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MANAGING MEGALITHIC TOMBS AS A NATIONAL RESOURCE IN THE NETHERLANDS.

Megalithic tombs in the Netherlands belong to the West Group of the TRB (or Funnel Beaker) Culture - the general name for a number of culturally related, agricultural peoples, living in north and central Europe between three thousand five hundred and two thousand one hundred BC.

In the Netherlands, the distribution of these hunebedden, which is their Dutch name, is limited to the relatively dry, sandy areas of the north-east. Today, 54 of them survive, out of an original number of around one hundred.

In the past, and especially in the 18th and 19th centuries, many of the tombs were demolished to provide material for the construction of churches, roads and dikes. Their acquisition by the State and by provincial authorities, and the introduction of legal measures, gradually put an end to this practice. It was succeeded by well-intended restorations by local authorities, and amateurish investigations. In 1918, a report drew attention to the sorry plight of the hunebedden at that time. This brought about the appointment of a supervisor, in the person of Mr. Albert Egges Van Giffen. Mr. van Giffen filled this post for many years, until his death in 1973, and during these years the hunebedden and their immediate surroundings came to bear the distinctive mark of his personality. He took care to extend his supervisory task beyond merely preserving the status quo. His efforts to enlarge the often minute reserves by land acquisition, and to have trees and shrubs planted and maintained, cracks and fissures in the stone filled in, restorations carried out and signposts and bronze name-plates installed, all point to a purposive policy.

His restorations were virtually always accompanied by research into the original positions of robbed or displaced boulders. This at the same time led to increased knowledge about the hunebedden.

After Van Giffen's death, the supervision of megalithic tombs lost his personal mark. The responsibilities were transferred to the State Service for Archaeological Investigations, the ROB, the service charged with the care of archaeological monuments in the Netherlands. Within this framework, however, it was still considered desirable to devote extra attention to the hunebedden. This led to the Minister of Welfare, Public Health and Culture on the first of January 1983 establishing a working group, under my own chairmanship. We have, in this group, worked on the basis that the hunebedden are not only important to archaeologists, but also to the public at large. This is a major justification for assigning them special care. A process of erosion has been taking place not only in the archaeological sense, and on the point of the history of culture and the man-made landscape, but also in a scientific and social sense. The threats posed by people curious about the contents of burial chambers, by harmful overgrowth within and around the hunebedden, natural weathering processes, erosion of the trodden surface around the boulders, by agricultural and other developments in the surrounding area, clambering youngsters and vandalism, necessitate a form of management that will not only guarantee lasting conservation and safeguard the possibilities for future archaeological research, but which will also take into account the great popular value which attaches to the hunebedden as elements of the national cultural heritage.

It was this consideration which made our working group decide to interpret its commission as broadly as possible and to strive for an integrated approach of all relevant aspects.

These aspects I shall discuss under the following six headings:

- the collection and evaluation of data concerning all megalithic tombs;
- safeguarding their scientific value;
- the tombs' legal protection, consolidation and restoration;
- integrating the megalithic tombs in their surroundings;
- initiating and guiding touristic development;
- and finally, stimulating the provision of information and education.

First, the collection and evaluation of data. Over the years, a huge body of information concerning the hunebedden has been accumulating. The trouble is that the nature and the quality of this information is far from homogeneous. It comprises photos, slides, correspondence, drawings, site surveys, reports, plans and publications of recent and vintage date. Matters are further complicated by the fact that these data are not kept in a central place and are often part of existing archives. For instance, large sections are to be found in the archaeological files of the ROB and various university institutes and museums. This means a serious handicap when it comes to carrying out archaeological-, management- and other research on the hunebedden. The working group has made it its aim to trace all these scattered pieces of information, to make them accessible and to set up a central documentation system. The photographic recording in 1982/'83 of all hunebedden, both from the ground and from the air, has been but one of the activities directed towards this aim.

Safeguarding the scientific value of a megalithic tomb is another matter. Of the 54 surviving hunebedden, 17 have in the course of time been scientifically investigated, partly or entirely. This has meant the emptying of the burial chambers. The contents of the other tombs are known to have been, sometimes repeatedly, the target of explorations, scientific or otherwise. Traditionally, it was the prospect of recovering finds, which provided the main incentive for digging. Today, however, we are interested in a wide range of data which may contribute to our understanding, of the construction of the hunebedden, of the people who built them, and of the contemporary landscape. Systematic archaeological research therefore must include the investigation of soil features, human remains such as teeth and burnt bone, and remains of plants such as pollen and carbonized seeds; not only within the tomb, but also in the closely surrounding area. Only in a single case so far, have these immediate surroundings been properly investigated, but this is where in many cases traces of the original covering mounds may still survive, as well as fossil soils - soil profiles of the days when the hunebedden were built. In this light, it is clear that safeguarding the monument's scientific value involves the protection not only of the burial chamber, but also of the covering mound or its remains, and the direct surroundings. For the burial chamber itself, we decided for a system of sealing. This requires the removal of the topmost 8 to 10 centimetres of soil in the tomb; this is sifted and examined for finds. The chamber is then paved with so-called grass-tiles, each measuring 61 by 41 by 10 centimetres and weighing 38 kilogrammes. Where this was required, they were mechanically sawn to the right shape.

Through their system of perforations they still allow the natural percolation of water. The floor laid in this way was washed in and covered with the sifted soil so as to leave no visible trace of the protective measures. This sealing program was initiated in 1983 and completed in 1985. In each case, the procedure was documented by means of a serie of photographs and a brief report. In this way the contents of 37 of the burial chambers have been given a protection against undesirable digging.

Thirdly, there is the point of legal protection, consolidation and restoration. In its present form, a hunebed gives the impression of permanence and indestructibility. But nothing is further from the truth. Both the structure itself and its component parts are extremely vulnerable and are threatened by man and nature. As I said before, the hunebedden have, especially in the past few centuries, been subjected to a wide range of activities. In the old days, the ideas of protection, consolidation and restoration were also implemented, although in ways different from our own. Today, 'protection' is a concept defined in sections 22 and 14/15 of the Ancient Monuments Act. However, these sections only apply in cases where the hunebed in question has been officially listed as an immovable Archaeological Monument. So far, 23 hunebedden have been listed. It is not until about 1990 that all hunebedden are expected to be formally protected in this way. Consolidation, which is the preservation of the present condition, restored or unrestored, requires measures taken locally. These should be based on a survey; listing, for each individual hunebed, what (if any) measures are required for supporting or anchoring its boulders. The boulders are exposed not only to human activity but also to the erosive forces of nature. Careful examination clearly reveals how these affect the stone. Acid precipitation, heating, cooling and freezing have led to cristalization processes and great thermal stress. Dependent on the kind of rock, this has resulted in cracks, fissures and rough, weathered surfaces. For the consolidation of individual boulders, which used to be done by simply filling in the cracks with cement, we are now considering some form of injection with synthetic resins. Whether superficial injections into existing cracks will suffice, or whether impregnation via drilled holes will be required as well, is a question still under study. For the time being we prefer to go slow on plans to actually restore or even reconstruct any hunebedden. Restorations in the recent past, as well as the evidence from a hunebed discovered beneath peat and clay in the northern Netherlands, as recently as 1982, still raise too many questions to guarantee a reliable restoration. Besides: restoration in most cases stands diametrically opposed to one of the aims of statutory protection, which is: preservation for future scientific investigation.

A hunebed is not randomly located in the landscape. Its builders carefully selected the site, in which soils, landforms, geology and topography might be taken into account. In as far as these natural factors still mark the landscape, they are features adding to its historic value. In today's management plans the conservation of these features is regarded as one of the key objectives.

In view of this, we have not only sealed the chambers, as I explained, but we have also designated an 'archaeologically relevant zone' around each hunebed. This zone, which may still contain such things as pot-sherds, flat-graves and remains of food offerings, has been given a width of 25 metres outside the foot of the original covering mound.

In this area, soil movement in any form is to be prevented; this includes the planting of trees and shrubs, the erection of tourist amenities and sand drift. This approach also affects the standing trees; it means that we refrain from certain forms of maintenance, such as tree surgery. To what degree the actual removal of solitary trees or clearance of woodland is indicated in this zone, depends very much on their position and the threat they pose to the hunebed. Such a threat is not only potential, as the possibility of a tree being blow over, but also actual, as in cases where a tree spreads its foliage above the tomb, affecting the humidity and vegetation in the hunebed. This causes certain mosses and lichen to disappear, for lack of sunlight and through eutrophication from leaf-mould. Their place is then taken by other mosses and especially algae.

The vegetation outside the archaeologically relevant zone should also meet a number of requirements. The shrubbery may

- serve as a see-through interface between the hunebed site and its surroundings;
- and prevent the intrusion of wind-blown fertilizer, where the site is surrounded by farmland; as fertilizers not only destroy the lichen, but also the characteristic vegetation of these poor soils;
- it may serve to maintain or to reintroduce elements of the Neolithic environment, as we have come to understand it through the analysis of pollen from fossil soils beneath the covering mounds;
- in summer, it can afford some shade, so as to limit thermal stress in the stone;
- if necessary, it can screen off incompatible development in the vicinity, by a curtain of greenery.

In order to meet all these requirements and also to serve the interests of a nature reserve, we are finding it necessary to increase the size of a number of hunebed sites. If land acquisition is not feasible, we shall have to start thinking about land management contracts with the owners of adjacent fields. In those cases where the direct surroundings are of spatial relevance to the hunebed, we shall also have to press for appropriate zoning plans.

My next point deals with initiating and guiding touristic development. A hunebed traditionally is a great tourist attraction. The special role of this type of monument in the field of recreation is clearly underlined by the use of a hunebed design as the emblem for tourism in the province of Drenthe. The tombs' impressive appearance and their often being tucked away in remote spots, exert a great attraction on people.

But now they have been discovered as leisure facilities and are in danger of being indiscriminately exploited as such. We wanted to prevent this development, while at the same time offering people the opportunity to become acquainted with these monuments. We have therefore tried to find a solution thas does justice to the demands from both sides. This solution has been the designation of 18 so-called 'star tombs'. These hunebedden have been selected in such a way as to represent among them every known type. Moreover, considerations of scientific interest, geographical distribution, available information, location and accessibility played a role in their selection. The idea is that these hunebedden are to be made accessible to the general public. This involves a number of things, such as the provision of signposts and information panels; construction and metalling of approach roads and parking areas and furnishing the sites with

greenery, seats and rubbish bins.

In 1987, each of the star tombs has been signposted along the public highway with a characteristic pillar. Apart from the Dutch emblem for archaeological monuments, this pillar displays the word 'Hunebed' and 'P' for 'parking'. The pillar directs visitors towards the car park. Here they find a second pillar, larger than the first one though similar in shape, which provides general information about the hunebedden. These pillars too have been erected in 1987. Finally, in the near future a third pillar will appear beside each of these 18 tombs, giving more detailed information. For instance, at one of the hunebedden people will be able to read about their distribution, at another about their construction, while the finds are discussed at the third etcetera. In this way, visiting all eighteen will continue to provide new impressions and knowledge.

The aim and indeed the result of designating 18 of the 54 hunebedden as 'touristic' tombs, has been a different kind of management for the remainder of them. Of course these will remain accessible but the idea is to keep them out of the public's attention, and to give a high priority to preservation for future scientific investigation. This follows the principle of zoning.

A final aspect of the working group's activities is the promotion of information and education about the hunebedden.

The ideas expressed so far, of course needed to fit in with the province's recreational policy. This led to consultations with the authorities and to the setting up by mutual arrangement of the Hunebedden Project. Apart from making accessible and equipping the 18 star tombs, as already mentioned, this project involved the preparation of educational material such as a guidebook, leaflet and a lesson for school-children; and the rebuilding and furnishing of the National Hunebedden Information Centre in the village of Borger.

This last development is an especially welcome one. The Information Centre had already existed as a hunebed museum, belonging to a private foundation. It stood in a different place altogether until in 1980 it was destroyed by fire.

A new location for the museum was found in a farmhouse dating to around 1850, immediately adjacent to the site of the largest hunebed in the Netherlands. To make the most of this unique combination, more financial scope was needed than the foundation on its own could provide. This predicament and the question of how best to interconnect the museum and the hunebed, sparked off contacts between the foundation and the hunebedden working group. It was hardly necessary to encourage the interest of the general public for a museum which, even with a provisional display, in three

summer months managed to draw some 20.000 visitors, from every part of the country and beyond. It was decided, within the framework of the hunebedden project, to give the museum the character of a national information centre, aiming to inform as wide a public as possible about the hunebedden and the culture to which they belong.

In order to carry through the plans, in 1984 subsidies amounting to a total of \$ 500.000,-- were applied for, to the Ministry of Welfare, Public Health and Culture, to the provincial authorities of Drenthe and to the Prince Bernhard Trust.

In spite of expenditure cuts all applications were granted, in 1985, and it was on the 25th of February 1987 that the newly laid-out hunebed museum was officially opened by the Minister of Welfare, Public Health and Culture, as the National Hunebedden Information Centre.

Apart from many prominent guests, the press also showed a keen interest. Besides, this occasion saw the unveiling of the first information pillar.

The formula of the Hunebedden Project is now being applied in several places in the Netherlands. In fact, it generates Touristic-Recreational-Archaeological Projects, which combine the following elements: safeguarding a monument's scientific value, making accessible and equipping its site, its consolidation or restoration and the provision of information on panels, in leaflets and in guide-books. All this is done in co-operation with local museums, which in their turn will kindle people's interest in the immovable items of our buried past. Such projects are the showpieces of our care for archaeological monuments and are examples of the socialization of



Megalithic tombs in the Netherlands belong to the West Group of the TRB or Funnel Beaker culture (the general name for a number of culturally related, agricultural peoples which inhabited north and central Europe between 3500 and 2100 BC). In the north-eastern part of the country - mainly in the province of Drenthe - 54 out of some original 100, have survived. As the oldest built monuments, they are for many Dutch people a visual link with their (prehistoric) past. Which is sufficient reason for managing them as a national resource. With this in mind the Minister of Welfare, Public Health and Culture in 1983 established a working group under my chairmanship. The working group decided for an integrated approach of all relevant aspects, in the form of a project. Subsidies were applied for to authorities concerned and were granted. These aspects were:

- -to collect, elaborate and evaluate all data;
- So far, a survey of all literature, correspondence, reports, photographs etc. had been lacking. This was experienced as a handicap in studying and managing the tombs;
- -to secure the scientific value;
- The chambers of 37 unexcavated tombs were sealed in 1983-1985 with special tiles, each weighing 38 kilograms and measuring 61x41x10 centimetres. In an archaeologicaly relevant zone of 25 metres around each tomb, digging and planting was prohibited.
- -to protect, consolidate or restore;
- So far 23 tombs have been given protection under the Monuments Act. Consolidation mainly concerns the removal of trees and the closing of cracks to prevent water and acid material from entering into the stones. Injection with synthetic resin is being studied. Restoration activities have been limited, keeping in mind future excavation and some unfortunate past experiences.
- integration in their surroundings;
- The surroundings are valuable for several reasons. Therefore the small tombreserves are expanded as part of land-development schemes, and physical planning measures are taken.
- to initiate and guide touristic development;
- Megalithic tombs have since long been touristic attractions.
- However, not every tomb is suitable to recreational exploitation. Therefore it was decided to make only 18 tombs accessible to the public. They were selected on the basis of their characteristics, scientific importance, geographical dispersion and location. This was done in 1986/1987, by putting up signs along the roads, by providing them with parking places, information—panels, picnic—seats and rubbish—bins. As a result, people pay less attention to the other tombs. This idea of zoning has since been followed by the opening up of other cultural heritage monuments.
- -to stimulate information and education;
- A local museum, situated next to the largest tomb, in 1984-1986 was rebuilt as the National Megalithic Tomb Information Centre. It was opened by the Minister on the 25th of February 1987. A guide-book, information leaflet, school-pamphlet and more panels with detailed information are in preparation and will be designed to interrelate.

When the project is completed, the tombs will form the showpieces of our care for the archaeological monuments, and an example of the socialization of archaeology.

Aux Pays-Bas, les sépultures mégalithiques se rattachent au groupe occidental de la civilisation dite "du gobelet en entonnoir" (3500 et 2100 av.J.Ch.). 54 exemplaires existent encore dans le Nord-est des Pays-Bas, principalement dans le province de Drenthe. Comme monuments les plus anciens, ils forment pour les Néerlandais le maillon visible avec leur passé préhistorique; raison suffisante de s'en préoccuper au niveau national. Dans ce but, le ministère de la Culture créa en 1983 un groupe de travail placé sous ma direction. Le project d'administration mis au point par ce groupe visait à une approche intégrée de tous les aspects importants. Les subventions sollicitées furent accordées par les autorités concernées. Voici ces aspects:

-Mise en place et élaboration d'une documentation.

Un résumé classé de la correspondance, mesurages, rapports, photos, etc., n'existe pas encore; c'est un handicap pour l'étude scientifique, administrative et autres des hunebedden.

-conservation de leur valeur scientifique.

Dans le passé 17 des 54 hunebedden furent étudiés. Entre 1983 et 1985, les sépultures des 37 autres ont été scéllées par des dalles perforées en béton de 38 kg chacune, mesurant 61x41x10 cm. Leur important contenu scientifique est désormais protégé des fouilles incompétentes. En outre, il est interdit de creuser ou de planter dans une zone de 25 m autour de chaque sépulture intéressant pour les archéologues.

-Protection, consolidation/restauration des sépultures.
En 1987, 23 de ces sépultures mégalithiques ont été classées monuments historiques. La gestion s'oriente sur la prévention contre une charge thermique trop importante, les produits acides émanant des arbres environnants et vers le colmatage des fissures. Momentanément, on n'entreprend pas de restauration à cause de recherches éventuellement nécessaires et

d'expériences antérieures.

-Intégration dans le site.

Chaque emplacement fut, en son temps, très soigneusement choisi. Pour autant que le site environnant présente encore son aspect originel, il y ajoute un élément de valeur supplémentaire réalisé par l'extension des réserves des hunebedden et par des mesures d'aménagement.

-Orientation et suivi des développements récréatifs.

Depuis toujours les hunebedden sont une attraction touristique de la province de Drenthe, ainsi que sa carte de visite. Cependant, tous les hunebedden ne se prêtent pas à la forme actuelle d'exploitation récréative. C'est pourquoi on a décidé d'en aménager 18 pour le public.

Ils on été sélectionnés afin que tous les types et caractéristiques soient réprésentés. En outre, pour cette sélection, ont joué un rôle: valeur scientifique, répartition géographique, information disponible, situation et aménagement. Depuis 1986 ces 18 hunebedden sont signalés de la voie publique. Ils sont pourvus d'un parking pour vélos et voitures, d'un panneau d'informations, d'un lieu de pique-nique aménagé et d'une poubelle. On peut visiter les autres hunebedden mais leur présence n'est pas signalée.

-Stimulation des renseignements et éducation.

Un musée local, situé près du plus grand hunebed a été aménagé de 1984 à 1986 en Centre National d'Information sur les Hunebedden; il a été ouvert le 25 février 1987 par le Ministre de la Culture. Guide, dépliant, informations scolaires et panneaux sont presque terminés et ainsi conçus qu'ils forment un ensemble.