypotheses advanced on this matter, and to my own thoughts on the subject (Chaume 2007).

The unpublished photographs to which I gained access are an important source of information, capable of casting new light on certain aspects of the burial. Although this often concerns mere details, it makes it possible to reconstruct the sequence of events more accurately, to significantly clarify the plan of the burial, to confirm or rule out interpretations based on taphonomy, and to pinpoint the position of some elements of the wagon which were still subject to discussion when the latest monograph on the burial appeared in 2003.

The site notebooks that R. Joffroy kept to record the daily progress of the excavations and to log the finds are still missing from the documentary sources at our disposal, and C. Rolley expressed surprise at this (Rolley 2003a, 21). Time has passed … and I can now reveal that these notebooks were burnt by R. Joffroy at a time that I have not been able to establish. I was given this information by R. Joffroy’s wife Marie-Louise when assembling material originally intended to be included in various chapters of C. Rolley’s volume.

Before embarking on the account of the investigation, some comment on the social context within which the burial of the “Lady” took place seems appropriate. The magnificence of her grave goods has highlighted the role of women within the Hallstatt aristocratic sphere and this aspect is still the subject of much discussion. Taking the Early Iron Age as a whole, it is possible to observe a progression in the presence of prominent female burials; whereas there are very few among the vehicle burials of the Hallstatt C period,

2 The photographers were Marie-Louise Joffroy, René Joffroy, René Chambon, René Paris, and Jean-Jacques Hatt.
3 I have made available the archive documents relating to the discovery of the Vix princely burial which form the subject of this article to Félicie Fougère, conservator at the Musée du Pays Châtillonnais / Trésor de Vix. She has re-used some of them in a brief presentation published in the Bulletin de la Société Archéologique et Historique du Châtillonnais (Fougère 2013). She draws attention in that article to the mythical aspect of the discovery and recounts the various stages of the crater’s restoration. Here we have chosen a different approach, taking into account all the archaeological data that are available today and accompanying them with a critical commentary, occasionally correcting some inaccuracies in the sequence of events outlined by Félicie Fougère and revisiting some of Claude Rolley’s interpretations.
they increase gradually to reach, in the Late Hallstatt phase, a balanced proportion between the men and women of the highest social rank (Chaume 2007, 32 fig. 5).

Such an increase is, most probably, the result of the combination of two phenomena: a move towards a matrilineal society around the middle of the sixth century BC and the attending establishment of lineages with hereditary powers. This model appears to best fit the socio-political context of the Late Hallstatt period, as perceived from the archaeological evidence. Women, in the absence of a male heir or because they played a part in the transmission of power, could have attained political positions (in the widest sense), which in no way precludes their fulfilling religious or divinatory functions, as some authors have indeed proposed (Megaw 1966; Pauli 1972; 1975; Brun 1987; 1998; Knüsel 2002; Verger 2003; Arnold 1995a; 1995b; Chaume 2007). The political and religious realms were far from exclusive, being closely connected in Antiquity.

At Vix, the aristocratic domain is not limited, as too often elsewhere, to the graves of the elite (the so-called elite burials) but extends to its settlement (fig. 1). Its aristocratic core has been identified in investigations carried out over the last two decades on the summit of Mont Lassois (recently Chaume / Reinhard 2014). There, excavations have uncovered a street flanked by property boundaries, storage areas in vast granaries, and houses, some of which are monumental apsidal buildings with painted cob walls, as well as less grand but similar buildings. Of the five largest Hallstatt-period buildings known in Europe, Vix has the four largest, measuring 35 m, 30 m, 27 m, and 25 m in length (fig. 2). Three of them are located on the “acropolis” of Mont Lassois within a quasi-urban setting. However, just as one had thought that the centre of power had been securely identified on the high plateau, a new large building (some 27 m long) was identified in summer 2018 at the foot of Mont Lassois in geophysical surveys conducted by Friedrich Lüth and Rainer Komp of the German Archaeological Institute (DAI), calling into question our conception of how the site was organised.

The large apsidal buildings, which are interpreted as palatial buildings, possess a complex architecture that has no precedent in European prehistory. It is not so much their length but their width (between 17 and 21 m) that is astonishing, defying all laws of static forces. The engineers of the École Nationale Supérieure d’Arts et Métiers (Cluny) who have studied these post-built structures are unequivocal: the people who designed these buildings show a level of mastery and know-how unknown until then (personal communication).

The investigations of December 1952 and January / February 1953

The dawn of a great discovery

Maurice Moisson’s uncovering of the mound

Maurice Moisson lived in Vix and knew the terrain of his parish like the back of his hand. He had noticed a concentration of stones in a fairly well-defined location, in a field that otherwise contained no or hardly any stones. We know from the mouth of the discoverer himself, thanks to a recording made by Radio Suisse Romande4, the circumstances in which he dug the exploratory trench that was to come across the handle of the crater. It was at

4 This Radio Suisse Romande recording, broadcast on 4 September 1979, was rediscovered by Jacques Noël, a musician in Châtillon-sur-Seine who died on 12 November 2016. After a career in insurance, Jacques Noël held a post at the Direction Régionale des Affaires Culturelles de Bourgogne. The recording
the end of the 1952 excavation campaign, which targeted the timber-laced rampart on the edge of the plateau at Mont Lassois — the very same rampart that our Austrian colleagues have recently started to re-examine (Chaume 2001, 33–39; Urban / PERTLWIESER 2011, 216 fig. 28; 219 fig. 32) — that Maurice Moisson convinced René Joffroy to cut a sondage in a field located in a loop of the Seine, at a place named “Les Moussenots” (plot no. 411 in section C of the Vix cadastre)5.

was transferred to a CD at Jacques Noël’s request. It is still on sale from the Association des Amis de Saint-Marcel under the title Maurice Moisson et René Joffroy en compagnie des enfants de l’école d’Étrochey-Vix racontent la trouvaille du Vase de Vix (Maurice Moisson and René Joffroy recount the discovery of the Vix crater in the company of the schoolchildren of Étrochey-Vix).

5 The place has been renamed and today it bears the place-name “Les Lochères”, and the field is now plot no. 31 in section C of the Vix cadastre (CHAUME 2001, 213 fig. 145). A small part of the

Fig. 1. Vix / Mont Lassois. Plan of the aristocratic complex with hillfort and tombs.
R. Joffroy has at various times given us his first impressions of the remains observed by M. Moisson. He variously considered them to be the remains of a sunken-floored building or *Grubenhaus* (Joffroy 1954, 2) or as evidence of the presence of a Gallo-Roman building. It is only when the trench cut the negative feature under the mound that it became clear that he was dealing with an impressive barrow, some 40 m in diameter.
R. Joffroy provides no or hardly any information concerning the sondage trench, except that it was oriented north-south and that it was some 20 m long (Joffroy 1962, 27). This recurring piece of information appears late in the publications concerning the site and contradicts R. Joffroy’s first note, read at a meeting of the Académie des Inscriptions et Belles Lettres, where he indicates that the sondage trench was 9 m long (Joffroy 1953a). It is highly likely that the latter measurement is correct since it agrees with the archive photograph showing the sondage trench (fig. 3).

Although we know the general direction of the trench, R. Joffroy does not tell us whether M. Moisson began it in the south and proceeded northwards or the other way round. On the photograph showing M. Moisson in the early stages of excavating his “hole” (fig. 4), on the cusp of his encounter with history, it is possible to see that the trench followed the same direction as the plough furrows in the field. The railway line from Châtillon-sur-Seine to Troyes can also be recognised in the background. Together, these two pieces of information indicate that the trench was indeed oriented north-south, starting in the north. We can also deduce from that photograph that the sondage trench was parallel to the eastern edge of the field, some 8 to 10 m from it. The unpublished photographs in R. Joffroy’s archive show us a trench estimated to have been around 1 m wide and 50–60 cm deep. It is likely that this depth increased to 0.8–1 m as the excavation progressed towards the centre. The slight impact that the sondage had on the mass of the barrow encroaches on the next plot, no. 32, which was acquired, at Bruno Chaume’s request, by the consortium of parishes in the Châtillon region (Communauté de Communes du Pays Châtillonnais). As for plot no. 31, it was bought in 2013 by the same organisation thanks to subsidies from the State and the Département de Côte-d’Or. The four hectares of the field containing the princely mound and other archaeological remains of note are now public property. This conservation measure had been preceded by the scheduling of the field as a historic monument at a time when purchasing the site outright had been impossible for a variety of reasons.
barrow explains why the trench is not visible on the images produced by the various kinds of geophysical surveys.

Once he had reached what he thought was the centre of the structure being tested by his sondage, Maurice Moisson cleared a rectangular space in line with the trench: this area covered around 4 m² and was some 50 cm deep (fig. 4). It is in this area that he intended to “go down”, i.e. deepen the excavation. René Joffroy tells us that by then he had already identified a large barrow; it is therefore not surprising that he sought to reach the burial chamber by this unorthodox method (a euphemism if ever there was one). This was certainly not the right way to go about it but, having known Maurice Moisson quite well, I know that he would only stop on the natural subsoil and hence I recognise his insistence on continuing to dig.

Only the central burial, which occupied a surface of 9 m², was excavated; it took “170 hours” (Joffroy 1962, 38), i.e. about 28 working days of six hours spread over two months interrupted by days of inclement weather. The remainder of the barrow was not investigated in 1953.

Maurice Moisson’s role

Maurice Moisson (20 June 1902–6 November 1980) was the key player in the discovery of the barrow and crater at Vix. It is largely to the intuition and tenacity of his stubborn
peasant character that we owe the uncovering of the princely burial. Over the months and
years that followed the discovery, René Joffroy always took care to give credit to the part
Maurice Moisson played in it: “It was the achievement of my dedicated site foreman,
M. Moisson, to detect such slight traces . . .”6 (Joffroy 1953c, 108).

A year later, R. Joffroy reiterated his appreciation in his publication in the Monuments
Piot: “It was during a systematic survey aimed at finding the burial grounds [R. Joffroy
refers to the Hallstatt cemeteries] that in October 1952 our site foreman, M. Moisson,
identified in a field to the east of the hill [Mont Lassois] a number of stones that were geo-
logically extraneous to the site”7 (Joffroy 1954, 2).

When giving credit for this sensational discovery to one or the other of the two main
protagonists (but let us not forget René Paris), people have variously tried to compare the
contribution of Maurice Moisson and René Joffroy. This was achieved in the end but, at
the time, there was no antagonism between the two and the personalities involved played
their parts true to form. Maurice Moisson was the fieldworker, with a keen eye for detail
but limited knowledge of excavation techniques, even though he had been digging on the
slopes of Mont Lassois since 1930 alongside Jean Lagorgette, the discoverer of the hillfort.
As for René Joffroy, he was already a fairly experienced excavator by 1952, at least by the
quite low standards demanded of archaeologists at the time, as noted by Claude Rolley
(Rolley 2003a, 21). Having known both Maurice Moisson and René Joffroy towards the
end of their lives, I can confirm that M. Moisson never hogged the limelight; not only did
he play a crucial role in the discovery but, and this is not generally known, he was also
instrumental in the legal process that led the owners of the field in which the barrow
stood, the Piment family, to give the entire assemblage of finds recovered from the burial
to the parish (commune) of Châtillon-sur-Seine by notarised deeds. René Joffroy always
gave him credit, and the polemic that arose after the publication of R. Joffroy’s 1979 vol-
ume (Joffroy 1979) and reached its apex in 1980 in an article published in Préhistoire et
Archéologie (Faton 1980) need never have arisen. At that time, R. Joffroy was taken to task
for having cropped a photograph of the excavations showing René Paris, René Joffroy and,
partially, Maurice Moisson (who, admittedly, cannot be recognised in the shot). This
assertion is groundless: having seen the original photograph, I can state that the shot was
never cropped. R. Joffroy never intended to diminish the role M. Moisson played, and the
series of photographs showing the three main protagonists in turn (R. Joffroy, M. Mois-
on, and R. Paris) and then together at the end of the excavation of the burial (Joffroy
1962, 35) are proof of this. Nevertheless, it appears that René Joffroy clammed up some-
what over time, in the face of the persistence of the academic community and a local
opinion that never failed to emphasise M. Moisson’s importance, as attested by the almost
immediate accolade granted by André Breton, that top dog of surrealism, in a letter of 28
December 1953 (Breton 1999, 1104). There he describes M. Moisson as a “cultivator
and gravedigger on the path to alchemy” (cultivateur et fossoyeur sur la voie de l’alchimie),
creating the “Moisson myth” in the process.

6 “Ce fut le mérite de mon dévoué chef de chantier,
M. Moisson, de déceler ces indices si minces . . .”
7 “C’est au cours d’une prospection méthodique
tentée pour trouver ces cimetières qu’en octobre
1952 notre chef de chantier, M. Moisson, repéra
dans un champ situé à l’Est de la montagne un cer-
tain nombre de pierres qui, par leur nature
géologique, étaient étrangères au site.”
The discovery of the “treasure”

Recorded on 5 January

In none of the various publications that recall the excavation of the princely burial at Vix can a straight chronology of the unfolding events be found. Only seven dates are ever mentioned: “And the excavation campaign on Mont Lassois ended on 29 December 1952”8 (Joffroy 1962, 26).

“That is why, on 3 January, on a grey morning, Moisson went with his pick on his shoulder towards the field where, here and there, rain-washed stones made lighter patches”9 (Joffroy 1962, 26).

“On 5 January [1953], at 5 p. m., an important bronze object appeared at a depth of 1.8 m…”10 (Joffroy 1953a, 27).

“Work stopped, and MM. Wernert, director of the 3e Circonscription préhistorique, and Guy Gaudron, principal inspector of the provincial museums, were notified by telegram. On 8 and 9 January, the objects that had been spotted were exposed and lifted in their presence”11 (Joffroy 1953a, 28). The finds were the two Greek cups, the silver phiale, and the great crater.

“Finally, on 12 and 13 February, we uncovered the body of the inhumed person”12 (Joffroy 1962, 36).

The excavations had started for me on a visit to Moisson when, on a Tuesday at the beginning of January, I came to collect the remains of a Greek cup; it ended on 13 February when I brought the diadem back to his house…”13 (Joffroy 1962, 36).

René Joffroy very quickly communicated the news of the discovery in a letter addressed to the Académie des Inscriptions et Belles Lettres which was read to the assembly on 16 January 1953 by M. Alfred Merlin standing in for M. Albert Grenier who was ill (Joffroy 1953a). G. Gaudron did the same on 28 January 1953, announcing the find to the Société nationale des Antiquaires de France (Gaudron 1955, 122).

The sondage was started between Christmas 1952 and New Year’s Day 1953; Maurice Moisson was adamant about this in an interview on Radio Suisse Romande. In a television documentary broadcast by FR3 Bourgogne in October 1978 and which had the evocative title “The Lady of Vix and her odd teapot” (La Dame de Vix et sa drôle de tisanière), he even specified that it was a Monday. Having checked with the calendar of 1952, we can establish that this was on 29 December.

René Joffroy gives us a different date by stating that the excavation began on 3 January. The two pieces of information need not contradict each other because it is conceivable that R. Joffroy, by giving the date of 3 January, wanted to mark the beginning of the investigations in the central burial.

8 « Et la campagne de fouilles sur le mont Lassois se termina le 29 décembre 1952 ».
9 « C’est pourquoi, le 3 janvier, M. Moisson, par une matinée grise, se dirigea, sa pioche sur l’épaule, vers le champ où, çà et là, des pierres lavées par les pluies faisaient des taches plus claires ».
10 « Le 5 janvier [1953], à 17 heures, à 1 m 80 de profondeur, apparut une importante pièce de bronze ».
11 « Les travaux furent arrêtés et MM. Wernert, directeur de la 3e Circonscription préhistorique, et Gaudron, inspecteur principal des Musées de province, prévenus télégraphiquement. Les 8 et 9 janvier, en leur présence, il fut procédé au dégagement et à l’enlèvement des objets repérés ».
12 « Enfin, les 12 et 13 février, on découvrait le corps de l’inhumée ».
13 « … avait débuté pour moi lors de ma visite chez Moisson, où, ce mardi du début de janvier, j’avais recueilli les restes d’une coupe grecque ; elle se termina le 13 février, en rapportant chez lui le diadème ».
The many discrepancies among the few factual elements concerning the sequence of events have prompted me to try to check the dates given by R. Joffroy, a task that proved quite difficult. The crater was discovered after 3 January, i.e. after the beginning of the excavation of the trench according to R. Joffroy (note that in his 1953c article, R. Joffroy dated the start of the sondage to 31 December; see above). Nonetheless, it has been possible to reconstruct the chain of events thanks to the calendar of the time available online.

On the Tuesday that followed 3 January, i.e. on 6 January, at 7.15 a.m., Maurice Moisson told René Joffroy that he had uncovered the crater. The crater had been found the day before, i.e. on Monday 5 January, and this date corresponds to the date given in R. Joffroy’s 1953 note (Joffroy 1953a). It was only a few minutes after René Joffroy and René Paris had left the site on that Monday evening that M. Moisson found the handle of the crater: “It was only five minutes after you left, that, while removing some stones, I came across something made of bronze”\(^{14}\) (Joffroy 1962, 28) (fig. 5). R. Joffroy mentions hav-

\(^{14}\) “Vous n’étiez pas parti depuis cinq minutes qu’en retirant des cailloux je suis tombé sur quelque chose en bronze ».
ing left the site at 16:30. On that day, sundown was at 16:59 and therefore it is around 16:40 that the discovery was made.

The excavation of the crater (figs 6–8)

On Tuesday 6 January at 16:00, after his Latin class, R. Joffroy sent telegrams to his colleagues Paul Wernert, director of the Circonscription des Antiquités préhistoriques de l’Est de la France, Guy Gaudron, inspector of the provincial museums, and Abbé Pierre Mouton, priest at Chalindrey and a long-time friend, informing them of the discovery (Joffroy 1962, 31) and inviting them to come to Vix on Thursday 8 January. Jean-Jacques Hatt, who was then the conservator of the Strasbourg museum, was to be invited later, probably after the removal of the crater. He could not, as Claude Rolley thought, have photographed the crater after it had been lifted from the burial on 9 January (Rolley 2003a, 21). He is most likely to have photographed the object in R. Joffroy’s garage in Châtillon-sur-Seine, where the crater was stored after it had been transported there by horse and cart on 12 January.

It took three days to free the crater (Joffroy 1962, 31; figs 6–8): it was finally lifted out of the burial chamber on Friday 9 January. The date and time recorded on at the bottom of the photographic prints that R. Joffroy’s heirs have supplied, the most important of which are published here for the first time, confirm this date. Wednesday 7 January was

Fig. 6. Vix. Maurice Moisson in the final stages of exposing the upper part of the crater.
dedicated to clear the barrow’s central area (Joffroy 1962, 32). Judging by the photographs available, this activity concentrated on the sector where the crater was located, that is, the north-western corner of the burial chamber.

The arrival of Paul Wernert, Guy Gaudron, and Abbé Pierre Mouton on 8 January marked the resumption of excavations to free the crater. On 9 January, in the morning, the crater was visible at the bottom of a hole (fig. 9), waiting to be lifted from the chamber by block and tackle (fig. 10). The operation was successfully conducted by Marcel Roblin, a masonry contractor and mayor of Vix at the time, helped by his son Roger.

The lid and handle, which had first emerged, had been extracted from the burial on Thursday 8 January. The photographic prints, one signed by René Joffroy and showing Maurice Moisson posing with the handle at his feet (fig. 11), the other (taken by Marie-Louise Joffroy) depicting René Joffroy and René Paris presenting the lid to view (fig. 12) are proof of this. These two photographs are not unknown: the second photo-

Fig. 7. Vix. The upper part of the crater with both handles freed. The end of the approach trench is visible on the top left of the photograph. The umbilicus that forms the support for the bronze statuette which fits on top of the lid can be seen inside the crater. René Paris is standing in front of the trench and Guy Gaudron is sitting near the crater. The lid and the handles are still in position.
graph, which shows the lid, was published quite early (Joffroy 1962, 31), while the first appeared much later in Préhistoire et archéologie (Faton 1980, 13). On the shot of the lid, C. Rolley rightly noted that little was missing from its central part, whereas R. Joffroy had declared the opposite. C. Rolley surmised that the excavator had made a mistake, but this cannot be so since on the images that show the excavation with the crater fully excavated it is evident that the entire central part of the lid is missing (fig. 7). This suggests that the object had been reconstituted on the photograph of R. Joffroy and R. Paris showing off the lid. It is highly likely that for that shot R. Joffroy held the sieve element of the lid (which had become detached when the roof of the funerary chamber collapsed) with his left hand (fig. 12). This would explain why this element is present on the photograph but incorrectly positioned, its raised centre (umbilicus) not being centred. With this empirically approximate gesture, R. Joffroy indulged in “freestyle reconstruction”.

We should probably also infer that the conical base of the statuette had somehow been glued back since it stands alone on the lid. The umbilicus is visible among the stones at the top of the fill of the body of the crater, thanks to the high quality of one of the prints (fig. 7). So, how should we explain the fact that this support was inside the crater but at
the level of its neck, contrary to R. Joffroy’s indications (Joffroy 1962, 69) that the statuette was found at the bottom of the vessel?

“The lid of the crater is lifted. The vessel, whose mouth measures exactly one metre, is full of soil and stones. Patiently – patience being a godly virtue – Abbé P. Mouton removes one stone after another; suddenly he feels at the tip of his fingers something that is not a stone, and this is the moment of discovery of a remarkable bronze statuette”15 (Joffroy 1962, 34).

Two different interpretations may help resolve this apparent contradiction. The first is that the statuette was located, more or less, at the same level as the conical base on which it fitted and not at the bottom of the vessel. The second hypothesis envisages that the statuette fell into the base of the vessel before the centre of the lid gave way and the body of

15 « Le couvercle du cratère est enlevé. Le récipient, dont l’embouchure mesure exactement un mètre, se présente tout rempli de terre et de cailloux. Avec patience – la patience est vertu théologale – l’abbé Mouton retire pierre après pierre ; il sent tout à coup du bout des doigts autre chose qu’un caillou, et c’est la découverte d’une admirable statuette en bronze ». 

Fig. 9. Vix. Maurice Moisson, at the bottom of the hole containing the crater, is busy installing the water pump.
the crater filled up with stones after the roof of the burial chamber had collapsed. The latter hypothesis appears (in my opinion) to be the less plausible of the two.

The crater, which had been lifted out of its hole on 9 January 1953, was set down on the field (fig. 13) and then put on a horse-drawn cart (fig. 10) to be taken on the same day by Adrien Mongenet to the yard of his farm in the centre of the village of Vix. The object was to stay there a few days (one or two?), during which time it received many visits, and then the cart and its precious load\(^\text{16}\) were stored in a barn adjoining the Mongenet farm next to the village square (today the barn has been converted to a dwelling). Finally, on Monday 12 January, Maurice Mongenet – who had just turned 18 – used the same mode of transport to bring its cargo to Châtillon-sur-Seine, where it reached René Joffroy’s garage in the house he occupied at that time at no. 123, Rue Docteur Robert. To prevent any mishaps, the horse had its horseshoes removed, to avoid slipping on the icy road. Despite these precautions, the cart had to be pushed over the last few metres of its ascent before arriving at its destination.

\(^{16}\) Information obtained from Maurice Mongenet.
The excavation of the burial chamber

“Two weeks passed … the excavators were preparing for the excavation of the burial”\(^ {17} \) (Joffroy 1962, 34).

This passage would indicate that the beginning of the excavation of the burial chamber took place at the start of the last week of January, i.e. Monday 26 January. This part of the operations can be briefly assessed. R. Joffroy (1962, 38) tells us that the excavation took 170 hours. This figure appears to be precise enough to be credible considering what is otherwise known. It represents 28 working days of on average of six hours, considering the limited daylight hours at this time of year and the very difficult weather conditions (rain, snow, and frost). Digging the sondage trench and excavating the crater had taken ten days. This would leave 18 days to complete the excavation of the burial chamber. If operations resumed on Monday 26 January, and if 18 days are added, we would reach 14 February, a date that corresponds to R. Joffroy’s account of the end of the excavations and includes two Sundays off on 1 and 8 February. Maurice Moisson never dug on a Sunday, on principle since he was not a practising Christian.

\(^ {17} \) « Deux semaines s’écoulèrent … les fouilleurs préparaient l’exploration de la tombe ». 
The excavation “had started for me on a visit to Moisson, when, on a Tuesday at the beginning of January, I came to collect the remains of a Greek cup; it ended on 13 February when I brought the diadem back to his house …”18 (Joffroy 1962, 36).

In this passage, R. Joffroy dates the end of the excavations to 13 February, but a few lines earlier he indicates that it ended on 14 February. The correct date is indeed 14 February and it is also the date that figures on some photographs in R. Joffroy’s archive.

René Joffroy mentions several times the problems that the rising water caused at the base of the burial chamber during excavation. He attributed this to a rise in the water table. Although the fact that the chamber was cut into the subsoil to a depth of more than 3.5 m is significant, the presence of a few dozen centimetres of water at the bottom of the burial cannot be due to fluctuations in the water table – R. Joffroy refers to 0.5 m but (in my opinion) this seems somewhat exaggerated: the rise in the water table is unlikely to have been much greater than 0.2 m. Pierre Rat, professor of geology at the University of Bourgogne, gave a convincing explanation of this phenomenon when shown the material from which the Hallstatt statuettes from the Vix sanctuary of “Les Herbues” had been

18 « … avait débuté pour moi lors de ma visite chez Moisson, où, ce mardi du début de janvier, j’avais recueilli les restes d’une coupe grecque ; elle se termi-

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made (Chaume 1991; Chaume / Reinhard 2000; 2002; 2003; 2007; 2013). It takes two aspects into account. First, the excavations acted as a sump, the water in the surrounding waterlogged soil (caused by a particularly wet winter with alternating snow and rain) being captured by capillary action. Second, the Argovian marls that form the geological sub-strate of Mont Lassois create an impermeable layer from which water from the slopes of the hillfort flow down to the first terrace of the Scine valley, where the princely barrow was erected. The combination of these two effects explains why water rose within the burial chamber. R. Joffroy’s idea that the burial took place in a period of dry weather, probably in summer, seems to be sound. Sampling of the buried soil for pollen analysis may perhaps produce a science-based answer to the question of when the body was placed in the chamber and when the chamber was closed off. It would require re-excavating the monument, a prospect actively under consideration.

The structure of the mound and the layout of the burial

The princely barrow

The input from geophysical surveys

The first aerial photographs showing the mound were taken by René Goguey in 1962 (fig. 14); they reveal an oval mound remodelled by ploughing with a longer axis of some 50 m and a shorter axis of around 40 m. This distortion follows the same direction as the direction of ploughing, which is oriented northeast-southwest. There is hardly any distortion affecting the east-west axis, whose length is 40 m. This distance corresponds approximately to the diameter of the original mound, which is 38 m. Essentially, it is the surface spread of what is left of the mass of the barrow visible on the aerial photograph. It is likely that the structure at the base of the monument has not been affected, or damaged very little, by the plough.
Four geophysical survey campaigns have been conducted in the area of the princely burial at Vix (mound 1). The first three were undertaken by Harald von der Osten-Woldenburg in 1995–96 and 1999 (fig. 15). The last, in 2016, was conducted by a team from the German Archaeological Institute (DAI) under the direction of Friedrich Lüth, assisted by Rainer Komp and Lukas Goldmann. They were complemented by a resistivity survey in 1996 and a ground-penetrating radar (GPR) survey in 1999. The insights that these surveys provide concern the structure of the mound and its immediate surroundings. On the magnetometer plot, the barrow itself, which is made of limestones and hence little susceptible to magnetic anomalies, is only feebly indicated. The edges of the mound are difficult to identify, especially in its northern part (fig. 15). Around the mound, it is possible to make out a wall or stone kerb. Some 15 years ago, deep ploughing dislodged a very large stone about 1 m long, which is thought to have formed part of the monument’s kerb.

The resistivity survey proved more fruitful (fig. 16). This method documents successive horizontal slices of the mound at intervals of 0.5 m, giving a three-dimensional image of the structure. In my published dissertation (Chaume 2001, 213), I thought I had identified the sondage trench of December 1952. The roughly rectilinear whitish anomaly visible on the magnetometer plot, which is some 20 m long and starts at the southern edge of the mound and runs towards its centre, could indeed correspond to the trench dug in 1952. At that time, I had envisaged a scenario for the discovery of the crater that is no longer tenable today because the newly available photographs in R. Joffroy’s archive show that the trench penetrated the upper part of the burial chamber and immediately came...
across the crater, which was placed in the north-western corner of the burial chamber as R. Joffroy rightly notes. If the geophysical surveys have so far failed to identify the exploratory trench dug by Maurice Moisson in what is left of the barrow (see above), they have also been unable to throw light on a mysterious further trench; only excavation could, at least partially, achieve that. This mystery trench is highly likely to correspond to an attempt at excavating, or rather robbing, the burial chamber well before 1930, the date of the first proper systematic investigations at Vix. A trench does indeed exist, and the Ground Penetrating Radar (GPR) survey of 1999 established its depth, which is between c. 0.7 and 0.8 m (fig. 17). The radar images show that this sondage deviated slightly towards the north-east as it reached the edge of the central burial, the latter indicated by a very bright
white mark caused by the high resistivity of the stony material used to backfill the excavation. At a depth of 0.8 m below the present-day ground surface, the traces of this trench, as well as any traces of the barrow, disappear. The maximum height at which the mound survived should therefore be estimated to be around 0.8 m. R. Joffroy’s observations appear to corroborate this:

“… today, only a few stones (of the tumulus) remain in place, over a thickness of 0.80 m and consisting of Bathonian stones and slabs that come from a geological horizon that outcrops on the surface some 1 km to the south, near the village of Etrochey; these stones, some of which are 0.65 m long, 0.50 m wide and 0.25 m thick, lay on a layer of natural clay compacted by the weight of the material above; this clay layer has yielded several pieces of Neolithic worked flint mixed with sherds of coarse pottery, sometimes decorated with impressed cordons, similar to material recovered in the Hallstatt layers on Mont Lassois”\(^{19}\) (Joffroy 1954, 2).

These pottery sherds no longer exist and hence we cannot deduce anything from them.

\(^{19}\) « … aujourd’hui subsistent seules les dernières assises (du tumulus) qui ont encore 0 m 80 de puis-
sance et qui sont composées de pierres et de dalles bathoniennes provenant d’un horizon géologique...
Fig. 17. Vix. Ground Penetrating Radar survey of the Vix princely barrow.
The “black holes”

In the central part of the mound, five “black holes” arranged in a regular pattern around the burial chamber form a circle measuring around 10 m in diameter and stand out from the mass of the monument. These oval features, about 3 m long, correspond to areas of lesser resistivity, where the stones are less dense. It is difficult to interpret them: are they related to the construction of the mound? This is far from certain, but their regular shape suggests that they are structural anomalies. Finally, the white line of the stone kerb that surrounds the monument and marks the threshold between the world of the living and that of the dead is visible in some places around the circumference of the barrow.

Plan and organisation of the burial

The architecture of the burial chamber

The dimensions of the burial chamber that Joffroy (1954, 3) gives us are 3.10 x 2.75 m, indicating that the chamber was not square but sub-trapezoidal. Such a lack of rigour, which seems surprising for the builders of a burial of such high status, may suggest that the construction of the tomb was somewhat hurried or, at least, that problems linked to the depth of the chamber were encountered. It is difficult to estimate the depth of the floor of the chamber with respect to the present-day ground surface. R. Joffroy tells us that the height of the burial chamber was 3 m, but obviously this does not mean that this figure corresponds to the depth of the cut of the feature. One of the archive photographs can help us estimate this (fig. 18). The tool shown there, a fork, is usually 1.5 m long. The difference between its level in the chamber and the ground surface is approximately 2 ½ times the length of the fork, i.e. 3.50 m. To this depth of 3.50 m we should add 0.50 m, which represents the difference between the level on which the fork is located and the floor of the chamber, which had not been reached at the time the photograph was taken. The wheels of the wagon had been set on the floor of the burial chamber. These wheels have a diameter of 0.75 m and their invisible parts, i.e. the parts not yet excavated, are estimated to be some 0.50 m high. The total depth from the present-day ground surface would therefore be around 4 m.

René Joffroy attempted to construct a narrative of the collapse of the burial chamber’s roof and its consequent crushing of the grave goods. He outlined some taphonomic aspects concerning the torc and especially the wagon and the human bones. C. Rolley has expanded on R. Joffroy’s observations, essentially adopting them. The lateral displacement of the objects in a west-east direction is an accepted fact, as R. Joffroy tells us, as is the partial collapse of the burial chamber’s northern wall, which covered and protected the gold torc and the skull of the deceased with a sandy layer. Our examination of the displacement of the objects and the movement of the body, however, results in a more complex taphonomic analysis (see below).
There was a posthole with packing stones at each corner of the grave; R. Joffroy states that the remains of wood that he sampled came from the walls of the chamber and he does not mention the possibility that they may have come from the corner posts. It is regrettable that none of these precious organic remains has survived (Joffroy 1954, 3 fn. 1). At least we know that timber was preserved in the chamber. The posts, although wedged in position by stones, could not support the weight of the roof of the burial chamber. It is more likely that the posts contributed to the survival the chamber’s timber walls by maintaining the planks in position.

The surroundings of the burial chamber were not excavated and hence we do not know how its roof was constructed. We should probably imagine an arrangement similar to that found at Lavau (Dubuis / Garcia 2015; Dubuis et al. 2015; Dubuis et al. forthcoming), that is, large joists set in the upper edge of the chamber and a covering of thick planks. The only roof of a Hallstatt princely burial to have survived (at least in part) is that of the central burial of the Magdalenenberg barrow, which came to light when first excavated in 1890 (Spindler 1971, pl. 53). It consisted of two layers of massive beams, one oriented north-south, the other east-west. At Hochdorf, the situation is less clear, since only traces of wood give us an indication of the structure of the roof. The joists that made up the roof of the chamber rested on the edge of the cut for the burial (fig. 19); we there-

Fig. 18. Vix. View of the burial chamber from above. The fork against the northern wall of the chamber gives an idea of the depth of the chamber’s floor level. The shot was taken at the time the iron tyres of the wagon’s wheels were beginning to emerge.
Fore do not know how they fitted onto the walls of the chamber. Thimo Brestel reports that in burial VI of the Hohmichele mound, in barrow 4 at Gießübel-Talhau, and at the Grafenbühl in Asperg, a central post was recorded, designed to support the roof of the funerary chamber (T. Brestel, pers. comm; Brestel in press). Nothing of the sort was noted at Vix, but that does not constitute reliable proof.

René Joffroy notes having observed traces of the wooden planking of the walls of the burial chamber during excavation. It is unlikely to have been the case everywhere because the archive photographs show that at least two sides of the chamber (visible on a print) had not been completely cleaned; one would expect them to be vertical when fully exposed, which is not the case.

The 1954 and 1958 plans (figs 20–21)

The general plan of the burial was finalised as early as 15 February, the day after the excavations ended on 14 February, as R. Joffroy (1962, 41) informs us, and published for the first time in 1954 (Joffroy 1954, 5 fig. 1). The plan was revised and published again a few years later (Joffroy 1958). The way the burial was excavated was less than satisfactory, even if we make allowances for the awful weather conditions (but quite normal for winter). René Joffroy refers to a grid having been set up to record the position of the objects (Joffroy 1962, 39) but it is permissible to doubt that this was done, even though he took care to state that “the position of the metal remains was recorded with the greatest precision. For very small objects, we took account of the fluidity of the mud that tended to flow towards the sump where the inlet of the pump was located; we estimate that the

Fig. 19. Traces of the timber beams on the edge of the roof covering the burial chamber in the Hochdorf mound.
margin of error for the location of very small objects was only a few centimetres. The final plan of the burial was drawn up by René Joffroy (1954, 5 fig. 1) from his notes but also with the help of René Paris, who gave me this information. It is highly likely that the authors of the plan used their memory to add accuracy to aspects that were not precisely recorded.

20 « … la position des vestiges métalliques a été notée avec la plus grande exactitude. Pour les très petits objets on a tenu compte de la fluidité de la boue qui tendait à couler en direction du puisard où la crépine de la pompe était installée ; on peut estimer qu’il n’y a pas plus de quelques centimètres d’erreur possible en ce qui concerne l’emplacement précis des plus petits objets ». 
Strangely enough, it seems that the excavation photographs were not used, or hardly used, to help locate the position of the objects. Together with Klaus Rothe, I undertook this painstaking but necessary task 65 years after the event. What was gained in terms of accuracy mainly concerns the horizontal stratigraphy. Because no levels were taken at all, the taphonomic study was obviously hampered.

The crater had been placed in the north-western corner of the burial chamber. That is true as far as it goes, but it is not certain that the position that R. Joffroy gave it on the plan is correct. Currently, the axis running through the handles is oriented north-northeast-south-southwest in relation to the burial chamber, the latter being oriented north-south. With respect to the position of the sondage trench, and because the "north" handle does not appear face-on but shows its eastern side, it is not impossible that the crater should be rotated by

Fig. 21. Plan of the Vix princely burial after Joffroy 1958, pl. IV.
around ten degrees towards the west. If the project of re-excavating the princely burial at Vix becomes reality, the precise recording of the sondage trench, which is bound to come to light, would make it possible to determine the position of the crater with greater accuracy.

As for the two Attic kylikes and the silver phiale, it is the traces they left on the edge of the lid that have made it possible to determine their position. These traces are no longer visible today and we must therefore trust the observations of the original excavators. There is no reason to doubt them.

René Joffroy tells us nothing or almost nothing about the three bronze basins, except that they were against the western wall of the burial chamber. There are no photographs or records of them in situ.

Fig. 22. Revised plan of the Vix princely burial (modified after René Joffroy's originals).
The attention of the excavators was focused on the eastern wall of the chamber because, presumably, the wheels of the wagon were resting against it and were still in position at the time of the excavation. Numerous photographs, unfortunately many of them redundant, illustrate this sector of the burial. Their examination makes it possible to reconstruct three-dimensionally some elements of the wagon and of the personal adornment.

The plan of the burial chamber is schematic, and the study presented here shows how imprecise it is. It goes far beyond the 5 cm margin of error that R. Joffroy (1954, 4) mentions. Given the observations made above, that margin is more likely to be around 20 cm on average. This is significant but has by no means prohibited various scholars from advancing certain hypotheses on one or another aspect of the problem since R. Joffroy’s first studies.

Significant gaps in information concerning many small objects such as nails, rivets, bronze or iron hooks, fragments of sheet bronze, or socketed elements made of bronze, pose a more serious problem. For some objects, knowing their exact position on the plan would have helped with the identification of their function. This affects in particular the following artefacts, listed in decreasing order of importance: one of the nails with sleeve

Fig. 23. The remains of the Lady of Vix photographed on a cloth background a few months after excavation and published in Paris Match in August 1953.
Rolley 2003c, pl. 64a.1; b); the two small balusters with slits (Rolley 2003c, pl. 59b); the decorative ring-shaped nails that have parallels in the wagon burial of Ca’ Morta in Como (Chaume / Rothe 2017); the bronze sheet metal fragments (Rolley 2003c, pl. 62.4–12; 63c–f); the 15 or so iron nails (Rolley 2003c, pl. 64a.13–16; 65); the three incomplete balusters (Rolley 2003c, pl. 59c); the three hub clamps (Rolley 2003c, pl. 42.2; 43d) that do not feature on the plan and which should logically be located near the fourth if the hypothesis that the hubcaps were deposited under the front of the wagon is correct; finally, the iron nails with decorative bronze heads (Rolley 2003c, pl. 55a.12–13; 56d).

Greater accuracy in the position and the drawing of the four supports of the box-shaped body of the wagon (Rolley 2003c, pl. 54) and of the two pairs of bronze discs (Rolley 2003c, pl. 67) would also have helped. One of the supports of the wagon’s box-shaped body and the eighth bracelet of the Lady of Vix are also missing from the plan.

The locational information gained from examining the archive photographs has made it possible to reposition a not insignificant number of objects (fig. 22). I have added to this repositioning exercise a reinterpretation of two pieces that I attribute to the wagon’s traction system, namely the draught pole and the yoke (see below).
Revising the plan of the burial chamber (fig. 22)

The human remains (Bernard Dedet)

The human bones that have survived have been examined several times, the last and most complete analysis being owed to Germaine Depierre and Henri Duday (Depierre / Duday 2003); in that study the two authors also consider the way the body was deposited and address matters of taphonomy. The unpublished photographic documentation does not give much additional information. The photographs are of two kinds: detailed excavation shots and a photograph of what may be the whole skeleton as excavated laid out on a cloth in roughly anatomical order; the latter photograph was printed in an article in Paris Match in 1953 (Chandet / de Segonzac 1953; fig. 23). This Paris Match illustration provides, in a manner of speaking, the inventory of the bones shortly after they were excavated, or at least those that are identifiable. The importance of this photo-
graph lies in the fact that it illustrates some pieces that no longer exist. Two segments of
the diaphyses of one of the forearms (radius and ulna) that G. Depierre and H. Duday
report as missing in 2003 are visible on the 1953 photograph. Moreover, it clearly shows
the two proximal articulations of the femora, with, in both cases, the head of the femur
and the greater trochanter, whereas H. Duday and G. Depierre (Depierre / Duday
2003, 30; Duday / Depierre 2003, 41) only indicate the presence of one, that of the left
femur.

Furthermore, four views of the excavations allow us to see some bones in situ (fig. 24,
views A, B, C, and C'):

On the view labelled A:
• the skull (a), lying upside down and with the base visible, the occipital part
towards the right;
• a clavicle (b);
• a humerus (c; also visible on fig. 24, B), seen from above, with the distal epiphysis
(shoulder) towards the bottom. It seems to be the left humerus because the epitrochlear projection
appears to be visible at the distal end.

On the view labelled B:
• the distal two thirds of the diaphysis of a tibia (d), seemingly the left tibia, in late-
ral-anterior view;
• a fibula (e), broken in two: the distal half has slightly slipped in front of the tibia
but remains close; the two bones were kept together by a bronze anklet; the prox-
imal half diverges markedly from the axis of the tibia. Note that Joffroy does not
show this break on his 1953 general excavation plan (bone “1” on this plan; cf.
fig. 21, bones at no. 30).

On the view labelled C:
• a fragment of a coxal bone (f), with ischial tuberosity, ischial spine, cotyloid brow,
and the greater sciatic notch wide open; despite not being entirely clear from the
photo, it seems that the external or posterior face of the bone is visible, which would
make it the left coxal;
• a femur (g) (a better view is shown on C') with its distal epiphysis apparently on
its posterior face; it would be risky to guess which side it represents;
• probably the diaphysis of the other femur (h); its proximal epiphysis is visible on
C'; the neck and head of the femur are present but too badly damaged to determine
whether it is a right or left femur. On R. Joffroy’s 1954 plan (fig. 20), this femur
head is shown facing west (bone labelled “i” on the plan; cf. fig. 21, bone at no. 37),
whereas the photograph seems to show it facing east.

The location of all these bones on the photographs confirms what has already been
outlined about the position of the body and its taphonomy. The head tipped backwards
after the ligaments had decomposed, towards the north. We can infer from the position
of the skeleton that the body was laid out supine, as attested by the eastern location of
the left humerus and tibia. Moreover, the location of the various limb elements appears
to indicate that movement occurred in two opposite directions with respect to the long-
itudinal axis of the wagon (fig. 24a, marked by arrows on the general plan): to the east,
the left humerus, tibia, and fibula (the latter two still wearing an anklet); to the west,
the pelvis, both femora as well as the mandibula and parts of the shaft of a forearm
bone, shown on R. Joffroy’s plan (marked b and c) but not visible on the photographs.
All this suggests that the box-shaped body of the wagon collapsed on either side of its
axis. The position of the humerus, with its distal epiphysis towards the north-east, also
indicates that more localised bone displacement took place. To the west, the coxal-femoral block is present, but it is impossible to determine which sides are represented on the photographs, except perhaps for the left coxal bone (fig. 24C and C′f). These elements would lend support to H. Duday and G. Depierre’s hypothesis that this block was turned “back to front” at a time in the decomposition process when these bones were still articulated.

The contribution of the archive photographs to the repositioning of the artefacts

The elements of the wagon and the jewellery of the Lady of Vix have all been moved; this is well known, and R. Joffroy drew attention to this from his very first publications onwards. The movement of the objects had a dual cause: the collapse of the roof of the burial chamber and the decomposition of elements of the artefacts made of organic material. It is not possible to determine the order in which these events took place and it is highly likely that both were connected.

I shall not return here to the debate over the position of the torc. Henri Duday (Éluère et al. 1989, 28–20) and Alfred Haffner (2003) have produced a well-argued analysis which (in my opinion) appears entirely convincing and which is widely accepted today (figs 25 and 26). Whatever opinion one may hold over this question, the taphonomic study is, however, in no way decisive in terms of the interpretation of the object as a diadem or a torc. Indeed, it seems that the location in situ of the object on the skull does not allow us to decide definitively between one or the other hypothesis (fig. 25). It is the typological study that carries the day in favour of the torc, a conclusion that had been reached in the articles by Christiane Éluère and Henri Duday (Éluère et al. 1989, 31), Alfred...
Haffner (2003, 180), and Martin Guggisberg (2000, 118–119 fig. 134). The discovery of a female statue at the sanctuary of “Les Herbues” in Vix, which wears around its neck a very similar neck ring, lends additional support to the idea that the object from the burial chamber was a neck ornament (Chaume 1991; 2001, 262 figs 195–196; 263; Chaume / Reinhard 2002; 2003; 2007; 2013).

With respect to the personal ornaments, the large hollow bronze ring on the body of the deceased, which R. Joffroy (1962, 101–102) as well as Jean-François Piningre and Suzanne Plouin (2003, 236–237 pl. 124) interpret as a torc that had moved out of position, is an element worth re-examining. The archive photograph (fig. 27) shows it to be under the coxal bone and on the (right?) femur, which suggests that the object moved little, if at all. The large ring appears to have slightly slipped downwards (southwards) and sideways (westwards) without, or hardly, moving away from the core of the body. It remained within the area of the pelvic girdle even though it is difficult to achieve greater precision from taphonomic observations as to the sides of the coxal bone and the two femora that are visible on the print. These points appear to back up the idea that this ring once formed part of a belt. It would have been worn on the belly like the objects known in German as Leibringe (body rings; see Zürn 1970; 1987; Kurz / Schiek 2002), probably not at the waist in view of its diameter (26.7 cm). Torcs with a very large diameter also exist, as found, for example, in Burial 1 of Barrow 10 at Mühlacker (Zürn 1970, 97–99 figs 65–66; pl. 53,1–2) or Burial 1 of Barrow 11 at the same site (Zürn 1970, 100 f. figs 67–68; pls 54A; 55). Their diameters are 32 and 33 cm respectively. Burial 1 of Barrow 11 also included, among other objects, a Leibring-type ring measuring 34.5 cm in diameter. Such cases, although infrequent, are not unique. Clearly the identification of the function of the large Vix ring rests on establishing its position on the body of the deceased,
since using the diameter as the sole criterion is insufficient to decide whether the Vix ring was a torc or a ring of Leibring type.

At one point on the plan, there is a concentration of five circular bronze plaques (fig. 21,11.28), which R. Joffroy tells us capped the hubs and the joint of the draught pole. The photograph (fig. 27), which is of good quality, allows us to partly agree with R. Joffroy, who states that the hubcaps were “found nested inside each other inside the box”\(^2\) (Joffroy 1962, 116), but this is contradicted by the photograph. The anklet, against which one of the lynch pins was resting, has a diameter of 129 mm (Piningre / Plouin 2003, 232), which gives us a scale for estimating the diameter of the circular plaques visible on the photograph and which have very similar dimensions. These bronze plaques are likely to correspond to three of the hubcaps (123 mm in diameter; Egg / France-Lanord 1987, 8). The fourth was probably not excavated when the photograph was taken. The four hubcaps would therefore have been collected and placed under the wagon rather than on the body of the wagon, and not positioned at the base of the wheels along the eastern wall as one might have expected. René Joffroy shows a cap for the draught pole joint on

\(^2\) “… ont été retrouvés emboités l’un dans l’autre à l’intérieur de la caisse.”
his plan (fig. 21, 28), an object that is not visible on the photograph; the position of the second cap is unknown.

On the 1954 plan (fig. 20) of the burial chamber, as well as on the 1958 plan (fig. 21), R. Joffroy does not distinguish between the elements that adorned the axles and those that decorated the joint of the draught pole (figs 20–21 no. 16), simply because he considered them to be pieces that braced the uprights of the wagon’s box-shaped body. It is easy to berate him for this with hindsight, but it would overlook the fact that at the end of the 1950s we hardly knew anything about Hallstatt vehicles. Significant progress was made when Chris Pare (PARE 1991; 1992) and Markus Egg (Egg / FRANCE-LANORD 1987), for example, studied the subject. For Vix, we had to wait until the publication of the wagon by Albert France-Lanord and Markus Egg in 1987 for the identification of the elements embellishing the axles (Egg / FRANCE-LANORD 1987, 19–23 figs 15–18). I shall not discuss in detail the many vicissitudes the wagon went through; these considerations would lead to far too much explanation and would require re-examining the whole question, a study that is in any case underway. I shall confine my remarks here to endorsing the suggestions made by René Joffroy (1957, 114) and Claude Rolley (2003a, 22), that is, that the draught pole had indeed been dismantled and then placed in the grave. But I shall follow an entirely different line of argument.
Discussions concerning the wagon

The draught pole (fig. 28)

Claude Rolley does not have a set opinion on the presence of the draught pole in the burial although he does agree that this was the case. He even maintains, like R. Joffroy (1962, 116–117), that it had been placed between the body of the wagon and its wheels but does not specify on what basis he reached this conclusion (Moulhérat / Rolley 2003, 26). Some scholars have asserted that the draught pole was in the grave (France-Lanord 1957; Joffroy 1954; 1957; 1958; Rolley 2003a), others, like M. Egg, remained doubtful about this. Up to this point, no clear scenario could emerge from these discussions. Let us note from this debate that Markus Egg had not reached a firm conclusion, considering that “the question of the draught pole in the Vix burial remains open”22 (Egg / France-Lanord 2003, 64). Markus Egg (Egg / France-Lanord 1987, 30) refers to (and rejects) Hayo Hayen’s hypothesis (Hayen 1983) that the circular bronze bands pierced by an iron nail with a moulded bronze head formed part of the draught pole (fig. 29). The iron rods that belong to these objects retain vertical and horizontal traces of

Fig. 29. Bronze fittings with iron nails topped by a bronze cabochon that formed part of the yoke used for pulling the Vix wagon (?).

22 « ... le problème du timon dans la tombe de Vix reste ouvert ». 

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wood, which indicate that two pieces of wood had been assembled. This kind of arrangement is, a priori, incompatible with a draught pole which needs to be made from a single piece to be solid enough. Furthermore, the diameter of the circular bands is identical, whereas the diameter of the pole is not circular but oval, as rightly observed by M. Egg (Egg / France-Lanord 1987, 30) and later by Julia K. Koch (2006, 121–127). I made the same observation when studying the Ca’Morta wagon: the draught pole of this four-wheeled Hallstatt vehicle is entirely covered with a bronze ornament, which could be reconstructed in full (Chaume / Rothe 2017, 21–22 figs 6–7.1). The draught pole of the vehicle found in the barrow of La Butte in Sainte-Colombe-sur-Seine is also oval in section, as attested by some published elements (Olivier 2001; Koch 2006, 124 fig. 131).

The draught poles of Hallstatt wagons are 3 m long on average. They are made in one piece and have a tapered shape, i.e. their width decreases the further away from the traction arms. At Vix these dimensions are not incompatible with the presence of a draught pole in the burial, provided it had been removed from the wagon. This is the hypothesis that I would retain by proposing that the draught pole was placed at an angle, under the wagon, as indicated on the new plan (fig. 22). The function of the bronze piece drawn on the plan (figs 21–22 no. 14) and placed towards the front of the wagon has not so far been determined. It may be a decorative plaque that would have been fixed to the upper part of the draught pole, just after the joint. This much-fragmented object is made of thin sheet bronze ornamented in two registers, each decorated with two lines opposed by a motif of isosceles triangles with a dot on top. This sheet is trapezoidal and not rectangular as the drawing published by M. Egg and A. France-Lanord (1987, 57 fig. 43,3) appears to suggest. It is possible to reconstruct the sheet and its decoration with a certain degree of precision along its width, but uncertainties remain as to its length.

If this hypothesis is valid, then it is evidence of the presence of a draught pole in the Vix burial. The two circular bands (fig. 29), which in this scenario cannot belong to the draught pole, would form part of the yoke.

The yoke

The possibility that the yoke had been included in the burial has, to my knowledge, never been evoked. There is no doubt that it formed an intrinsic part of the wagon’s traction by two horses, but was it deposited in the burial chamber? Whether this was the case is arguable, especially since no piece of the harness has been recognised, most probably because the harness was never paced in the chamber, unlike, for example, at Hochdorf (Koch 2006, 78–87), where it was recovered in its entirety.

I suggest, as a hypothesis, that the circular bronze rings topped by a cabochon of the same metal were elements that decorated a yoke (fig. 29), as can be seen at Hochdorf (Koch 2006, 78–79 figs 89–90; pl. 10,162–164). On R. Joffroy’s plan, a single exemplar is shown in the north-eastern corner of the burial chamber (fig. 20,25). It is surely not by chance that this object was found very close to the position suggested for the draught pole; it is not extravagant to suppose this since the draught pole and the yoke are connected by the purpose they fulfil in pulling the wagon.

To conclude on this point, the excavation photographs, although rare and sometimes of poor quality, clearly show that the plan indicating the position of the objects on the floor of the burial chamber is inaccurate, to say the least. This impression is reinforced by uncertainties at a taphonomic level and hence Claude Rolley’s conclusions on the objects that he deems remained in situ or considers as having moved are now superseded (Moulhéréat / Rolley 2003, 24–25).
The surroundings of the princely barrow

On Harald von der Osten-Woldenburg’s resistivity plot (fig. 16) a light mark can be seen some 5 m from the edge of the mound, to the south-west of the princely barrow. It is probably a large stone, displaced from the kerb that surrounded the monument, or perhaps a stela that had fallen from its original setting on top of the mound. A similar situation was encountered during the excavation of mound 2 (fig. 1) in 1995–96 (Chaume 2001, 221–223): an elongated stone, identified as a stela, was lying at the foot of the barrow, a few metres away.

A Gallo-Roman rural establishment is located very close to the princely mound, to the north of it (fig. 15). Only its main building is visible but other structures of the same period have been recorded in excavations in the vicinity (Chaume 2001, 219). A square enclosure located some 30 m to the north of the Gallo-Roman building is undated. Could it be a funerary enclosure? It is a plausible hypothesis, but only archaeological excavation could prove or disprove this.

A second burial mound, erected to the south-east of the princely barrow at a distance of some 55 m, is of greater interest for our subject. This mound was identified in H. von der Osten-Woldenburg’s geophysical survey of 1999 and was not visible in René Goguey’s aerial photographs. What is left of the barrow is defined by a circular ditch just under 20 m in diameter. A central burial can be made out at its centre. This barrow has not been excavated; it may be the burial of the warrior who accompanied the torc-bearing statue recovered in the sanctuary of “Les Herbues” – which is likely to be a representation of the Lady of Vix – unless this male burial had been placed in the princely burial, closest to its consort.

In 2003, during excavations carried out in the area of “Les Lochères”, very close to the princely barrow, a burial (feature 5) was uncovered in one of the sondage trenches. This burial appears to belong to the remains of an earthen funerary mound that was not surrounded by a circular ditch since it is not visible on R. Goguey’s aerial photographs; neither is it identifiable on the magnetometer plots produced by H. von der Osten-Woldenburg and the DAI. The grave, which was unfurnished and without any special features, had been disturbed by ploughing: the lower part of the skeleton was missing. The osteological analysis has identified the body as that of a child about five years old. Radiocarbon dating has yielded a date on a plateau of the calibration curve. It is likely to be a Hallstatt burial that most probably belonged to a completely eroded barrow.

Conclusion

This study is intended to act as a preamble to re-investigating the princely barrow of Vix by renewed excavations. I have therefore tried to glean as much information as possible from the sparse documents that have survived in the archives.

I have adopted a historiographical approach, by using unpublished documents or new reflexions, to elucidate aspects that have been much discussed, such as the sequence of events and the role the actors played in the Vix drama. The photographic archives that the heirs of René Joffroy and Paris Match have made available have allowed Bernard Dedet and me to clarify the plan of the burial in some points, notably in the sector occupied by the wagon. I was also able to measure, thanks to these photographs, the degree of error incurred when the plan of the burial was drawn up and the consequences this had on the interpretation of the burial’s layout. Changes were often merely in matters of detail, but this sometimes proved crucial, for example when attempting to show that the draught...
pole and yoke were present in the grave, or when assessing the “loss by attrition” of the Lady of Vix’s bones since she was first exhumed. My approach has not merely been retrospective; it also looks to the future since it is intended to investigate this emblematic site afresh.

The monument that covered the burial of the Lady of Vix has not yet yielded all its secrets. We know nothing, or hardly anything, about its architecture; the latter is available for study mostly in the base of the barrow since very little remains of its superstructure. We hope that it survives relatively well over a height of around 0.70 to 0.90 m; we also hope to re-examine the structure of the central burial. The five “black holes” need to be explained; their regular distribution around the burial chamber calls out for an explanation that so far has not emerged. The buried soil on which the monument was erected also requires close examination. R. Joffroy talks of the ground having been levelled and tamped down; this is unusual but must be tested. Excavations would also allow us to obtain more information about the dating phases of the monumental building, through sampling of the buried soil and the analysis of its pollen. It is also not impossible that secondary burials should come to light in and around the monument: they may help date the central burial, a matter that is not unanimously accepted, even today. Analysis of the aDNA of skeletal material to establish possible family links between the inhumations found around Vix and the lady buried in the centre of the princely burial is a further objective, and there are many others.

I have used the phrase “Lady of Vix” to refer to the deceased person on purpose. Like, no doubt, many others who have examined the case of the “lady”, I am not entirely immune to the mythology and myth-making that surrounds this discovery, precisely because it lies at the crossroads between archaeology and myth. The discoverers of the Vix “treasure” (R. Joffroy and his team) were the first to contribute to the creation of a myth by fuelling it, more or less deliberately, by methodological sleights of hand; for example, the length of the sondage trench jumps from 9 to 20 m because 20 m implies a methodologically sound strategy with the trench starting outside the monument, whereas 9 m (the true figure) shows that Maurice Moisson went straight to the core of the monument. The time spent excavating the burial is given in hours by R. Joffroy (170 hours) and not in days (18 days). Since it is likely that it is the number and not the unit of measurement that lingers in the memory, the greater the number the better: hence from 9 to 20 and from 18 to 170. These blatantly aggrandising tricks helped create the myth. Among the dates that R. Joffroy gives for the beginning of the excavation of the trench and which vary greatly from one article to another, the date of 31 December is indicative of a mythologised shift, since New Year’s Eve marks a passage heavy with symbolism. The media promptly took up the baton of myth-making from the archaeologists; the INA’s (National Audiovisual Institute) short film bears the particularly telling title of *The Lady of Vix and her odd teapot* (*La Dame de Vix et sa drôle de tisanière*). The Lady of Vix is presented as a White Lady, a ghost wandering on the Vix “heath”. One can appreciate, through this web of converging hints, how difficult it is for an archaeologist to retain an objective stance when faced with a discovery of such magnitude and avoid falling into the trap of projecting a mythical epic. Is it in fact possible to avoid succumbing to the myth entirely?

In this article, I also wanted to return to some aspects of the excavations, its course, and the events that accompanied the discovery of the crater; I have tried to assess to the limits of what is possible the way the burial was laid out by providing new elements on the subject.

At the end of this study, I cannot, like many others, avoid a certain feeling of frustration when thinking about the range of potential analyses and gains in information that could
have been obtained had the excavations been conducted under better conditions. Intact burials, well excavated, and with such a level of wealth are so rare … But, re-reading the first accounts of the discovery published in the *Comptes rendus de l’Académie des Inscriptions et Belles Lettres* (Joffroy 1953a; 1957), I noticed how much praise eminent archaeologists heaped at the time on René Joffroy and his team concerning the quality of his excavation. These unanimously flattering comments make us appreciate the enormous gulf that exists between what was then considered to be a well-executed excavation and our present-day standards. Indeed, excavation techniques were only just beginning to be addressed at the time: André Leroi-Gourhan had published his work in 1950 and Sir Mortimer Wheeler was to do the same in 1954, just a year after the excavation of the princely burial at Vix. The articles of Paul Courbin (1987) and Pascal Darque (1996) recount the long struggle it took for these methods to become established within the archaeological community.

We must therefore soften our critical stance; having excavated two vehicle burials, I know that we are never beyond being taken to task for the choices we make. It is tempting to be withering but let us remember that the Vix excavations were more or less (rather less, I admit) of the standard expected in 1953. Although today this is a matter of deep regret, this was how it was.

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Abstract: Tracking down the story of the discovery of the Vix princely burial: new results

On 5 January 1953, Maurice Moisson uncovered the mesmerizing Gorgon-headed handle of an enormous bronze crater; it was the opening scene at the theatre of discovery of a major Celtic site known today as the burial of the “Lady of Vix”. The circumstances of its discovery and the conditions of the excavations of the time have severely affected any scientific results that could be expected from the investigation of an intact wagon burial. For this reason, even now many questions remain unresolved. The archival documentation (some 60 previously unpublished photographs) passed on by the heirs of René Joffroy, the director the original excavation, and the re-examination of certain published elements have allowed the author to propose some new interpretations and to provide more detail concerning the sequence in which the findings were made, which so far had been quite hazy. The author was also able to clarify the plan of the burial, the vehicle it contained, the architecture of the burial mound and its archaeological context. All these elements, once sorted out, enable us to look afresh at this most famous of excavations. The author has also sought to outline a hermeneutic approach to the developing myth of the Lady of Vix and what she took into the afterlife. In this context it is quite surprising to read that André Breton, that top dog of surrealism, promoted the humble digger Maurice Moisson to the rank of alchemist.

Zusammenfassung: Neues zum Fürstinnengrab von Vix: Untersuchungen zur Entdeckungsgeschichte


Résumé: Du nouveau sur la tombe princière de Vix : enquête sur le scénario d’une découverte

Le 5 janvier 1953, Maurice Moisson mettait au jour l’anse « médusante » d’un grand cratère en bronze, prélude d’une découverte majeure sur l’époque celtique, connue aujourd’hui comme étant celle de la tombe de la Dame de Vix. Les circonstances et conditions de fouilles de l’époque ont nui gravement aux résultats scientifiques qu’on aurait pu escompter de l’exploration de cette tombe à char intacte. De sorte qu’il reste encore, à
l’heure actuelle, nombre de questions en suspens. Les documents d’archives communiqués par les héritiers de René Joffroy, responsable de la fouille à l’époque des faits, et le réexamen de certains éléments factuels déjà publiés m’ont permis de proposer de nouvelles interprétations et d’apporter des précisions sur la chronologie des découvertes, jusqu’alors très floue, aussi bien que le plan de la tombe, le char qu’elle contenait, l’architecture du tumulus et son environnement archéologique ; autant d’éléments qui, une fois compilés, permettent de jeter un nouveau regard sur cette fouille célèbre. Je me suis également attaché à esquisser une analyse herméneutique qui interroge le mythe *in statu nascendi* de la Dame de Vix accompagnée de son viatique. Dans ce contexte, il est plus surprenant sans doute, de lire sous la plume d’André Breton, pape du surréalisme, l’élévation de Maurice Moisson au rang d’alchimiste.

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