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Caroline Hamon

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MAGICAL, MUNDANE OR MARGINAL?

Deposition practices in the Early Neolithic
Linearbandkeramik culture

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Daniela Hofmann





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A publication of the Institute for Pre- and Protohistoric Archaeology (Institut für Vor- und Frühgeschichtliche Archäologie) of the University of Hamburg and the Department of Archaeology, History, Cultural Studies and Religion, University of Bergen.



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Isn't it strange? Grinding tool deposits and deposition in the north-western LBK

Caroline Hamon

Abstract

Among the emblematic objects found in Linearbandkeramik deposits, querns carry several levels of highly symbolic significance in relation to agricultural and household lifestyle. The first discoveries of Neolithic quern hoards in western Europe were made in LBK contexts in Belgium at the beginning of the twentieth century. Since then, about 20 LBK quern hoards have been discovered, almost exclusively in the north-western part of the LBK territory, in a region located between the Seine and Meuse rivers. The detailed analysis of their localisation and organisation highlights common codified practices. The technological analysis of the grinding tools reveals complex stages of selection. These lead us to propose and discuss several interpretations for such deposits.

Keywords: *querns; deposits; codified practices; agriculture; Paris Basin; Linearbandkeramik*

Introduction

All archaeologists have probably been perplexed, at least once in their career, when in the course of excavation they came across evidence of a deliberate, unique and time-limited act of object deposition. Funerary deposits clearly fall into this category of feature, but so also do so-called non-funerary “structured deposits”, *i.e.* caches and hoards. These practices correspond to deliberate and intentional acts of object burial where items are extracted from their current life cycle and not intended to be retrieved (see *e.g.* Bradley 1998; Chapman 2010; Fontijn 2002). The main difficulty for archaeologists lies in clarifying and demonstrating the intrinsic significance of these practices, which are sometimes highly meaningful from a ritual and symbolic point of view.

Such practices generally involve some of the most emblematic innovations of European pre- and protohistory: flint tools for the Palaeolithic (*e.g.* Angevin *et al.* 2009; Peresani 2006), stone axes for the Neolithic (Jeunesse 1998; Pétrequin *et al.* 2012; Van Gijn 2010; Wentink and Van Gijn 2008) and metal swords and axes for the Bronze Age (Fontijn 2002; Needham 1988). The selection of such meaningful objects, in addition to their deliberate burial, gives a particular symbolic value to these deposits, all the more so since they are also generally associated with funerary practices.

Consequently, scholars rapidly focused on the high cultural and symbolic significance of these practices for prehistoric societies. The interpretation of such

practices varies between researchers, depending on the theoretical framework adopted. Interpretations, therefore, range from craftsmen's hoards, which form an integral part of a full cycle of economic production, to highly ritual acts which form part of an array of symbolic practices, and also include all intermediate hypotheses. In fact, all of these practices can be gathered under the heading of social practices, the meaning of which is worth exploring.

Among the emblematic objects found in deposits, querns carry several levels of highly symbolic significance especially for the Early Neolithic period. Firstly, they symbolise the growing role of cereal consumption in the daily diet of the first farmers: along with sickle blades and other agriculture-related tools, the quern is, in fact, one of the principal forms of material evidence for cereal preparation prior to consumption. Thus, grinding tools are highly emblematic of transformations in the technical system that emerge at the beginning of the "Neo-lithic": they attest to the diversification of stone tool production techniques through the use of polishing and pecking, and to the intensification of their use in a broader range of activities. Finally, querns are strongly associated with the domestic realm as their use is directly interconnected with the daily tasks that structure the organisation of the domestic sphere, particularly within the female domain. Due to these mutually non-exclusive, complex and multiple levels of meaning, querns are apt to be integrated in varied cultural and symbolic expressions, including structured deposition practices.

The first discoveries of Neolithic quern hoards in western Europe were made in LBK contexts in Belgium at the beginning of the twentieth century (De Puydt 1902; Hamal-Nandrin *et al.* 1936). Since then, about 20 LBK quern hoards have been discovered, almost exclusively in the north-western part of the LBK territory, in a region located between the Seine and Meuse rivers. The material culture and objects associated with these hoards allow them to be attributed to the LBK and BVSG (Blicquy/Villeneuve-Saint-Germain) cultures, a time period spanning between approximately 5200 and 4650 cal BC (Figure 1). For the most part, these grinding tool hoards have been discovered on settlement sites, directly associated with houses or with isolated refuse pits. By combining a detailed analysis of the configuration of these hoards and a detailed techno-functional analysis of the 89 grinding tools contained within them, it seems possible to propose a better characterisation and interpretation of this hoarding phenomenon in relation to settlement organisation and funerary practices.

Status and significance of querns from an ethnographic perspective

Used for everyday activities, grinding tools could be seen as mundane utilitarian objects. Their role in the domestic realm is sometimes considered to be limited to various food preparation tasks, and more precisely to the routine tasks of de-husking and grinding cereals. However, ethnographic descriptions highlight great variety in the status and significance attached to grinding tools in terms of their use context, either domestic or collective, their role in food preparation and finally their social meaning in relation to the sharing of tasks. In this sense, querns can be considered as highly meaningful implements with multiple levels of significance.

First, the use of querns in many societies is intrinsically linked to their users' role as food suppliers. In many agricultural societies, for example, querns and

grinders are called “mothers” and “children” (*e.g.* Hamon and Le Gall 2013). They are also deliberately broken in the event of disease outbreaks or epidemics. They are transported by nomadic populations as a basic component of the cooking toolkit (*e.g.* Gast 1968).

Secondly, they play a particular role in the organisation of domestic activities. Given that the complete processing of cereals requires several hours of work per day, and that the weight of querns means that they are not very mobile within the domestic space, cereal grinding must be considered a highly structuring activity within the domestic area (Roux 1985; Searcy 2011). In many examples, daily domestic activities revolve around food processing. In spatial terms, tasks are organised around the cooking area (fireplace, grinding and pounding tools). In some contexts, however, grinding tools are at the disposal of the community for communal use and are therefore governed by another framework of social relationships between the users (family, neighbourhood, clan rules). The context of quern use therefore has a significant impact on where and how querns are stored. For example, restricted ownership of querns would encourage storage away from the collective food preparation area, whereas a more collective management would favour storage near collective areas (Hamon and Le Gall 2013).

Thirdly, the use of querns for grinding activities is strongly related to the sharing of tasks between men and women (David 1998; Katz 2003). In most societies, grinding activities are exclusively women’s work. Only in very particular contexts do we find men taking charge of this activity. This is the case in some nomadic societies, among men who travel large distances from their villages or for men with a specific social status within the community (single or widower, old men, etc.; Roux 1985).

Finally, querns have an important role in transmission practices between generations among sedentary populations (Gelbert 2005). The use of querns in itself requires a long apprenticeship of several years, which implies transmission of a certain know-how, in most cases from mothers to daughters (Hayden 1987). The long use life of grinding tools, which can span several decades, confers a particular status on these querns. In addition, they are often seen as personal property. For all of these reasons, querns are an important element in marriage dowries in many agricultural societies and are an important component of the rules governing the transmission of inheritances (*e.g.* Hamon and Le Gall 2013; Searcy 2011).

Given all of these levels of symbolic, social and cultural meanings, querns can be seen to be anything but mundane functional objects. Each of these different levels can be explored in order to discuss the wide variety of interpretations for quern deposits and to answer a fundamental question: were grinding tools stored or hoarded for later retrieval as an “open deposit”, or were they definitively buried as a sealed offering to mark occasions of great importance in the social life and memory of LBK communities?

Grinding tool deposits: what does the term mean?

Grinding tool deposits: the data

To date, 20 grinding tool hoards have been discovered on 13 sites, together with a few other discoveries whose deposition status is unclear (Chapon-Seraing: Destexhe-Jamotte 1951; Villejuif: Giraud 1943). They are

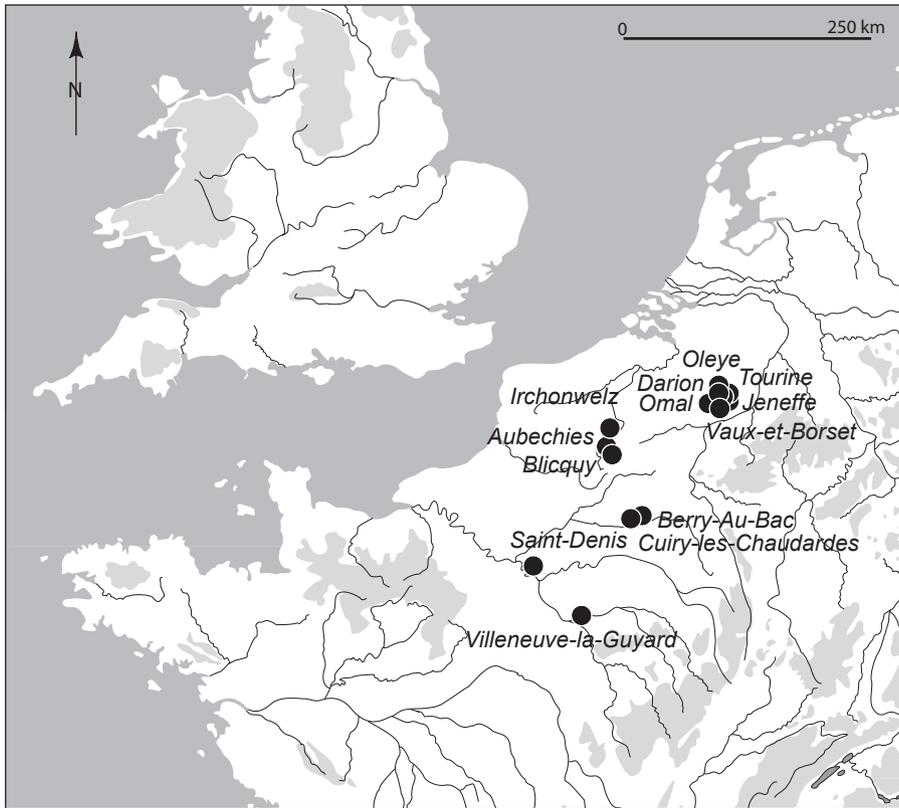


Figure 1. Location map of deposits in the Paris Basin, Hainaut and Hesbaye.

found in a region delimited by the Seine to the south and the Meuse to the north-east (Figure 1). Six are located in the Seine and Aisne valleys within the Paris Basin (Allard *et al.* 1995; Hamon 2005; 2006; Hamon and Samzun 2004a; Ilett and Hachem 2001; Prestreau 1992), three in Hainaut (Constantin *et al.* 1978; Hamon 2008a) and six in Hesbaye (Cahen and Van Berg 1979; Caspar and Burnez-Lanotte 1994; De Puydt 1902; Hamal Nandrin *et al.* 1936; Jadin 2003). Eleven of these deposits have been found in LBK contexts, while nine others cover the complete sequence of the BVSG. LBK and BVSG deposits are represented in both regions (Paris Basin and Meuse area). Some of the sites, especially in the Hainaut area, have yielded several deposits from one or more individual houses (Irchonwelz and Aubechies in Hainaut, Berry-au-Bac in the Paris Basin). The following section presents a critical overview of the data summarised in Table 1, and of the main observations already presented in previous syntheses on the topic (Jadin 2003; Hamon 2008a; 2008b). Surprisingly, since these latter publications, no new discoveries of grinding tool hoards have been recorded within the Seine–Meuse area.

Location and organisation of the deposits

While grinding stone hoards are not present in every house or in every village, all grinding tool hoards found in LBK and BVSG contexts are directly associated with living and household areas and follow three different configurations. Firstly, grinding tool hoards have been found in refuse pits alongside houses, following two different configurations: 1) where tools are placed and arranged in the fill of the lateral loam pits, the deposit may have taken place in the continuum of refuse accumulation (Figure 2); 2) where tools are placed in a recut part of the lateral pit

Site	Culture	Structure number	Pit type	Stratigraphic position	Arrangement of tools	Position of tools	Numbers of querns	Numbers of grinders	Numbers of hammerstones (cited)	Reference
Touraine	LBK?	undet.	undet.	undet.	next to each other	undetermined	1	1		Anonymous 1892; De Puydt 1902
Darion	BVSG	89047		recut	next to each other	facing downwards	3	2	1	Jadin 2003
Oleye	LBK	-	ditch terminal	base of ditch		on the side	2			Jadin 2003
Vaux-et-Borset	BVSG	VGI-89-082		base	undetermined	undetermined	3	3		Caspar and Burnez-Lanotte 1994
Jeneffe	LBK?	zone K		middle part of pit fill		one in use position	6			Hamal Nandrin et al. 1936
Omali	LBK?	pit or fireplace 4	undet.	middle part of pit fill	undetermined	undetermined	2	2		Constantin et al. 1978; Hamon 2008a
Aubechies	LBK	10	pit group		next to each other	use position	3	2		Constantin et al. 1978; Hamon 2008a
Aubechies	LBK	38	lateral pit	upper part of pit fill	isolated	use position	2			Constantin et al. 1978; Hamon 2008a
Aubechies	LBK	150 (33)	recut	upper part of pit fill	undetermined	undetermined	1			Constantin et al. 1978; 1991; Hamon 2008a
Blicquy	BVSG	30	lateral pit	upper part of pit fill	next to each other	2 querns facing downwards and one in use position	3			Constantin et al. 1978; 1991; Hamon 2008a
Irchonwelz	BVSG	1	lateral pit	upper part of pit fill	undetermined	undetermined	3	3		Constantin et al. 1978; Hamon 2008a
Irchonwelz	BVSG	2	lateral pit	upper part of pit fill	next to each other	facing downwards	2	1		Constantin et al. 1978; Hamon 2008a
Irchonwelz	BVSG	3	lateral pit	middle part of pit fill	stacked	facing downwards	4	4		Constantin et al. 1978; Hamon 2008a
Irchonwelz	BVSG	7	lateral pit	middle part of pit fill	next to each other	facing downwards	1	1		Constantin et al. 1978; Hamon 2008a
Irchonwelz	BVSG	9	lateral pit	base of pit	stacked	querns in use position and grinders to the side facing downwards	3	3		Constantin et al. 1978; Hamon 2008a
Saint Denis	Late BVSG	1	isolated pit	middle part of pit fill	in a circle	facing downwards	5	2	3	Hamon and Samzun 2004a; 2004b
Berry-au-Bac	RFBS	598	isolated pit in rear part of house	middle part of pit fill	in a circle	facing downwards	3	4		Allard et al. 1996; Hamon 2005
Berry-au-Bac	RFBS	641	isolated pit in rear part of house	middle part of pit fill	in a circle	facing downwards	3	2		Allard et al. 1996; Hamon 2006
Villeneuve-la-Guyard	Early BVSG	248	isolated pit	undet.	in a circle		3	3	1	Prestreau 1992
Cuiry-les-Chaudardes	RFBS	382	lateral pit	undet.	none		1	2		Ilett and Hadhem 2001

Table 1. Description of the location, organisation and composition of the deposits. RFBS = Rubané Final du Bassin de la Seine.

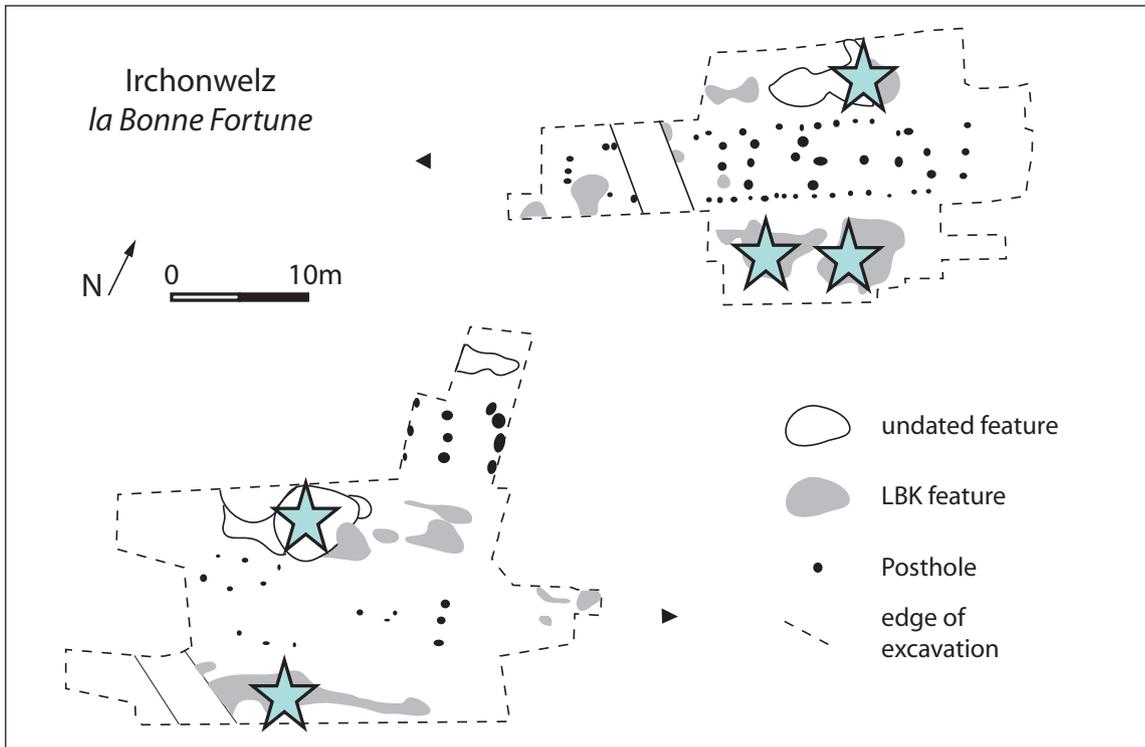


Figure 2. Distribution of deposits (stars) in the domestic space: the example of Irchonwelz, la Bonne Fortune (after Constantin et al. 1978).

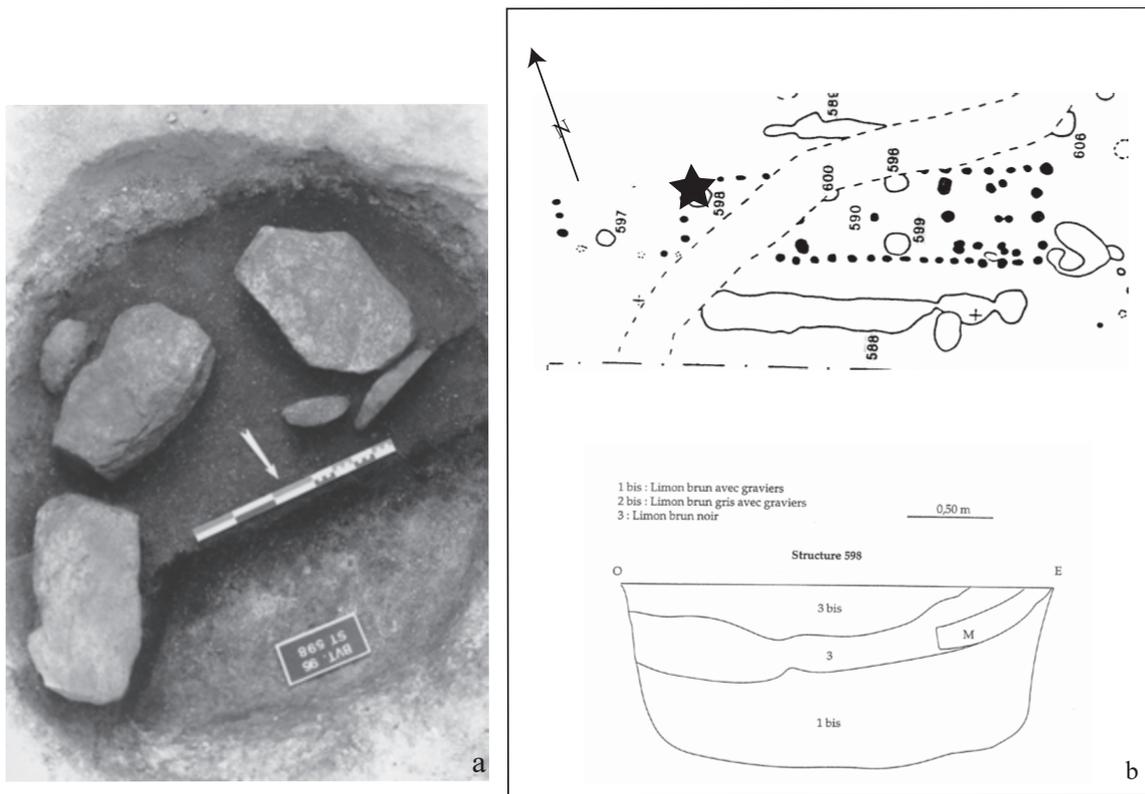


Figure 3. Distribution of deposits inside the domestic space: the example of Berry-au-Bac, le Chemin de la Pêcherie (after Allard et al. 1996; photo: Era 12 du CNRS).

fill, they may correspond to a later phase of the life of the pit, either related to the functioning of the house or after its abandonment.

Secondly, grinding tools were deposited in isolated pits, located within settlements but a little away from the main domestic area. The most relevant example is that from St Denis, which was found in an area lacking evidence for actual houses but which contains a rich assemblage of waste material that is compatible with household waste. In this case, it seems that the pits were not dug especially to receive the deposit but, rather, were used for the disposal of waste. Thirdly, some deposits have been found in circular pits dug in the rear portion of houses; this is for instance the case for both deposits at Berry-au-Bac (Figure 3). The location in this particular part of the house clearly raises the possibility of designated storage areas.

These different deposit locations do not seem to follow a clear chronological or regional pattern. However, a clear difference can be observed between the respective practices in the Paris Basin and Hainaut. While there is never more than one grindstone deposit per house in the Paris Basin, two to three deposits can be found alongside the houses in Hainaut, sometimes with multiple deposits occurring in the same lateral pit. In fact, the rules governing the placing of a deposit relative to an inhabited or abandoned house do not appear to be the same for both areas.

In rare cases, grinding tools have been deposited in a position of use, their active surface facing upwards, but more generally they were deposited in a classic storage position with their active surface facing downwards. This suggests that particular care was taken to protect the working surface from any alteration or damage. Furthermore, the arrangement of the tools clearly indicates that all of the tools were deposited in a single, short episode without any further retrieval or new deposition of tools. We can identify two different arrangements of tools within deposits: 1) lower grinding stones are put next to each other or on top of one another in order to build a “pile” under which their associated handstones lie (Figure 4); 2) lower grinding stones are arranged in a circle at the centre of which were placed their associated grinders and several hammerstones (eight out of 14 deposits) (Figure 5).

Figure 4. Arrangement of grinding tools in piles: a. Irchonwelz, la Bonne Fortune; b. Aubechies Coron Maton; c. Blicquy, la Couture du couvent (after Constantin et al. 1978).

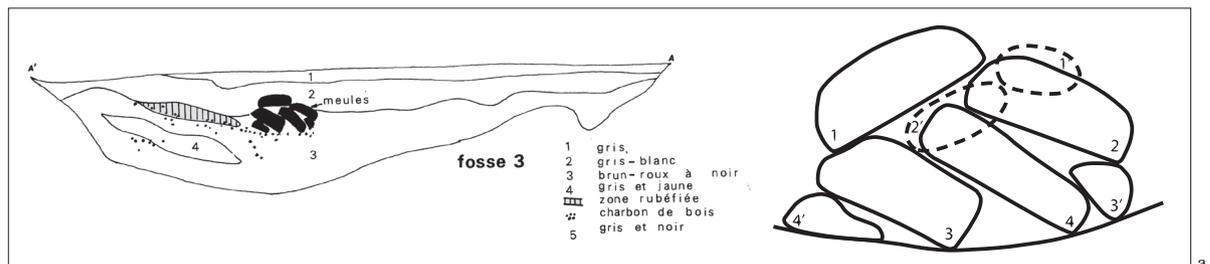




Figure 5. The Saint-Denis, Rue du Landy deposit (after Hamon and Samzun 2004a; 2004b; photos: S. Durand, Inrap).

The first arrangement seems the most frequent in Hainaut and Hesbaye, while the second seems typical of the Paris Basin (four out of six deposits).

To sum up, the arrangement of grinding tools within deposits highlights a desire to protect, store and preserve entire tools; this seems to be guiding a deliberate, organised and even codified act of deposition. A regional, rather than chronological, dichotomy can be observed in the positioning and organisation of the grinding tools within each deposit. In the Paris Basin, no more than one deposit has been found per house. They are placed in lateral refuse pits, isolated pits or at the back of houses, and more frequently display a circle-like arrangement of the individual tools. In Hainaut, up to three deposits can be found in a single house. They are mainly deposited in lateral refuse pits and the grinding tools are more likely to be deposited next to each other or in piles. The partial descriptions of the deposits from Hesbaye (especially for the older discoveries) do not allow

us to categorise this area into one group or another, except in so far as no “circular” arrangements of tools have been recorded there. In fact, while no real chronological differences seems to have existed between LBK and BVSG grinding tool deposits, two different regional “ways of doing things” or even “traditions” can be distinguished: one in the Paris Basin and the other in Hainaut and Hesbaye.

Composition and selection of the grinding tools

A closer look at the detailed technological and functional analysis of the grinding tools allows a better understanding of the selection criteria used prior to their deposition. Between three and six lower grinding stones are generally deposited together with their associated grinders. Grinding implements were always deposited as complete sets, meaning that the lower and upper parts were deposited together. In several cases, hammerstones used for rejuvenation of grinding tools have also been deposited. These observations confirm the deposition of complete sets of grinding tools as if they were intended for further future functional or symbolic use.

In contrast to classic settlement refuse contexts, all grinding tools found in deposits are complete, which means that they were deposited in the earth directly after their extraction from their normal use cycle and context. It is also worth noting that grinding tools were not especially made for deposition, as they all bear traces of use and no roughouts have been found. In a way, grinding tool deposits can be considered as the exact opposite of the deliberate breakage practices that have been revealed on some LBK settlements (Hamon 2006; Verbaas and Van Gijn 2009), as their arrangement in the pits seems, at least to some extent, to preserve the tools in fully usable condition.

More surprisingly, most of the grinding tools found in hoards show technical specificities. If a selection was made from among everyday grinding tools, it has clearly focused on particular tools, as demonstrated by a brief overview of the characteristics of a series of deposits whose tools have been studied from a technological perspective.

An Early LBK deposit (st. 598) at Berry-au-Bac consisted of three querns and four grinders (Hamon 2005). The querns weigh between 16 and 20 kg and have been shaped by removing flakes from blocks extracted from quartzitic sandstone layers; their active surfaces show strongly concave profiles and peripheral polishing attests to intensive use. The grinders are relatively small in size and limited in thickness (less than 6 cm), have a convex active surface and all display smoothing due to use on their dorsal surface.

In the LBK and BVSG deposits from Hainaut (Blicquy, Aubechies, Irchonwelz; see Hamon 2008a) querns are all made of quartzitic sandstone slabs, which explains their angular shapes. In the LBK deposits querns and grinders are of overlapping type, while in the BVSG deposits they are of short type (narrower than their associated quern). The querns are between 36 and 53 cm long and less than 12 cm thick. They bear evidence of moderately intensive use, but several querns show clear evidence of reshaping or repecking, more rarely observable on tools from refuse contexts. On the three sites, several querns show quite deep impact traces attesting to vigorous pecking and there are several cases of reshaping of the sides and ends of the quern. In fact, most of the querns found in these deposits show evidence of recent rejuvenation or reshaping.

The five querns making up a Late BVSG deposit from Saint-Denis (Hamon and Samzun 2004b) are also all made out of thick quartzitic sandstone blocks;

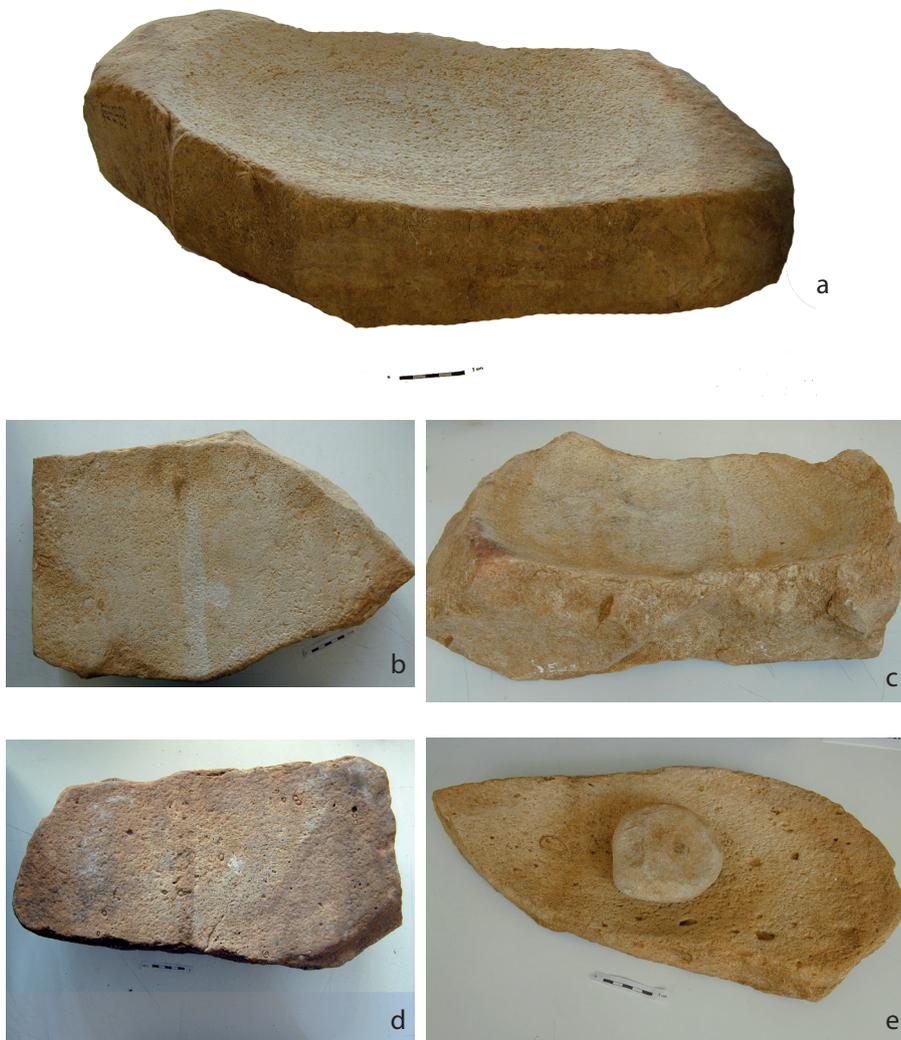


Figure 6. The Saint-Denis, Rue du Landy grinding tools and their technical specificities (after Hamon and Samzun 2004a; 2004b; photos: C. Hamon).

their coarse shaping by flaking explains their angular morphology. They have average lengths of between 42 and 48 cm and are up to 13 cm thick. In one case, the quern reaches a length of some 60 cm with a weight of 36 kg. Each of the querns corresponds to a particular stage of use and management. Some show a very short duration of use with very pronounced pecking. In contrast, others show very long durations of use: the concavity of some active surfaces is very pronounced and they have very prominent edges. Some show several successive stages and motions of use, and finally some were manufactured from fragments of formerly larger querns (Figure 6).

Several conclusions can be drawn from this brief overview of the characteristics of a representative sample of deposited grinding tools. Firstly, deposits can bring together tools of similar morphological characteristics (as in Hainaut) or, on the contrary, of very different morphological types, raw materials, and cycles of use (as in Saint-Denis). In Irchonwelz, the querns are all made out of quadrangular slabs with a trapezoidal morphology and are associated with loaf-shaped, short grinders (Constantin *et al.* 1978). In Saint-Denis, each of the five querns recovered corresponds to a specific morphological type: a thick quadrangular flat quern, a flat trapezoidal thin slab, a concave quern with distal and proximal edges and a thin slab that was used with a circular motion (Hamon and Samzun 2004b, fig. 4). Secondly, the deposited grinding tools are of large size: tools of this size are rarely found in domestic refuse pits, but this is probably because querns in refuse pits

tend to be greatly fragmented (particularly in the case of large examples). Finally, most of these grinding tools show evidence for either long use lives or complex life cycles. This evidence can take many forms, for instance a high degree of concavity (Figure 6), extensive intense use wear, or a high level of morphological distortion. A large proportion of these tools show traces of fresh, and sometimes incomplete, reworking of their active surface. In other cases, complex stages of reshaping of the ends and sides have been revealed (Figure 6). In addition, several implements reveal complex stages of use, with multiple active surfaces on opposite sides or overlapping each other, or multiple functions attested by use-wear analysis. As an example, in Saint-Denis one of the thin slabs shows three successive stages of use, the last active surface was clearly used with a circular motion to grind animal matter as indicated by use-wear analysis (Hamon and Samzun 2004b). In fact, the selection of the tools being deposited is clearly related to their normal life cycle, as they directly reflect the coexistence of different types of querns and different stages in their use. This configuration highlights their close connection with domestic contexts.

“Structured deposits” versus hoards: towards a definition of grinding tool deposits

In the light of these observations, we must ask ourselves: what are these hoards and how can we interpret them? On the basis of the data recovered, several hypotheses can be discounted while others deserve greater attention.

Because of their specific characteristics, these structured deposits are clearly distinct from fortuitous deposits and simple accumulations of objects: they do not constitute concentrations of waste material or simple accumulations of waste in refuse areas, nor do they represent straightforward abandonment of tools. Their primary deposition, their codified organisation, their repetitive pattern, as well as the exclusion of any other deposited material apart from grinding tools, would, in our opinion, exclude a simple act of abandonment or the disposal of waste material.

More difficult to interpret is the deposition of a single quern and grinder together in a pit. In most cases it is difficult to determine if this is a deposit or refuse. Do these finds reflect occasional disposal in refuse pits or do they reflect more structured deposition practices? Such cases are difficult to interpret, particularly when several examples are found within pits related to one single house, or to several houses in the same village (see for example Bosquet *et al.* 1997; Praud *et al.* 2010).

Because of the particular organisation of the tools within the deposits, and the respect paid to a series of rules governing their configuration, they can be defined as codified acts of deposition. The homogeneity of the elements composing the deposits and their exclusive nature (consisting only of grinding tool sets) reinforce this interpretation. The nature of this codified act deserves closer examination. The lack of roughouts or waste arising from shaping stages definitely excludes the possibility that we are dealing with quern production areas. On the contrary, the deposition of complete grinding sets in a usable state, sometimes with evidence for a long and complex life, clearly links them to their full life cycle. Their very long use lives, and the investment required for the procurement of the raw material and their shaping, make grinding tools precious equipment from an economic perspective. Consequently, their burial and extraction from the normal economic cycle is anything but insignificant. But depending on the intentions behind their deposition, the interpretation of this act can vary significantly.

If we consider that grinding tools were deposited temporarily, with the intention of retrieving them at a later date, they can be interpreted as open structured deposits, such as caches or storage places for tools. This interpretation could be supported by the diversity of types and also by the protective position in which the tools were deposited, which suggests that they were destined to be used again. Following this hypothesis, the act of deposition could be interpreted as a simple stage in the long use life of querns. However, the placing of some of these deposits in the bottom or middle layer of the fill of refuse pits tends to contradict this interpretation.

If we take the view that these deposits were definitive, with a more ritual connotation, they could be interpreted as hoards. This hypothesis is supported by the deliberate and codified nature of the act of deposition, which follows established rules. Furthermore, these rules were repeated, respected and reproduced over a large geographical area and chronological timespan, suggesting the existence of some kind of “tradition”. Following this hypothesis, the grinding tools would have been extracted from their life cycle and buried in the earth in a sacrificial act. This act of deposition would have been a single and meaningful moment, a specific event in the life of a group, a household or a village. The close association between these deposits and domestic contexts may, therefore, express a collective act with a deep resonance within the community.

Interpretation hypotheses

By virtue of their discovery contexts and their intrinsic characteristics, grinding tool deposits raise questions regarding the schematic dichotomy between domestic and ritual, profane and sacred. This is also why proposing an ultimate interpretation for these practices is challenging, if not to say impossible, given the present state of research.

A miller's house or a craftsman's store?

Initial interpretations of these practices clearly focused on two different hypotheses relating to the status of houses and their inhabitants. They can be summarised as follows: were those engaged in the practice of deposition quern producers or quern users? This question has important implications for the way we generally interpret these deposits, either in relation to their production sequence or to their use life.

After the discoveries of the Hesbaye grinding tool deposits, De Puydt and his colleagues (1911) interpreted these structures as storage places associated with a living area. This was taken to indicate the presence of a “miller's house” in which tools were stored directly adjacent to the living area. However, the absence of deposits in most houses, and their high numbers in others, somewhat contradicts this hypothesis. Such organisation of cereal preparation, with one “miller” in charge of the flour production for a part, or all, of the village would imply that these kinds of deposits should be relatively frequent and identical from one village to another. However, this is not the scenario suggested by the archaeological data.

The discovery of the deposits in Hainaut gave rise to new interpretations by C. Constantin and his colleagues (1978), who saw these deposits as temporary caches indicating the existence of a craft workshop associated with the houses. Following close study of the technical properties of the grinding tools deposited (Hamon 2008b), this hypothesis is still worthy of consideration. If we can directly exclude the existence of a shaping area, based on the lack of shaping waste and

roughouts, the particularly long duration and complex stages of use of the deposited grinding tools could fit with the idea of the deposit being related to a craft workshop engaged in the maintenance and rejuvenation of grinding tools. Following this hypothesis, the deposits would be seen as temporary reserves or storage areas from which grinding tools could be retrieved at a later stage. The function of the deposits could be diverse: storage of grinding tools to be retrieved for further rejuvenation or reuse, or burial of querns in order to modify the properties of the sandstone (humidification and softening) so as to facilitate reshaping. These hypotheses would be compatible with the occasional and random pattern of these deposits and the apparent lack of systematisation of these practices within the domestic area. As an indirect consequence, this hypothesis would imply that at least one craftsman/miller per village, or perhaps per household, would have taken charge of the management of the grinding tools for part of the community, as already proposed through the detailed analysis of the distribution of shaping waste within the domestic area of Cuiry-lès-Chaudardes (Hamon 2006). It would also suggest that the status of that specialist was more or less attached to the house he or she was working in. However, the frequency of non-retrieved grinding tools raises questions, as does their rapid covering by new waste and refuse layers when located mid-depth in lateral pits. If these were temporary caches or storage places, why were these tools abandoned so frequently, even though the houses were still inhabited for a certain time after their deposition? The absence of clear answers prompts us to explore other hypotheses that take into account the definitive nature of the burial.

A foundation or abandonment ritual?

The close link between grinding tool deposits and domestic spaces raises the possibility that they relate to house foundation or abandonment rituals. In the Neolithic of continental Europe we have very little evidence for foundation deposits. Only a handful of examples of single grinding tools, deliberately placed face downwards in very specific locations, such as at the base of walls or at the bottom of pits, have been interpreted as foundation rituals (*e.g.* Graefe *et al.* 2009).

In the case of structured grinding tool deposits, the archaeological facts do not reveal any particular pattern in the choice of the sites and houses where deposits have been found: these houses correspond neither to the earliest nor the most recent sites in the region, nor to pioneer houses nor to particularly long-term or short-term occupations. It is therefore difficult to associate the deposition of grinding tools with the settlement of a new community in a new area or with the building of a new house within a village.

Such a practice would relate the offering of a quern, as a symbol of food preparation and one of the basic components of the household, to cereal-based food wealth. But the deposits have generally been found at mid-depth in pit fills, suggesting that they were not deposited when the house began to function. In addition, the long duration and complex stages of quern use seem rather incompatible with a foundation ritual, unless we consider that they were brought from another house or village to be buried at the moment of the construction of a new house. Similarly, the deposition of querns at mid-depth in pits does not appear to be compatible with an abandonment ritual: by definition such a ritual would have occurred at the very end of the occupation of a house and the deposits would therefore only occur in the uppermost levels of the pit fill.

However, the deliberate burial of querns extracted from their life cycle could correspond to other practices. In ethnographic contexts, the practice of quern burial is observed in two different cases. Firstly, following episodes of disease or epidemics within a household or a village, all grinding tools may be buried for sanitary reasons. However, their burial is generally accompanied by acts of destruction and breakage which have some degree of ritual meaning. Secondly, on the death of their owner grinding tools can be transmitted to a descendant (daughter, niece) or buried in the earth as an offering or to accompany the dead woman in the afterlife.

It has to be said that the hypotheses of foundation or abandonment rituals, while seductive, are not very satisfactory as they do not accurately reflect the archaeological reality of quern deposits.

Symbolic offerings by and for the community?

Coming back to the fundamentals, the deposition of several grinding tools together might point us towards the idea of a collective act. Although it remains difficult to prove archaeologically, this act must have been highly significant for a certain part of the community: part or all of the inhabitants, at the scale of a household, village or larger area. In this sense, deposition can be considered as a basic social practice whose actors represent the community or are mandated by the community to carry out the deposition.

The deposition of grinding tools in the earth may have functioned as a materialisation of the specific status of the house with which they are associated. It may be connected to its inhabitants, such as a specific clan, a village chief or a religious authority. It could also be interpreted as a women's house: countless ethnographic examples indicate that grinding activities are highly emblematic of the women's sphere and of the sharing of tasks within agro-pastoral communities. We could envisage the existence of a collective building for women's meetings, which would combine the maintenance of social ties and the practice of highly connoted activities in terms of gender. But deposition could also be an expression of the collective status of a building, whose function may have involved food procurement or processing (cereal harvesting events, collective meal preparation and cereal grinding) for part or all of the village community.

However, such deposits may also be the material expression of an exceptional social or ritual event within one house in the village, directly related to the different levels of grinding tool symbolism. This may have involved ceremonies or religious practices relating to food security and agricultural wealth. The act of burying in the earth has multiple meanings: it can represent the world of the dead, but also the fundamental source of food procurement especially within agricultural communities. In this sense, the burying of querns could be interpreted as a votive offering to invoke the "forces" of life, wealth and fecundity of the "mother earth" to ensure the community's food supplies and cohesion.

The burying of domestic grinding tools could also be interpreted as a commemorative event, linked to the former inhabitants of the house. This would be compatible with the placing of such deposits directly within the domestic waste in the lateral pits and also with the temporality of these deposits, which occur either during the occupation of the house (deposit at half-depth in the pit fill) or after its abandonment (recutting of pits). In this hypothesis, grinding tools can be interpreted as offerings for the protection of the house. They would symbolise

the memory of the household, the female elders and the agricultural way of life of LBK people through the act of invoking the ancestors. In this sense, the sacrifice and offering, through burial, of durable domestic equipment may have marked an occasion of great importance in the social life and memory of LBK communities.

Considering grinding tool deposits as offerings for the community implies that even domestic and everyday implements were vested with high symbolic value. This symbolic value does not seem to be attached to “exotic raw materials invested with a large amount of skills and know-how” (Van Gijn 2010, 211). In this sense, they cannot be associated with any kind of prestige, personal status or rank. Behind these deposits, everyday labour is elevated to the rank of a major and structuring activity essential for the survival, cohesion and long life of the community. Finally, regardless of their significance, we can certainly identify these depositional acts as highly significant practices for part or all of the community at a village scale. The relative rarity of this practice, as well as its temporal continuity and geographical spread, confirm its role within LBK society. Along with other symbolic practices, the deposition of grinding tools appears to have been an important event as well as an important medium for ensuring the transmission and reproducibility of LBK social ties and rules.

The expression of a cultural tradition?

A thorough examination of the geographical and chronological distribution of deposits of LBK grinding tools highlights the close connection between this phenomenon and the north-western margins of LBK expansion. As pointed out by I. Jadin (2003, 458), very few similar deposits are recorded in central and eastern Europe.

This distribution area corresponds to the very last stages of the LBK expansion to the west, but also to the main area of the BMSG development. In fact, the phenomenon seems to be concentrated in an area between the Seine to the south and the Meuse to the north-east. To the north, it appears that no deposits have been found in the Netherlands (Modderman 1970; Verbaas 2014). To the east, the Rhine constitutes the eastern limit of the phenomenon. Finally, at the southernmost and westernmost limits of the area, this phenomenon appears to be absent in Late LBK and BMSG contexts to the south of the Yonne, in central France, Normandy and Brittany

Given this distribution, it is tempting to relate the phenomenon of grinding tool deposits to the manifestation of a “margin effect” stemming from the redefinition of a specific identity or the existence of regional groups in this area. This would be supported by at least two observations. First, we have already highlighted two different traditions within the grinding tool deposits from the Paris Basin on the one hand and the Hainaut/Hesbaye area on the other. This would confirm the cultural value of these deposits as a vector of regional traditions. Secondly, the distribution area of grinding tool deposits corresponds, more or less, to an area that sees a major shift in funerary practices. In contrast to central and eastern Europe, where large cemeteries have been found, the dead in this area are buried in the vicinity of the houses, in the fill of lateral pits. On the margins of the LBK territory, this major shift in funerary practices might express a wish to link the dead more closely to the household or to the village area, stemming perhaps from a desire to protect their burial place. The correlation between the development of grinding tool hoards and the shift towards locating burials in areas close to dwellings could reflect a common symbolic significance for both phenomena.

These two practices may express a refocusing on the domestic sphere supported by the whole community, perhaps in a desire to express and defend their sedentary way of life and the social organisation of their villages on a western frontier that was subject to many new external influences. Hence, the act of burying individuals or equipment could be an expression of commemoration, directed at the ancestors, and could even be seen as a certain form of conservatism.

In any case, the appearance of grinding tool deposits in a marginal area of the LBK territory, an area also marked by a change in funerary practices, is probably not a coincidence. In fact, in contrast to the practice of polished adze and quern deposition in the burials of central Europe and the Rhine, these categories of tools are completely absent from the LBK grave good assemblages of the Paris Basin. One could suggest that the phenomenon of grinding tool deposition constitutes the direct expression of a transfer of symbolic significance from the funerary domain to that of domestic ritual. A change of paradigm in burial customs would thus have directly generated a renewal in the field of non-funerary ritual practices.

Within the LBK, the practice of depositing objects is not limited to grinding stone tools. The Late LBK at the beginning of the fifth millennium BC sees the development of several categories of deposition, especially the deposition of adzes. Close examination of these deposits in an area from the Danube to the Rhine (Jeunesse 1998) highlights several characteristics: adzes are generally deposited without any other categories of objects and are closely related to the settlement area. The adzes composing the deposits have been extracted from their ordinary life cycle. They correspond to different typological types, are of limited dimensions and have been used prior to deposition. For these reasons, they cannot be seen as prestige objects, unlike objects deposited in funerary contexts. In fact, the selection of adzes for deposition follows the same guidelines as the selection of querns. This would suggest that Late LBK deposits shared a similar and common significance throughout the LBK territory, with a strong link to the inhabited space. Some authors relate this phenomenon to the emergence of a true “*Hortsitte*” or “hoard custom” at the end of the LBK, and to the establishment of a clear distinction between funerary deposits and settlement deposits. They also consider stone tool deposits as evidence for the existence of complex and stratified social structures from the beginning of the Neolithic (Jeunesse 1998; Lichardus-Itten 1991).

Conclusion

While no definitive interpretation can be proposed for the phenomenon of grinding tool deposition, the close and detailed examination of available examples highlights their importance within the community at multiple levels. These practices, which are closely linked to the realm of the living, fall into the category of “community deposits buried in knowledge of and for the benefit of society at large and useful for keeping personal aggrandisement in check” (Chapman 2010, 112).

Finally, what are these deposits? Relying on the facts, these deposits are composed of complete sets of intensively used grinding tools, extracted from their current life cycle and deposited in a storage and protective position. When did the deposits take place? These deposits occurred during the use life of the house but also of the objects, which do not seem to be intended for later retrieval. Who was doing the depositing? These deposits were made by a group of individuals by and for the community, who

extracted the tools from their sphere of use, which was highly connoted in terms of gender, relationship to the domestic sphere and food abundance.

Deposits were placed in the vicinity of buildings, directly associated with the waste and living areas, and thus closely linked to the domestic sphere. They follow a series of established rules which seem to have been respected over quite a large area and timespan. The practice occurred in a particular area, at the north-western margin of the Late LBK territory, between the Seine and Meuse rivers. It is part of a number of major shifts within Late LBK cultural traditions and symbolic practices, such as the burial of the dead in the vicinity of dwellings and the abandonment of cemeteries.

As such, grinding tool hoards can be interpreted in terms of a strong attachment to regional traditions, inherited from ancestors, and commemorated important occasions in the social life and memory of Neolithic communities. Far from being an insignificant phenomenon, there is much evidence for the structuring role played by grinding tool deposits within the ritual practices and the building of the cultural identity of the Late LBK people who had settled the north-western margins of Europe.

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