

Report of the Campaign 2001

Introduction

The International Nemrud Foundation (hereafter INF), established in 1998, has worked for a couple of years to obtain a permit from the Turkish Government to carry out archaeological research on and around the monument of Antiochos I of Kommagene on the mountain of Nemrud Dağ in the province of Adıyaman, South-eastern Anatolia, Turkey. The main aim of the Foundation is to protect the monument from further deterioration and destruction as well as to restore the gigantic statue groups and some of the relief stelae on the Eastern and Western Terraces. To reach this ambitious aim it seemed, first of all, necessary to make a new documentation of the remains on the mountain and to study the possibility of a virtual reconstruction.

Thanks to the permit granted by the Ministry of Culture to the University of Amsterdam, a team from the Amsterdam Archaeological Centre of this university started research on the 14th of July 2001. This is the day represented on the famous Lion Horoscope on the West Terrace. The team was composed of archaeologists, epigraphists, geodesists, construction and AutoCAD engineers.

Objectives

The 2001 research had several goals.

In view of INF's main interest in preservation and restoration most energy was spent to obtain documentation as complete as possible, the so-called SIS (Site Information System), which may serve to researchers, students and restorers in the future. Archaeologists could gain profit from this system for their research. We expected that new technology (especially the use of laser scan techniques) could yield a more fundamental documentation of the site than hitherto provided.

Besides concentrating on the terraces and statues proper, the Amsterdam research also made a modest start with the study of the direct context of the monument, i.e. the area of the mountain below the tumulus and terraces. We therefore conducted a pilot survey in part of this area. First of all to see if there were any stray finds providing new information for our understanding of the monument. There is, for instance, a remarkable absence of pottery from the monument itself that could have been preserved on the mountain's slopes; furthermore we know that also this area was incorporated in the conception of the monument by means of guarding animals and entrance stelae. Secondly to look if a more extensive field survey, maybe to be executed in the next years, is possible and would be worth the effort.

Composition of the team

Professor H.A.G Brijder, University of Amsterdam, project manager
Dr. Eric M Moormann, University of Amsterdam, acting project manager
Dr. Miguel John Versluys, University of Leiden, assistant project manager
Drs. Tesse D. Stek, University of Amsterdam, drawings
Ellen Thiermann, University of Amsterdam, drawings
Professor Onno M. van Nijf, University of Groningen, epigraphist

Marlies Schipperheijn, University of Groningen, epigraphist
Ir. Hans Garlich, Technical University Delft, geodesist
Ing. Marinus Kremers, Technical University Delft, geodesist
Ir. Maurice L.A. Crijns, president INF, project co-ordinator
Anne ten Brink, secretary INF, praehistorian
Ir. Jaap Groot, member board INF, structural engineer
Dipl.-Ing. Klaus-Dieter Kiepsch, Callidus GmbH, Halle, 3d laser-scan
Ing. William A.M. van den Bogaard, AutoCAD engineer
Drs. Petronella J.M. van den Mortel, virtual reconstructions
Levent Vardar, Ministry of Culture, Turkey, project supervisor (14 July-15 August)
Nurhan Turan, Ministry of Culture, Turkey, project supervisor (15 August-20 September)

The 2001 campaign

In the following paragraphs the results of the work carried out this year will be shortly discussed. In view of the importance of the site of Nemrud Dağ we feel an obligation to publish our objectives and first results as soon as possible: publication of the *First Interim Report* in the Dutch international periodical on Classical Archaeology *Bulletin Antieke Beschaving* is thus scheduled for next year.

The Site information System

The SIS covers the facts and figures relevant to the site as follows:

- coherent short description of the monument;
- full documentation of the monument by means of GPS, AutoCAD and 3D-laserscan.

As to our project, first, these data will serve to reach the following aims:

- virtual reconstruction of the monument;
- preparation of the *anastylosis* of the colossal statues in the near future.
- provide a solid base for further scientific research

The SIS enables the user to further gain insight in the monument him- or herself. It has different layers or levels, ranging from a general overview to a specific detail.

The most general level (1) is formed by the topographic map. This has been made by Garlich and Kremers from Delft University. Many thousands of GPS points have been combined and show the tumulus with its remains and some of the characteristic features directly around it. A remarkable detail of these measurements is the fact that the top of Nemrud Dağ is not 2150 m. high, as always stated, but 2206 m. Another novelty is the correction of the orientation of the mountain. In respect to all extant maps the North is situated 5° further to the West.

From this overview the user can zoom in on one of the terraces.

Level 2 provides detailed maps of the East- and West terrace with the position of the statues, the tumbled down blocks and most other elements. These have been made by the same geodesists from Delft.

Level 3 takes the user into these maps by overview photographs of the terraces. Now the terrace's maps can be visualised from different angles while the placing of the statues (rather evident) and the location of the different groups of blocks (much more problematic) becomes clearer.

On the fourth level one encounters the giant statues themselves. Here are drawings that show the statues' structures in different blocks and also indicate which blocks are still in situ.

The tumbled down blocks of the statues can be studied on the fifth level. It provides photos of groups of blocks and, after that, of individual blocks. It is combined with a database that shows our designation of the blocks.

Some of the individual blocks, lastly, can also be found on level 6. Here are scale drawings of blocks with sculpted details, from different perspectives, thus giving more detailed and precise information than the photographs. Stek and Thiermann from Amsterdam University have made these photographs and drawings.

The 3D dimensional reconstruction, made by Van den Bogaard and Van de Mortel, based on the 3D laser scans provided by Kiepsch, combines these different levels but will, in general, be of great help in getting a general understanding of the monument. For reasons of convenience we thus labelled it level 0.

In summary, we get the following sequence:

Level 0: 3D reconstruction

Level 1: topographical map

Level 2: terrace plan

Level 3: terrace photographs

Level 4: giant statues' drawings

Level 5: blocks photographs

Level 6: blocks drawings

The general structure of the SIS as explained above, will be illustrated here by a short description of the data available for the East Terrace and West Terrace.

The East Terrace has been relatively well preserved. The gigantic statues are standing upright for the most part. The eagle and lion are, at both sides, largely destroyed and have been the least preserved. Level 0 and 1 provide a general impression of the East Terrace as preserved nowadays. On the plan (level 2) the position of the blocks and all other elements are precise, however not all (fragments of) blocks are visible. For the numbering of the blocks see below. Level 3 are photographs providing an overview of the terrace on which nearly all blocks and other elements can be seen. Blocks are numbered from 1 to 56. This numbering is random but in general follows the present position of the blocks in the field, i.e. from left to right when facing the statues. Small or unidentifiable fragments are not always included. The database (list of blocks East Terrace) gives our interpretation of the 56 blocks, i.e. where we think they originally were. The statue/layer/block indications refer to the (reconstructed) statues and their structure as presented on level 4. The statues are named from left to right as seen frontally: A (lion), B (eagle), C (Antiochos), D (Commagene), E (Zeus), F (Apollo), G (Heracles), H (eagle), I (lion). The base of the statues is always layer 1; layers are numbered from bottom to top; most statues have 7 layers. Most layers consist of different blocks; these have been given a letter. When facing a statue, the block in front, at the left side is designated a; counter clock-wise follow blocks b, c, d, etc. The photos of groups of blocks and individual blocks presented in level 5 are also to be consulted together with the database (list of blocks East Terrace). This way the user can study specific parts of the East Terrace, also being able to check our interpretation of the blocks. Level 6, drawings of individual blocks, will be of great help in understanding the features characterising specific blocks. We decided to provide a relatively large number of drawings of the East Terrace blocks (in comparison to the West Terrace, see below) for practical reasons. The East Terrace blocks can be drawn more easily than those on the West Terrace; besides the structure of the statues can be more easily understood on the East Terrace because of their better state of preservation.

The West Terrace is less well preserved and thus asked for other emphases in the documentation system. Because a general overview of the West Terrace could not be obtained by the laser scans (level 0 and 1 are thus relatively incomplete here), it was decided to compile a plan of the West Terrace with the (few) GPS points as basis. On these fixed points an imaginary grid was laid down; the blocks were measured and drawn in by hand from this grid. The West Terrace plan presented here (level 2) is thus not 100% exact. Because, however, we do not seem to deal with an 'in situ' situation with regard to the fallen blocks this does hardly seem to matter. For getting an insight into the present position of parts of statues fallen down it proved to work out very well. For the numbering of the blocks see below. Level 3, overview photographs of the West Terrace, makes the plan understandable and vice versa. Because the situation on the West Terrace is more complicated than on the East Terrace, the SIS user finds relatively a lot of photographs here. Blocks are numbered from 1 to 152, again at random but roughly from left to right. As on the East Terrace, the database (list of blocks West Terrace) gives our interpretation of the 152 blocks. For the statue/layer/block indications, and level 4 in general, the East Terrace statues and their structure necessarily served as a parallel. The same indications are used. In level 5, photographs of the blocks, emphasis was mainly laid on groups of blocks because many times individual blocks do not show many, if any, specific characteristics. Thus, there are many question marks in the database (list of blocks West Terrace). Also for this reason, and as explained above, drawings of individual West Terrace blocks (level 6) are few. In general, blocks with a dimension of less than 0.2 x 0.2 have only been included when showing figural characteristics.

In the two lists of blocks thus seven tables are shown. The block number logically refers to the number of the block on the plan of the terrace. Then follow the statue/layer/block indications as explained above. Added are the names of the statue and of its part in question; both just for visualisation as this information is already present in the statue/layer/block indication. The last table indicates if it concerns a fragment or a whole block. The lists of blocks are connected with another part of the database, i.e. the photo/drawing list. This contains the following information: the code of the photo with the corresponding block number; the view (from which side the photo is taken, is it a detail or an overview, etc.); a table indicating if there is a drawing of the block in question; and remarks. With the photo code the first two letters logically refer to the East Terrace (ET) or West Terrace (WT), the following figures indicate the block number (in case of overviews the central block has been taken), the final letters indicate the view (ba = back, fr = front, si = side, ls = left side, rs = right side, bo = bottom, to = top, gr = ensemble, xx = unknown). General overviews or blocks of the statues' bases may have alternative codes; these are however always evident (ET-overview 1, WT base F, etc.).

In compiling the SIS, epigraphic and archaeological interpretative research was carried out simultaneously. The archaeological questions partly raised from the demands mentioned, partly from the study of the scholarship up to now. Some new hypotheses regarding chronology, iconography and interpretation will be presented in the *First Interim Report*.

Epigraphy

Van Nijf and Schipperheijn checked the well-known texts on the backs of the giant statues and registered some 'new' texts on one of the blocks of the giants, fallen down on the West Terrace.

They made black-and-white photos, colour photos with a digital camera and squeezes of the erased inscriptions barely visible on the backs of the Dexiosis stelae on the West Terrace. These texts apparently had been cancelled for some unknown reason and were replaced by the already known inscriptions in which Antiochos dedicates the slabs to the gods depicted on the relief sides. It is hoped to find means to decipher the old texts. On the spot, it was possible to read some letters with a good flood of sun light, but as the ideal moments were short only (late morning, part of the late afternoon) no words, not to say sentences could be registered. We now hope to find a possibility to read the texts by reworking the different photo records and the squeezes. As squeezes were made of one slab only (that with Zeus), the others will have to be done in the near future.

Survey

The area below the tumulus and the terraces formed part of the sanctuary and its conception, as made evident by means of processional roads and markers. To understand what was happening on the terraces, it was necessary to also study this direct, wider context; especially because some interesting questions remained to be answered.

Versluys and Ten Brink carried out some investigations. The aims of the 2001 survey were modest. First of all we wanted to check if the information provided by Goell and Brokamp in the 1950s was correct and to look if there was perhaps more to be found. Secondly we wanted a more thorough and detailed insight into the area because the most recent map, compiled by Brokamp's in the 1950's, is rather basic. Thirdly we looked for pottery and other traces of human occupation. The striking absence of pottery on the terraces itself plays an important role in the discussion if the sanctuary was ever in use. In view of the climatic circumstances (every spring huge amounts of melting water run down the mountain) *and* from observations made during the preparation of the season, we surmised that the remains looked for on the mountain might be, at least partly, in the area below.

As to our first question, the information provided by Goell and Brokamp seems to be correct and rather complete. The procession road stele I is still in situ. There is no trace of the socket of stele II anymore; as Sanders already conjectured, the place was probably destroyed in the foundation of the modern stairs leading up from the cafeteria. From another stele, lying below the North terrace, it cannot be determined anymore if it concerns an entrance stele or not. We did not come across other such remains. Eye-catching though is a remarkable flat area below the East Terrace where possible cuttings from the living rock are visible as well as large blocks of stone. One could think of a kind of quarry here. Also more in general, the limestone around the mountain gives us the impression that the blocks for the statues could well be hewn in the direct area.

As to our second question, a more thorough inventory of the area proved to be worth the effort. The area below the East Terrace (n/e) consists for a large part of an alternation of ridges and gorges. These gorges are formed by the melting water running down from the mountain after winter and always end up in one or more so-called ice caves. These ice caves form, as it were, a kind of band around the mountain at this side; they continue till below the East Terrace and then stretch out further east. The ice caves differ considerably in size. In

many, especially the larger ones, the power of the water coming down can be clearly noticed by the extreme weathering of the rock. The all-year presence of water here is witnessed by vegetation at the borders of the caves still abundantly present in September. We numbered the ice caves directly connected with the gorges, but it is important to realise that there were much more, stretching out to the south and east. From the ice caves it is a 20 minutes steep climb up to the East Terrace. The ice caves, providing abundant fresh and cold water all year, thus seem to have been a source of water much nearer than the spring down the Malatya valley.

Also our look for remains of pottery and other human occupation, this year's third objective, proved to be successful. In the survey area we found prehistoric artefacts, Kommagene pottery, pottery from later periods, and parts of the monument on the mountain. In itself this is an important establishment; quantities are few though, despite difficult and intensive searching. Most artefacts are logically found at the borders of the gorges. The survey database presents the finds, supplying a map of the area with the find numbers and further, for every artefact, GPS points, a description, dating and photographs. Considering the prehistoric artefacts and the pottery, the results are too meagre to draw any real conclusions besides the general insight that Nemrud Dağ attracted human interest from prehistoric times to the Byzantine period. Considering parts of the monument fell down the mountain, it is important to see how large their area of distribution is. The few tuffit parts of stelae and sockets we found probably came from the East Terrace. They indicate that, again due to climatic circumstances, the present find spot of artefacts fallen down the terraces only has little to say about their original position.

All finds were documented by means of description and photographs and can be studied via the database. There were handed over to the director of the Adıyaman Museum at the end of the campaign.

Round Table on Conservation and restoration

August 16-18 a round-table on conservation and restoration of the monument took place at Kāhta and Nemrud Dağ. A delegation of the Ministry of Culture, presided by Fikret Uçcan, Undersecretary, and Alpay Pasınlı, general director, Halil Işık, vali of the province of Adıyaman, Bulent Akarcalı, MP and president of the Turkish Democracy Foundation, and stone specialist from the World Monuments Foundation gathered in a thorough collaboration. The future policy as to the treatment of the stone surfaces, esp. those of the tuffit stelae and sculptures, and the re-erection of the colossi was discussed in two intensive meetings. A follow-up was planned to be organised at Amsterdam University in November 2001.

Conclusion

All in all the first campaign proved to be successful. With regard to all objectives important progress has been made. The Site Information System has been designed and works very well. It is completed for about 80% and has to be finished the next year. Therefore, we could already make a modest start with the anastylosis next year. From this compilation of material interesting new observations on the sanctuary and its interpretation arose. The results of the pilot survey were promising as well. This lead us to the design of a research project in which our main goal, the anastylosis, becomes the centre of a broader effort to understand Commagenean landscape and history, as witnessed by our 2002 research proposal.