Svenskt HällristningsForskningsArkiv

- a database and an archive of rock carvings

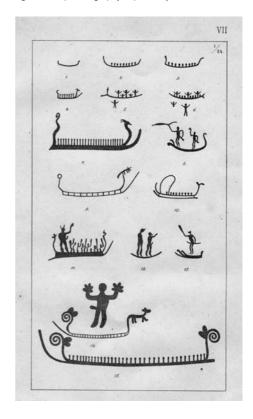
Svenskt HällristningsForskningsArkiv – (direct English translation: Swedish Rock Carvings Research Archive) – a national project for constructing and establishing of a database and an archive for documentation and research of rock carvings at Göteborg university financed by RiksBankens Jubileumsfond and Riksantikvarieämbetet.

Rock carvings in Sweden have attracted interest of researchers ever since the early 17th century. Already then were depictions made and attempts of interpretation formulated. The rock carvings in Northern Bohuslän have since then been the focus of special interest. In the beginning of the 19th century C.G. Brunius accomplished a complete documentation of rock carvings in Tanum and among other things recorded the engraved images by the use of a co-ordinate system. Brunius have got many predecessors in Bohuslän but also in other parts of Sweden. In the course of the 20th century the knowledge and information of the rock carvings spread outside academic circles to tourists, schools and public. Today, the number of researchers, private and academic occupied with documentation of rock carving images and describing them text wise have increased to an extent that no one could ever have foreseen.

The increasing accumulation of documentation of rock carvings leads to an increased demand to take care of it, to put it into archives and to make it accessible to researchers and others interested. Simultaneously, the problem of the deterioration of the documentation itself has to be addressed and its preservation for the future be solved.

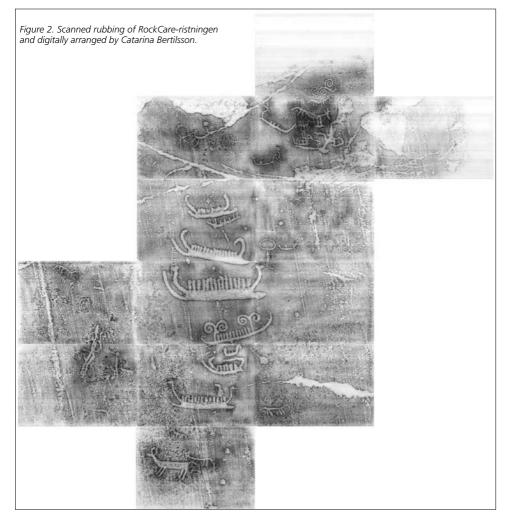
That is in a short summary the background for the need of a national project with the

Figure 1. Ship iconography depicted by Brunius in 1808.



primary ambition to assemble old and new information about rock carvings in a database and to make it accessible for research, management and presentation purposes. Such a database FMIS – Fornminnesinformationssytem has been established by Riksantikvarieämbetet for all registered ancient monuments. Special registers originally in analogue format and with a definite research perspective has since long been developed for runic inscriptions - Runverket, churches – Sveriges Kyrkor and medieval farms and estates – Det Medeltida Sverige. The need for

a modern register for rock carvings focusing on research perspectives and management aspects has been discussed since the 1970s and ideas of a specially designed project have existed for more than 10 years. Those ideas were partly realized within the frameworks of the EU-projects Hällristningar I Gränsbygd, RockCare and RANE that were directed by Riksantikvarieämbetet and Länsstyrelsen in Västra Götaland in co-operation. They resulted in the development of the databases Hällrist and RockCare Base that both contain systematized information on rock carvings



that have been systematically assembled by organized activities of the projects. A large mass of information is also constituted by the more than 3000 rubbing paper sheets that were scanned and arranged digitally stitched by a technique that was developed in co-operation with Riksarkivet.

These positive achievements lead to discussions of the possibilities of a deepened co-operation between the Institute of Archaeology in Göteborg and Riksantikvarieämbetet. The outcome was an application for an infrastructural project to Riksbankens Jubileumsfond that was approved in October 2006. The application for the project that

has then been officially named Svenskt Hällristnings Forsknings Arkiv - SHFA was also supported by the County Administration, the Regional Museums Administration and Tanum municipality manifested in a common Letter of Intent. In January 2007, the project started to work with its first phase designated to a nationwide inventory of all primary field documentation of rock carvings. This documentation is now kept various collections belonging to a large number of public and private archives. In total more than 80 such archives are concerned spanning from the national Antikvariskt Topografiskt Arkiv - ATA in Stockholm to some individual researchers private archives.

Figure 3. Detail of Register form used for the archive inventory developed by SHFA.

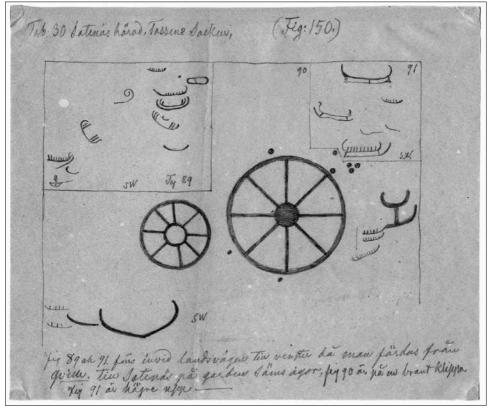


The primary goal of the inventory is for the first time to create the circumstances to get an overview of this highly interesting but widely spread documentation made in various materials using shifting standards and now kept under uncertain conditions. The inventory register will therefore describe the different collections in relation to location, content, format and condition. It serves as starting point for the present work of the project regarding the planning, prioritization and digitalization of the documentation. In addition it will also highlight the need to secure information and preserve original documentation.

This nationwide inventory is now performed at archives, museums, research institutes and private collections by SHFA staff. Step by step it is producing a detailed picture of the quantity and quality of existing documentation material of prehistoric rock carvings. The intention is that the material then will be scanned and assembled in one single database. Since the volume can be estimated to at least 100 000 documents the scanning will in this first phase concentrate on the documentation from the latest 15 years. But also older "pioneer" material of key importance such as Åke Fredsjös' original documentation from Kville härad and Einar Kjelléns photo negatives from the Enköping area in Uppland will be scanned already now in the initial phase of the SHFA-project.

Another aspect guiding the priority order of scanning is that it has been found practical trying to collect and scan all available documents for a certain panel regardless of when it was originally produced. This will be a big

Figure 4a. Scanned drawing of Sotenäs rock engraving made by Nils Månsson Mandelgren in 1875.



advantage from a user friendly perspective once the database is in use. In addition it will create new possibilities for researching one and the same rock carving from a historical perspective. The remaining documents will then be scanned in the subsequent phase of the project. The ambition is to scan all existing documents in due time. Preliminary calculations made on the basis on the work time that has been used for the archive inventory and the documentation scanning the concept "in due time" at the best may mean in three years. Exceptions will however be made for filed documentation made in sensitive materials for example fragile tracing paper or aged transparent construction plastics that may easily fall apart or even dissolve. The format of roll scanner will also lead to some size related delimitations that demands for more advanced equipment if to be solved.

The digitized database will be equipped with advanced search facilities that will constitute

useful tools for researchers, cultural institutions and all others interested. The basic idea is that the search register and the data base once they have been ready made and publicly accessible will be linked to RAÄ: s Kulturmiljöportal and Kulturmiljösök. This will of course increase its' accessibility and usefulness for documentation, research, presentation and management of rock carvings. It is intended to be accessible via Internet through various interfaces and web services that are now being developed.

The prioritized aims of the SHFA projects are the following:

Survey and register all documentation of rock carvings in all public and private archives

Scan and digitize all imagery documentation material with accompanying texts and maps

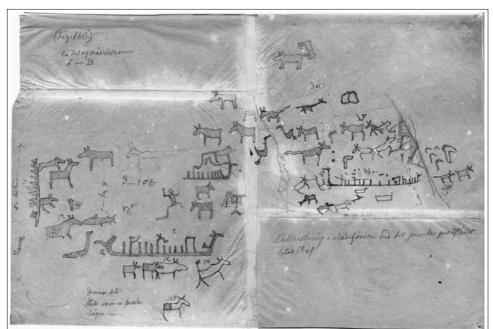


Figure 4b. Scanned drawing of Nämforsen rock engraving made by Nils Månsson Mandelgren in 1875.



Validate and integrate digital imagery information from the EU-projects RockCare, Hällristningar i Gränsbygd och RANE

Develop users interface and web services for research and presentation

Create a national archive with a new building located in Tanum

Progress in 2007

The first project year has been designated to organizing of the work, buying of necessary high quality equipment, a large format roll scanner, a high resolution photo scanner and a likewise text document scanner, and to start the archive inventory and the actual scanning. The project at present resides at Tanums Hällristningsmuseum in Underslös that has provided suitable localities with space enough to house the equipment, the staff and the activities. This museum was founded by the Dane Fred Gudnitz in the 1950s and has since conducted documentation of rock carvings and built up a large

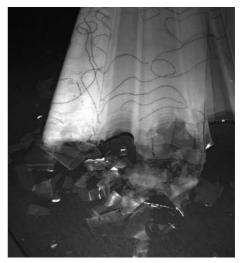


Figure 5. Photos of full scale original documentation on construction plastic made in the 1970s now starting to dissolve.

archive which has partly been scanned by RockCare and will now be included in the new database.

The project is also engaged in scanning of parts of the waste collections in the archive of Vitlycke museum. So far the work has been focusing on test scanning of different types of material and now encompasses more than 1000 documents and basically large portions of Åke Fredsjö's original field documentation of the rock carvings. Test scanning of documentation made on plastic has also been performed and with positive results.

The inventory of archives is conducted at the same time and as yet have more than three fourths of the 82 institutions on the list been visited and their collections have been registered. This includes Lunds Universitets Historiska Museum, Simrishamns museum Enköpings museum with the Einar Kjellén archive and Göteborgs Stadsmuseum. The work is performed according to the time plan and has been very positively received by all

archives concerned. This task is calculated to be concluded in the summer of 2008.

The intention is further to build up a searchable data base on literature on rock carvings. This task commenced in the spring of 2008.

IT pilot study

In 2006 the Archaeological institute applied for a research grant from Riksantikvarieämbetet to be used for development and implementation of the IT system of the project. The application was approved in June 2007 and the grant was initially used for an IT pilot study in which is described the needs for research, communication and professional culture heritage work as basis for data modeling and specifying of requirements for the system for an Internet based database

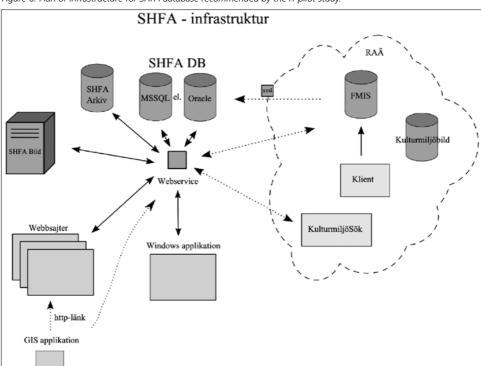


Figure 6. Plan of infrastructure for SHFA database recommended by the IT-pilot study.

of documentation material on rock carvings. Further, the pilot study was urged to put forward propositions for how to solve the long term ownership and management of the database. The study resulted in a series of recommendations of which one suggests that Göteborgs universitet will take on the long term responsibility for keeping and running the database in close so-operation with Riksantikvarieämbetet.

A key component of the study is to include a research perspective, where the researchers themselves may propose ideas and more direct wishes as regards the construction of the database and its use such as search facilities. Accordingly, a number of reference persons were selected to answer a deep enquire that will picture the needs and wishes of the research collective. A similar working model was used to enlighten the system technical questions. There a number of key individuals in IT-functions at Riksantikvarieämbetet. Västarvet, Länsstyrelsen in Västra Götaland and at Kulturavsstyrelsen in Köpenhamn in Denmark were deep interviewed in order to provide the project with an as wide as ever possible picture of possible technical solutions.

Time plan

Based on the present funding and aims it is calculated that the project will be able to work until mid 2009. The ambition is that. and then at the latest, the database will be put into work mode and public use. Test runs is planned to be performed at the end of this year. Additional funding for three years until 2012 has been applied for at Vetenskapsrådet for further widening of the work to develop a new infrastructure for research on rock carvings. In a subsequent phase the intention is to widen the work to include further Nordic countries and in the European Union. Requests have already been presented from several institutions in Norway and discussions are also held with the research institute CCSP - Centro Camuno di Studi Preistorici in Valcamonica in Italy that keeps the largest library and research archive on rock art in the World. A foundation for a wider co-operation with several other research institutions in different countries already exists as a result of the Culture 2000-project RockCare- Tanum Culture Heritage Laboratory in which was produced among other things a common figure type list in six different European languages.

The IT-pilot study with its recommendation has now been approved and a new funding for another year was granted in March 2008. It will be used primarily on a deep study to find a long term solution for the important work of the project to develop a modern, easily accessible research data base on rock carvings loaded with the extraordinarily rich documentation on Sweden's rock art that has been assembled by ambitious researchers for almost four centuries.

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