Zusammenfassung


Abstract

In the Seine-Yonne basin at around 4500 B.C. numerous cemeteries appeared, including giant “enclosures” which as a funerary manifestation would have no later equivalent in Europe. These constructions, whether tumuli, palisade enclosures, or mixed systems, sometimes exceed 300 m in length but contain very few burials. Beyond the classic interpretation, which sees high investment in a few individuals as reflecting a hierarchical society, structural analysis of these cemeter ies shows the repetition of an elementary module, associated with consistent attributes, evoking hunting and more broadly, the wild. An exercise of association and exclusion brings into play the morphology and arrangements of the monuments, the gender of the in humed individuals and their attributes. In the male monuments, a central figure is thus distinguished, sometimes with original physical characteristics and accompanied by an enigmatic insignia: a pointed bone instrument with a wide base, trivially called an “Eiffel Tower”. This figure is surrounded by other individuals interpreted as hunters on the basis of the accompanying objects. Other individuals proba-
bly served as no more than passive figurants, rather like foils. In any case, the monumental cemeteries of the 5th millennium correspond to the earliest human groups for which we can identify diverse and repetitive statuses.

The revelation in the 1980s of both the funerary and Neolithic character of a number of immense and enigmatic features, first seen thirty years before in aerial photographs taken above the district of Passy (Yonne), completely modified the classic vision of the middle Neolithic (Mordant 1998). The excavations at Passy and Balloy (Seine-et-Marne) revealed the funerary nature of these occasionally huge earthworks, dedicated to only a few deceased individuals. In the Paris Basin about twenty monumental cemeteries are now known (fig. 1), spaced twenty to thirty kilometres from each other (Delor et al. 1997). The absolute dates of these sites converge around the mid-5th millennium, between 4700 and 4300 B.C. The finds associated can be attributed to the Cerny culture, the ultimate stage of the Danubian Neolithic in the Paris Basin.

Very few cemeteries have still been investigated. Other than Passy and Balloy, excavations have been only intermittent, either due to the amount of work required, as at Escolives-Sainte-Camille (Yonne), or because the site was largely destroyed before excavation, as at the Porte aux Bergers at Vignely (Seine-et-Marne), or because the cemetery was very small, as at Gron (Yonne), or at the Noue Fenard, again at Vignely.

Various publications have often made a correlation between the burial population and the investment involved in the creation of monuments. The Balloy cemetery contained only around forty burials (Mordant 1997), and Passy less than thirty (Duhamel 1997). It is quite likely that many graves have not been preserved. The discovery of a burial is always conditioned by the erosion of the site, and thus by its depth. Nonetheless, axial graves are most often deeply buried: at Gron, Passy, and in the main sector of Balloy, we can suggest that they were all, or almost all, revealed through excavation. The ensemble I-II of Balloy, with eight (or nine) axial graves, remains exceptional. In fact, one burial per monument is the norm, well illustrated by the largest of the Passy monuments, more than 280 m long. The number of graves is not predictable, but it is important to note that the longest monuments never include more than one.
The contrast between the number of persons necessary for the construction of the monuments, which is unknown but surely considerable, and the small population buried within, is sufficient to attribute a particular status to the individuals concerned. We will not reiterate the classic hypotheses, which, based on the presence of male and female subjects, along with sometimes very young children, conclude that hierarchical status was inherited in the society in question. Such a conclusion relies on a superficial reading of the data, and thus is itself superficial.

Funerary ideology

Scarcity of grave goods

Relative to the considerable effort involved in construction of the monuments, the associated grave goods seem rather poor. The “Grossgartach” grave of Passy (burial 4.1) contained an unusually high number of objects. We must not, however, exaggerate their luxurious quality: pots, twelve arrowheads, two tranchets, one backed knife, a set of large flint blades, a sheath and perforated hammer made of red deer antler, a forked tool, three polishers and two awls made from bone, a stone bracelet fragment, a pendant composed of a shell and a canid canine, and large pile of anodonta shells with one scallop shell (Bernardini et al. 1992). While these objects are indeed numerous, none are made from rare or distant materials and none are sophisticated. One of the pots, since attributed to the Rössen culture (stage 3), probably comes from the Rhine region. However, though there is little evidence for the circulation of pots during the Neolithic, the distance of 200 to 300 km is not extraordinary. The origin of the scallop shell, if it is not a fossilized shell, is roughly comparable. What a difference with the spondylus, in the previous period! At Passy, the only other burial with a considerable number of objects is grave 5.1, which contained an impressive number of arrowheads, but still no exotic elements. Finally, two burials at Gron include a wide range of objects.

These four burials are less representative of the reality than the dozens of graves that yielded only one or two, or even no objects. Obviously, we are only discussing preserved objects, and this rules out all those made from perishable materials. Balloy is the most extreme example in this sense. Due to heavy erosion in two of the three sectors of this cemetery, not all of the monuments produced axial graves. Nonetheless, among the twenty-seven burials identified as axial, twelve contained no artefacts, and ten contained only one type of object, such as a few arrowheads or an awl. The proportion of these types of graves increases further if we consider only identifiable objects, leaving out sherds and flakes. In this case, thirteen graves have no objects whatsoever, and thirteen others only one category of object. Only one burial (grave 5) yielded more than one category of clearly identifiable objects (fig. 2).

If we exclude grave 4.1 at Passy, the grave goods do not demonstrate circulation of materials and objects. All the raw materials were available in the immediate environment, except for the sea shells used as body ornaments. While during the early Neolithic, burials were often associated with spondylus shell ornaments of a supposed Aegean origin, these monumental cemeteries have not produced a single Alpine axe, though these objects circulated all the way to Armorica during this period. Therefore, if we accept the idea that the individuals buried in these monuments held an exceptional, or at least important, social position, we must recognize that this

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1 Our anthropological analysis of the entire Cerny corpus has led us to revise some previous data. Based on the coxal bone and using both the macroscopic classic method (Bruzek 2002), and the metric probabilistic method – “DSP” – (Murail 2005), burial 4.1 at Passy, the so-called Grossgartach individual, is now a male skeleton, and burials 360.1 and 360.2 at Gron are female.
status is not reflected in the quantity or quality of the associated grave goods.

Man and the wild

Faced with these disconcerting artefacts, I. Sidéra provided an essential key to their interpretation (at the Cerny conference in 1994) by showing the importance of hunting in the funerary ideology (Sidéra 1997). When not directly related to hunting activities, the artefacts are still linked to the wild world. Hunting is directly evoked through projectile points, the lithic artefact most frequently found in the graves. The animal materials used in the manufacture of body ornaments and tools are almost those of wild species: suidae canines are frequent, awls, chisels and polishers are most often made from cervid metapodials, and the enigmatic object trivially called an “Eiffel Tower” is made from a cervid scapula. In addition to pierced shells, the body ornaments include the vestigial canines of red deer, pendants made on suidae canines, and pierced teeth. Among the more unusual objects are a pierced bear molar and a pendant made on a wolf axis at Vignely, another bear molar at Gron, and the claw of a bird of prey at Balloy. Can all the artefacts be classified in this way? The exceptions are in fact rare. The only tools that do not seem to be related to hunting or the wild world are a few flint tranchets. Ceramic objects, which are less suggestive, are rare in the monuments and not representative of what we find in settlements: they include micro-pots and pots with a deformed or even quadrangular opening.

The emphasis on hunting in the burials does not correspond to a change in the economy. The Cerny culture is an agricultural society, like those by which it was preceded. The role of hunting in the faunal assemblages from settlements is even reduced relative to that of Villeneuve-Saint-Germain (Jeunesse / Arbogast 1997). We do, however, note a modification in species representation, with aurochs and wild boar becoming less frequent than red deer. The overemphasis of the wild world, or hunting, in the graves is independent of dietary factors. How, therefore, can we not consider it as a reflection of the ideology of the corresponding groups?

The image of the hunter recurs frequently in these burials. Arrowheads are exclusively male objects (p < 0.0001): there are none with women. At Balloy, within the axial graves, only four males are associated with artefacts, and in three cases they are arrowheads. At Gron, arrowheads are present in two male burials. The Passy cemetery contained seven burials with arrowheads. These correspond to two immature individuals, four men and another adult of undetermined
gender, due to poor bone preservation. At Vignely, yet another male is accompanied by projectile points, as at Gron. What is more surprising is that these are not in fact quivers, or even actual hunting equipment: grave 7 at Balloy contains only three arrowheads, and grave 3 only two; graves 114 and 123 of Escolives-Saint-Camille contain only one. In both of these cases, the arrowheads are not the only objects present.

Arrowheads are the most suggestive object. Ceramics are not directly associated with the individuals and the case of the three micro-pots in burial 46 of Balloy does not seem to be the norm. As in burial 352 at Gron, the pots are often placed outside the grave, probably on top. The body ornaments raise the same type of problem as the arrowheads. The two littorina associated with the older of the two children of grave 356 at Gron do not form a necklace. The only dentals shell of grave 9 at Balloy would likely be considered as accidental in a different context. In the category of curiosities, we can reconsider the trio of a pierced tooth (bear molar), pierced shell and shaped bead (discoid) found in the triple burial 148 at Vignely: could such a sampling be anecdotal? In the absence of use-wear analysis, it is difficult to determine the function of the bone objects since - unlike arrowheads - awls, chisels and lissoirs are not clearly associated with a particular activity. Awls were found in two female graves at Balloy, and chisels in two male graves at Vignely.

Lastly, one bone artefact deserves special consideration: the famous “Eiffel Tower” objects often considered as anthropomorphic spatulas (Carré 1993; Mordant 2001). These objects are found only in monumental cemeteries. Seven examples are known, all in Cerny contexts, from the Yonne, Seine and Marne valleys. There is a probable eighth example, although due to poor preservation its identification is uncertain (Müller et al. 1997). It comes from burial 352 at Gron, where the remains of a red deer scapula were found close to the left side of head, strongly suggesting the presence of an “Eiffel Tower”. The majority of these objects are made from scapulas, and none of the graves contain unworked scapulas of large herbivores. Furthermore, these object are always found near the head. Except for a preform found in the Balloy interrupted ditch enclosure, and one example found out of context at Passy, all of these objects were found in burials. All are associated with known sites with monuments, except for the object from the Porte aux Bergers at Vignely, which is nonetheless comparable in all aspects to a monumental cemetery (Chambon/Lanchon 2003). Though these objects are often interpreted as figurines, I. Sidéra demonstrated that they were hafted and that their pointed end was used (Sidéra 1997). The precise function of the “Eiffel Tower” thus remains unknown. Function did not determine the detailed morphology of the piece because the eight are all different, even as far as the blank is concerned: a scapula in five cases, and a long bone in the three cases at Passy. These “Eiffel Towers” from monumental cemeteries have no parallels, either before or after. Either this object served a new, short-lived function, or it doubled an existing functional category.

Ultimately, though these grave goods evoke a specific domain, their repetitive and parsimonious nature gives them the role of an attribute. They serve as an insignia and designate the status of the individuals.

The role of the hunter

Although the “Eiffel Tower” spatulas are made from the bones of a wild species (red deer) they are not as explicitly related to hunting as arrowheads. Moreover, at Gron and Balloy, the physical characteris-
tics of the individuals they accompany do not correspond to the usual image of a hunter (Chambon / Petillon 2009).

In fact, the hunters themselves seem to be relegated to a role of secondary importance. At Balloy, though it is clear that the individuals associated with hunting weapons occupy an important position, it is still secondary: they surround the principal individual. In addition, their physical characteristics correspond more closely to the image of a hunter: they are young adults who are much more robust than the individual in grave 5 (fig. 2). At Gron, the objects buried with the principal individual do include two arrowheads (the association is not strict), but in addition to the fact that his pathology would have prevented him from using a bow, the arrowheads are primarily associated with the second monument, with 13 pieces constituting its principal equipment. Finally, though the presence of an “Eiffel Tower” does not exclude the presence of arrowheads in the graves of Passy, they are nonetheless much more frequent, and sometimes associated with immature subjects.

Compared to the burials associated with a spatula or arrowheads, the other individuals appear much more discrete. Some seem to play no more than an accessory role, or a role beyond their capacities. This is the case for the individuals in the double graves at Gron, but we can also include three simultaneously buried adolescents at Vignely, and we could propose a similar interpretation for the children associated with the main burial at Balloy (Chambon / Leclerc 2007). For others, particularly at Balloy and Vignely, the distinction is more difficult. Either the absence of objects or a remarkable situation in these cemeteries does not evoke a precise activity, or the objects present do not sufficiently characterize a particular activity. Lacking a functional analysis, this is the case for the bone awls and chisels.

A monumental scenography

The general pattern

The organisation of cemeteries, or rather the construction of cemeteries, again underlines the prominence and the role of individuals. Though there is no doubt as to the unity of the phenomenon, no two cemeteries are exactly alike. The number, morphology, dimensions and arrangements of the monuments are extremely variable. The emblematic site of Passy includes around twenty monuments, the smallest of which is less than 20 m long, and the longest over 300 m; they are arranged in a fan pattern and present a great variety of forms. The more homogeneous site of Balloy contained three groups of more modest monuments (the longest just over 60 m long), which are broadly parallel (Duhamel / Mordant 1977). At other sites, such as Escolives or Vinneuf, the monuments are located very close together and form a compact unit. The initial appearance of these cemeteries is difficult to determine since no elevation is preserved. The data vary as much from one site to another as from one monument to another, oscillating from the simple palisade to the giant mound (Duhamel / Midgley 2004). The variability of the plans could correspond to variations in elevation, though the hypotheses of reconstruction are still too numerous.

The monuments are most often elongated, but a few are clearly circular. The only relatively constant dimension is their interior width, which is around 8 m. Whether immense or modest, the monuments are dedicated to only a small number of individuals: the majority contain a single burial located in the central axis.

It would be wrong to consider each cemetery as a more or less anarchical assemblage of monuments. Though we cannot identify a pre-
established pattern, we do observe repetitions and associations that structure the whole, as we revealed for the first time at Balloy (fig. 3). In this cemetery, D. Mordant associated different monuments based on their orientation and morphology (Mordant 1997). For our part, we noted that when a monument included several adult burials, the genders were not mixed (Chambon 1997). For example, the main axis of monument I-II includes four male graves (and four graves of immature subjects), that of monument XV three female graves, and that of monument XVI, two male burials (accompanied by one immature individual). The monuments appear to be gender specific.

A basic module

We transposed the model established for the cemetery of Balloy to Passy (Chambon 2003). This analytical framework definitively contradicts the hypothesis of a progressive aggregation of monuments ultimately arranged in a fan shape. We can easily identify the associations of monuments through the superposition of three criteria: orientation, topography and morphology. The cemetery of Passy is thus defined by the juxtaposition of pairs or trios of monuments (fig. 4). Within these groups, the monuments are rigorously parallel and their morphology is more similar within a group than it is to other monuments in the cemetery. The extreme diversity of the Passy monuments allows us to push the model formulated at Balloy even further. The association of monuments does not necessarily signify assimilation. The monuments are always dissimilar in some ways: the morphologies cannot be superimposed and one pair can include a very long monument and a very short one. While the east-
ern extremities line up, the organization of the facades is different. In each pair or trio, one monument includes an axial "post hole" on this eastern edge, sometimes completed by an alignment of comparable features spaced at regular intervals outside the monument. At Passy, we encounter the same principles of association and dissociation as at Balloy.

The groups of monuments thus allow us to identify the basic module of the monumental cemeteries. This basic module is again encountered at Gron, les Sablons (Yonne), a few kilometres from Passy. Two monuments were revealed and an extensive excavation indicates that no others exist in close proximity (Müller et al. 1997). They are side by side and strictly parallel (fig. 5). They are trapezoidal in form and belong to a single morphological family, while at the same time preserving their own identity. They are clearly distinguished by their dimensions, as well as by the organization of the facade of

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Fig. 4: The cemetery of Passy, Sablonnière sector (Yonne) – association of monuments according to three criteria: topography, orientation, morphology. The final impression of a roughly fan-shaped pattern results from the aggregation of pairs or trios of monuments.


Fig. 5: The basic module – the case of Gron, les Sablons (Yonne); two side by side monuments with the same orientation and belonging to the same morphological family. These two monuments are nonetheless distinct in terms of their dimensions and the construction of the facade of the longest one.

*Abb. 5. Das grundlegende Modul – das Fallbeispiel von Gron, les Sablons (Yonne); zwei benachbarte Monumente mit dersel- ben Orientierung, die zur selben morpholo- gischen Familie gehören. Diese zwei Mono- mente sind nichts desto trotz einzigartig, in Bezug auf ihre Dimensionen und die Kon- struktion der Fassade des längsten.*

2 The term "post hole" is employed by convention. It designates a cavity that can have very large dimensions; the hypothesis of standing stones, for example, cannot be excluded.
the larger of the two, which has an axial "post hole" on its eastern edge.

**Distinct and repetitive statuses**

The structural approach to these cemeteries clearly provides another analytical key in the combination of these organisational data with both the grave goods and the biological identity of the dead. Within the five modules identified at Passy and Gron, six graves contain at least one arrowhead. Present in only four modules, the individuals with arrowheads are grouped in two cases in a single module (Passy 4–5 and 7–8–9). On the contrary, individuals with an “Eiffel tower” are never associated; they occur in two modules at Passy Sablonnière (4–5 and 10–11) and in one at Gron. As we have already seen, the individuals with this emblematic object are all men. Since the only gender determined in these monuments is male, the enclosure are obviously male. Each “twin” monument contains a male burial (Passy 4.1 and Gron 14) or child burials (Passy 10.1 and 10.2), one of which has male grave goods: arrowheads. The only female burial present close by one of these modules is not located in the enclosure but in one of its ditches (Gron 360). In fact, whether they contain men or children, these modules are clearly male in character (fig. 6).
This pattern is repeated in the same manner at Balloy, where the gender significance of each enclosure is known. The man of grave 5, the only one in the cemetery accompanied with an “Eiffel tower” spatula, is located at the heart of the main group, which is composed of eight axial male and child burials within monument II. This enclosure is associated with monument V, also male. The man with the “Eiffel tower” is the oldest of this module, and his skull shows traces of a trepanation. Disregarding the “Eiffel tower” spatula, the grave goods are neither abundant, rich nor exotic, but they are exceptional. In addition to a suidae canine, a recurrent item, there is a a bird of prey claw and a tube made from a bird long bone, stuck into an ochre ball. This central burial is oriented east-west, as are the two children on either side, while the two men on either side are oriented with their head to the west (graves 3 and 7). These adults are equipped with arrowheads, which are only found in three burials in the entire cemetery. As well as in Gron, two female burials associated with the module are not in the central area of the monument, but are located close by or between two segments of the surrounding ditch.

These four male modules generally show clear similarities and an obvious intent to reproduce a pattern. Beside the man with the “Eiffel tower”, three classes of dead are in fact repeated identically from one module to another. First of all, the men: five are buried on the main axis of the internal area of the monument; they are always younger than the “Eiffel tower” man; they are placed in the same monument, or in its twin. Four are equipped with arrowheads. The next class of dead is composed of ten children, whose age never exceeds 8 years. Their graves are placed in the same way as the men. One (Passy 10.1) contains 5 arrowheads. The last class includes the only three female burials located near a module (Gron 360, Balloy 33 and 35), as well as a man, two adults of undetermined gender and two children (Balloy 11; 10 and 12; 32 and 36). None of these individuals had access to the internal area of the modules. While these burials are marginalized, they do reflect grouping near the individuals buried within the monuments. Located close by the enclosures, or even next to enclosures ditches, these burials match the orientation of the internal ones and, in three cases are lined up on the same main axis (woman Gron 360, man Balloy 11, child Balloy 36).

The “Eiffel Tower” spatulas are rare objects. For this reason, the individuals they accompany attract our attention, and a special status can be suggested. More surprisingly, these individuals seem to be the centrepiece of a clearly staged arrangement. The location of various burials in close proximity, their biological identity et equipment express others statuses. A clear distinction can thus be observed between, on the one hand, the status of certain young men and children with access to the internal area of the modules, in an identical position to the “Eiffel tower” man, and occasionally with hunting equipment, and on the other hand, the status of the few women, men and children placed close by yet outside the monuments. The reproduction of the module, within the cemetery, as well as from one cemetery to another, thus implies the reproduction of symbols and statuses expressed in death.

In the context of this organisational model, analysis of non-metric characters reveals complementary information. In fact, the sharing of one or two rare characters (i.e. observed on few individuals in the cemetery) inside a well-defined archaeological set is acknowledged as valid in terms of family or social groups (Crubézy/Sellier 1990). In the present case, each of the male modules identified comprises an indisputable archaeological group with a varying number of individuals. In fact within each cemetery, a biological link can be observed in three of these male modules (due to poor preservation of the skel-
etons, there are no results for module 10-11 at Passy). Thus, the “Eiffel tower” man 5.1 of Passy and the 4.1 man in the twin monument are the only two individuals with a parietal notch bone. The “Eiffel tower” man 352 of Gron shares with the child 356.2, close to him, a mendosal suture, a metopic suture and an occipital foramen, all characters that do not appear on other individuals in the same grouping. Lastly, the “Eiffel tower” man 5 of Balloy and the grave 3 man, in the same monument, both have an ossicle at asterion, a character found in no other individuals in the cemetery. The suspected strong heritability of this character (Gemmerich 1999) suggests that the two men were blood relations. These three clusters of rare non-metric characters thus always involve the “Eiffel tower” man and one of the men or children buried in the same module. In any case, the spatial groupings do not appear random in biological terms, and for one of them a blood relationship is even highly probable. These results underline the exceptional role of the “Eiffel tower” men within the cemeteries, adding a family aspect to the spatial and ideological criteria.

Discussion: a highly structured society of the dead

A considerable investment for only a few individuals: on this basis, the interpretation of these monuments is above all social. We cannot be satisfied, however, with the common hypothesis that these cemeteries are the reflection of a phase of increased social competition during which a small elite monopolized all power. A scheme as universal as this could explain all monumental funerary practices, in any time or place, and masks the complexity of the phenomenon, which transpires more clearly through a structural analysis.

A more complex approach to reading the cemeteries reveals the central role of the principle of reproduction. The cemeteries are thus reduced to the juxtaposition of elementary modules. Beyond the morphological differences between monuments, architectural details are repeated from module to module. The number of persons buried varies little from one module to another and sex of the dead is of great consequence for cemetery organisation. In this perspective, two models are distinguished in a constant play between opposition and association; but we cannot, at this time, determine their connection (fig. 7). On the one hand, male monuments confront female monuments. On the other, a pair of male monuments is organised around a central individual, equipped with an “Eiffel tower” spatula, with the presence of the hunter in the same or in the other monument.

Abb. 7. Die zwei Modelle – (1) Männliche Monumente konfrontieren weibliche Monumente. (2) Ein Paar männlicher Monumente ist um ein zentrales Individuum herum gruppiert, das mit einem “Eiffelturm” ausgestattet ist, außerdem hier die Präsenz des Jägers im selben oder einem der anderen Monumente.
around a central individual, equipped with an “Eiffel tower” spatula. Far from expressing the wealth or prestige of the beneficiaries, the grave goods transmit a code, reduced to a corpus of signs: “Eiffel Tower” spatula, arrow, suidae canine, awl, chisel (and a few others). If one elementary module is reproduced in the cemetery, and from one cemetery to another, all of the values associated with this module are thus also reproduced.

The statuses expressed in death are the same from one cemetery to another. But do these statuses express strictly funerary values? The observations converge: the funerary practices (organization of the cemetery and treatment of the deceased), the characteristics of the individuals associated with the “Eiffel Tower”, and the associated grave goods (functional objects with traces of utilization) all show that the status of these individuals is not uniquely funerary. Whether we call them chiefs, “shamans”, or by another name, it is while they were living that the deceased individuals accompanied by spatulas played a specific role.

The monumental cemeteries of the mid 5th millennium present a particularly favourable opportunity to observe a social structure during Prehistory. In fact, in some cases during Neolithic we are faced with individuals buried in some huge monuments, like those of the Gulf of Morbihan, or accompanied by spectacular grave goods, as in Varna cemetery, but what is actually exceptional in the Cerny context, is assuming that one individual is exactly the same, in a social point of view, as another one. On current evidence, the human groups that constructed the Passy type monuments are the earliest to show diversified and repetitive social statuses.

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