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# Excavations at the Rock Carvings

at Torp in Skredsvik in Bohuslän, Sweden in the early 1990s

# Abstract

In the years 1991-1995 the authors excavated at the rock carvings at Torp in Skredsvik, a site that is one of the most remarkable in all Bohuslän when the engraved images, the way in which they are combined and the topographic context is considered. In the paper the results from the excavations, the finds and the implications for the dating are presented for the first time.

## Background

In recent years there has been a series of excavations in front of rock carving panels in Northern Bohuslän (Kristiansen & Prescott 2000 with references. Benatsson 2004 with references). These excavations have revealed a lot of hitherto unknown archaeological finds and new information. In that way new light has been shed on the context of the rock art and the engraved granite panels. Already before those, in the early years of the 1990s the authors performed archaeological excavations at two of the most spectacular rock art sites in Bohuslän, namely at Torp in Skredsviks parish and at Fossum in Tanum parish. Due to a number of unforeseen circumstances that will not be accounted for here, the reports from these excavations have been delayed for many years. Thanks to the excellent initiative of the editors, Gerhard Milstreu and Henning Prøhl, to let the present issue of Adoranten focus on excavations in connection with rock carvings the present authors have now been offered an opportunity to finally tighten this lacuna. However, due to the rather extensive information from these excavations this

paper will focus on the excavation at Torp in Skredsvik whilst a report from Fossum in Tanum will have to wait for yet some time.

## Torp in Skredsvik - the site and the setting

The site itself was surveyed for the first time in 1890 by Emil Eckhoff during the field campaign that was later to be named Göteborgsinventeringen (Bertilsson&Winberg 1978). The rock art at Torp is composed of different motifs of much varying character and in varying combinations and compositions that makes it one of the most remarkable and intriguing sites in all Bohuslän. In 1990 it was surveyed in detail by Riksantikvarieämbetet and the result came out that it consists of almost 1000 figures dispersed in seven different panels located on three main rocks situated within a total distance of 35 meters. Fig. 1. The first with and largest engraving is composed of 1 ship, 1 circle circumscribing one large cup-mark, 562 cupmarks and 101 lines and grooves. The one single ship, situated low on the panel was detected during the clearing of vegetation

Fig. 1. Map of the excavated rock art site Torp in Skredsvik.





Fig. 2. View over panel number one from north east. The lower panel is almost completely covered, not to say perforated by cup-marks and grooves that also continue on the domeshaped panel to the west but with less frequency. Photo: Ulf Bertilsson, Riksantikvarieämbetet.



Fig. 3. Close up on panel number one from north. On the lower western part of the panel is a big concentration of cup marks and grooves that often connects cup marks. Photo: Ulf Bertilsson, Riksantikvarieämbetet.

in the initial phase of the first excavation. The engravings are placed on a low projecting rock that it covers almost completely. Fig:s 2 and 3.

The second panel is much different in character being composed of 6 ships, 14 footprints, 3 fragments and 62 cup-marks on an almost vertical panel. What makes this panel extraordinarily is the fact that the some of the larger ships with crew-strokes of which some has marked knobs are superimposed by deeply carved and paired foot-prints that seem to have been not only put on top of the ships but also deliberately placed in them with the heels "standing" on the keel-lines. Fig. 4

The third panel is situated on a dome-shaped projecting rock reaching 1,75 meters height and 10 meters diameter. The engraved images consists of a combination of those appearing on panel one and panel two, namely 5 ships, 15 foot-prints of which several are paired, 1 cross, 5 fragments and 167 cup-marks. Connected to the third panel are another four smaller panels; one with 1 single cup-mark, another one with 2 ships and 10 cup-marks, yet another one with 1 single cup-mark and finally one with 1 ship, 1 circle, 1 fragment and 71 cup-marks. Fig. 5.

The figures and the ways in which they have been combination indicate that the rock art at the Torp site contains figures and elements that connect to a more wide-spread tradition of rock art than the one typical of immediate neighbouring areas in Bohuslän. The abundance of cup-marks, lines and grooves and paired foot-prints is more common in Skåne and Västergötland than in Northern Bohuslän where depictions of ships, humans, animals, weapons and ornaments dominate. The imagery displayed on the panels at Torp may also have some interesting chronological



Fig. 4. View over panel number two from south-east. The panel displays a unique composition of superimposed paired foot-prints where the heels are deliberately placed on the keel lines of ships of early type with headed crew lines. Photo: Ulf Bertilsson, Riksantikvarieämbetet.

Fig. 5. View over panel number three from north. This main panel is located to the upper middle and to the western parts on the opposite side of the dome-shaped rock. Another smaller concentration of petroglyphs is located to the top surface of the rock right of the wide crack under the big oak tree. Photo: Ulf Bertilsson, Riksantikvarieämbetet.



implications pointing to an early, possibly Neolithic dating. In addition, the richness of deeply carved images and superimpositions makes likely that the site has been visited and used repeatedly during a long period of time. The height above the present sealevel is between 40 and 45 meters a fact that further strengthens the possibilities of an early date of the site. At the same time it must be kept in mind that the topography and geology of the surrounding landscape present a context that resembles that of most of the Bronze Age carvings further north in Bohuslän; the engraved panels situated on the border between the moraine and the clayey soils both presenting acceptable circumstances for prehistoric settlements and surrounded by rather steep mountain hills and ridges with some typical burial cairns and stone-settings. Another difference is that the engraved rocks at Torp also differ from the typical ones since it consists of gneissic granites of rather poor guality instead of glacial polished, fine-grained granite.

## The archaeological excavations

There were several reasons for choosing to conduct archaeological excavations at the engraved panels at Torp;

One has already been mentioned, the fact that the rock art looked different from that normally found in Bohuslän. The differences make the site unique and a real challenge for a rock art researcher trying to sort out and explain the contextual and chronological implications of the site;

A second reason was a high possibility that there could be soil strata and now buried prehistoric surfaces undisturbed by ploughing in historic times in direct connection with the engraved panels;

A third reason was that judging from ocular inspection there might be a stone packing in immediately in front of at least one of the panels indicating a construction made by man that might help to shed new light on the function of rock art and the activities performed at the site.

The excavations were carried out on three different occasions from in 1991, 1992 and

1995, the total time of excavation being four weeks. The work was made possible by a generous grant from Velanders' Fond administrated by Dr. Gustaf Trotzig at Riksantikvarieämbetet. Alongside of the authors, Cecilia Bertilsson participated during the whole excavation. Sven-Gunnar Broström and Kenneth Ihrestam participated during the second excavation and Lasse Bengtsson during the third excavation that lasted two weeks. The kind assistance of these skilled persons facilitated the sometimes rather heavy excavations work a lot.

The first excavation focussed on the basic issues that was presented above; was there areas undisturbed by historic ploughing immediately adjacent to the engraved panels?; was it possible to find stone pavements or any other manmade constructions in connection with the rock art?; was it possible to find any artefacts in the soil? The first question was answered positively by the excavation in front of *panel number 1* but not until the second season in 1992 when the excavation there begun.

The excavation in front of panel number 2 was concentrated to the assumed stone-paving right below the engraved figures, in this case the ships with the superimposed paired foot-prints. A meter square was laid out in there and the excavation was performed. On the surface a number of stones and boulders varying in size between 5 and 40 cm cropped up. Fig. 6. The turf was about 10 cm thick and under that followed a 10 -25 cm thick stratum of humus, stones and boulders up to 60 cm in size under which the glacial clay occurred. The earth layers turned out to be natural and unaffected by human intervention the supposed stone-paving included. Still the existences of the engravings demonstrate that there have been human activities there. This was also verified by some finds from the excavation the most interesting being a micro-sized - 12 mm - broken pointed flint flake with traces of wear on one edge that was found in the humus and stone stratum. Although this item is not easy to give a more precise date it may be of Bronze Age type. Regardless of that it is still not possible to determine weather it is connected to the



Fig. 6.Close up on the meter square at panel number 2. The excavated area was situated right in front of and below the central part of the engraving. The stones that stick up under the grass-turf layer turned out to be deposited naturally on the spot. Photo: Ulf Bertilsson, Riksantikvarieämbetet.

making of the petroglyphs and deliberately left there on top of the natural "stone-paving" or if it had just been incidentally lost at this very spot.

The excavation activities at *panel number* 3 and the adjacent panels number 4-7 was concentrated to a 1,5 m wide depression covered by moraine in the south eastern part of the rock. The reason for this decision was that the edge of the rock in three directions – North, East and West – seems to duck into a mostly natural clayey stratum that some places have been disturbed by agricultural activities in historic times.

However, the remaining parts of the rock from south east to south west seems to be surrounded by a stone paving that from certain details like the existence of a brim appears to be man made. Due to the available working resources it was decided not to uncover or excavate the stone paving but to leave that to a future field campaign. Instead the excavation concentrated on the moraine covered depression that was excavated by a trial trench of 1.5 m length and 0, 5 m width. The size of the trench was decided from the natural conditions of the soil that made it impossible to enlarge the size of the excavated area. In addition to this trench, two 0,5 meters square test pits was put out on 2 m respectively 2,5 m distance due south of the trench. Under the thin grass-turf the excavation revealed a stratum of sandy, clayey soil that lasted to the bedrock 40 cm down under.

The soil in the test pits looked much the same except from the fact the southernmost one ended in a clayey layer that seems to be natural in this area. The trench produced two small pieces of flint that looks like they have been consciously dressed but when so with very poor technique. In the trench 20 cm under the soil surface there were also a marked occurrence of rounded stones up to 10 cm in size that had been selected and



Fig.7. Field plan of the excavated area in front of panel number one with the concentration of dark soil with pieces of charcoal and quartz splinter marked. Drawing: Catarina Bertilsson, Riksantikvarieämbetet.

deliberately put there. It was then decided that no further excavations were to be conducted at the panels' number 2 and number 3 after the opening season although the results from the test excavations and some interesting features certainly would justify that. That will instead be realized some time in the not too distant future.

Instead the work in the subsequent field campaigns in 1992 and in 1995 was concentrated to *the area in front of panel number 1*. The soil was not disturbed by historic ploughing in front of the panel. In fact there were no signs of disturbance by ploughing or other activities in connection with agriculture in the trench that was laid out right-angled and excavated to a length of 6 meters out from the rock. The depth of the soil was ranging from 50 cm close by the engraved panel at the upper end of

the trench to 30 cm at the end of the trench further down the slope. It consisted of three different strata; grass-turf, humus and sandy silt under which followed the glacial clay. The grass-turf varied between 5-12 cm in thickness, the humus between 15-30 cm and the stratum with silt was generally 15 cm thick. The excavated area extended over a total of 7 meter squares that were all laid out in front of the south western edge and lower part of panel number one. One reason for this was that there were four big boulders of 75 - 125 cm size that on the surface looked as though they might have been intentionally placed in a way that they formed a slightly curved almost semicircular row with spaces in between. If so the boulders would delimit a



Fig. 8. Profile of the soil strata in front of panel number 1 with the bowl-shaped cavity marked. Drawing: Catarina Bertilsson, Riksantikvarieämbetet.

certain space in front of the engraved panel. Another important reason for excavating this area was that it would important to find out weather the cup-marks and grooves would extended further down under the present ground surface.

The answer to the last question turned out to be a no. No additional cup-marks were found. The answer to the first question regarding the boulders turned out to be a yes. The boulders did not form an actual wall but they most certainly seemed to have functioned to fence off the area inside and in front of the engraved panel from that on the outside. The hypothesis that the boulders had had that function was further strengthened from the existence of yet another stone construction. In the outer western meter square were three stones ranging from 15-45 cm in size placed so that they formed a right angel.

Inside the stones facing the rock with the cup-marks and grooves was an almost circular, 60 cm wide concentration of dark and sooty soil with pieces of charcoal and splinters of quartz. Fig. 7. This soil was up to 25 cm in depth and in profile forming a bowl-shaped cavity under which was placed stones of the same size as the ones forming the right-angular construction on the surface. Fig. 8. It does not seem to be pushing ones' luck too far to interpret this phenomenon as a hearth. Which function the hearth had had in its prehistoric context is not certain but it is obvious that it must have had a rather direct connection with the engravings. Close to the middle part of the panel was an concentration of burnt clay, 10 cm wide, 50 cm long and 15 cm deep indicating that further firing activities had taken place.

In the area surrounding the hearth and still inside the row of boulders, big fragments of fire-cracked stones occurred frequently. Their rather dispersed distribution might also be an indication that the hearth was used at several occasions and cleared out in between. On the other hand the whole area inside the big boulders seemed to be in



Fig.9. A close-up drawing of a situation during the excavation at panel number 1. To the lower left is the panel with cup-marks. The boulders are the ones fencing of the area in front of the panel from which the majority of finds derived. The size of the boulders are indicated by the two archaeologists busy excavating behind them. Drawing: Catarina Bertilsson, Riksantikvarieämbetet.

rather good order and although with several activities once taking place there the overlaps and disturbances seem to have been few. Instead the general interpretation is that the area and surface may have been left in rather good order the last time in use and than gradually and slowly decaying through the course of time.

The finds in the four meter squares consisted of total of more than 30 find numbers with more than 150 objects were registered and taken care of during the excavations. They majority consists of stone artefacts of different types and of course also waste stone material like fire-cracked stones from the heart and outside it. But there were also finds of ceramics in the form of pot shards of various types. There were no metal objects either from cupper, bronze or iron. And although metal objects generally are low-frequent in this area it may have some important implications for the dating of the site.

# The finds - a short over-view

Due to the restricted space available here it will not be possible to provide a detailed report of the excavation but the authors intention is still to provide an extended summary that will hopefully give a good enough picture of the early excavations at Torp in Skredsvik that will hopefully also serve as an "appetizer" for a future full report. Here will now follow a short overview of the most important finds and the finding circumstances;

*In the trench* starting at panel one: 1 piece of rough red brown ceramics, 1 piece of black smooth material ceramics.

In meter square 2 the finds consisted of 1 flint flake, 1 piece of ceramics, and a couple of quartz flakes.



Fig. 10. Two engraved ships of Early bronze Age type, period III, on panel number three. Photo: Ulf Bertilsson, Riksantikvarieämbetet.

In meter squares 3 and 4 were some pieces of dressed flints and quartz and also some small burnt stones that probably also had been worked on.

In meter square 5 were the most numerous finds namely; 1 flint scraper, a stone packing in three layers of burnt and flaked stones, 1 burnt flint flake with traces from wear, 2 quartz flakes, 3 pot shards of which 1 black polished eventual rim piece, 1 yellow brown quartz, 1 indeterminable, 1 quarts flake with concave retouch, 4 fragments of rock, 1 polished indeterminable artefact plus another eventual 2 such, 1 hammer stone, 1 indeterminable pot shard, 1 hammer stone, 3 flakes and 2 "strange stones".

In meter square 6 were the following finds; 1 flint flake with concave retouch, 1 worked stone and 1 eventual hammer stone, 1 hammer stone, reddish and small but fits good in hand, further ceramics of indeterminable type, some quartz splitter and 4 small polished stones.

*In meter square 7 were* 2 flint flakes, 3 quartz flakes and 10 pieces of quartz.

Altogether the finds are rather sparse and uniform but not that do not make them less interesting. The most obvious fact is that rock material of different kind were frequently used in the activities taking place in front of panel number 1; fragmentary tools, "semi tools" and waste materials. Since the stone tools at in general are worn and plus the fact that many are broken and/or fragmentized it is obvious that they have been used intensively. Many appear also to have been polished on one or several sides.

Normally stone tools like hammer stones are used in process of manufacturing and shaping other stone tools in flint or in some different rock raw material. This might also have been the case at Torp although, when so, there are very few signs or remains of the end products. So this indicates that one should look for an alternative explanation regarding the use of the hammer stones and polished stone fragments. And since the finding context includes the rock with panel number one with the massive representation of cup-marks and grooves, the obvi-



Fig. 11. Completely carved out, paired feets on panel number three. Photo: Ulf Bertilsson, Riksantikvarieämbetet.

ous explanation would be that the hammer stones and other stone objects were used in the process of making the petroglyphs – to hammer out the engravings and to polish them afterwards. This does still not explain why many of these objects are broken. Of course this might be the result of too intense use but it also looks like some of the objects could have been deliberately broken. If we were looking for a reason for this behaviour it would not be obvious but could of course have some thing to do with the rituals that were performed in the fenced of area in front of this panel.

## The dating – some reflections

Normally when dating rock art in Bohuslän, Bronze Age comes up as the first suggestion. This could of course also be the case at Torp. Some recent studies of the phenomenon seem to keep down the possible dates to the Late Bronze Age and the Montelian period V (Vogt 2006 with references). On the other hand there is also a reverse trend; the rather newly established chronology built on the typology of engraved ships (Kaul 1998) that are just in the process of being tested by detailed levelling observations (Ling 2006) that clearly demonstrates the fact that ships were engraved through the whole Bronze Age, starting at least in period I and probably even earlier in the Late Neolithic. If we try to apply this dating scheme to the ships at Torp the outcome would be that the ships on the vertical panel number 2 superimposed by paired foot-prints seems to belong to period III, the central ones, and to period VI or even period A of the Pre-Roman Iron Age, the smaller and single lined ones in the right part of the panel.

The ending of the stem on the central ship may at first glance look as it could be dated to period V since it split in a way that makes look almost like a winged chape turned upside down. However at closer examination it seems obvious that the stem was originally bent inwards and shorter and consequently the split lines are added later. This re-designing of the ship may very well have taken place in period V. The ships on panel number 3 look somewhat different being double-lined and having bent stems with animal heads according to Lings' dating scheme would place them in Period III, some time between 1300 and 1100 BC. This earlier dating of panel 3 is further strengthened by the presence of some circular designs. There are also foot-prints that may not be as well fitted as a datable image since them judging from other appearances in Bohuslän and elsewhere might be a longlived and thus multi-period design although with an inclination for appearing in an early rock art context.

On panel number three there are also cupmarks in combinations and patterns that looks more like the "normal" rock art context than the ones on panel number one that we will now turn the intention too.

The size and shape of the cup-marks and grooves and the extreme frequency to which they occur on panel number one makes them a case different from almost anything else in Bohuslän. To find a parallel we have to turn to the megalithic area in Västergötland where on roof-slabs of megalithic tombs and on rocks and boulders similar symbols have been engraved. The collected information from all these sites gives the impression that they have been in use for a long time and at repeated occasions. A long time that probably means that this tradition started already in the megalithic era and continued during the whole Bronze Age and into the Iron-Age. An excavation at Oppen in Tanum (Bengtsson 2004, Kristiansen.K.& Prescott. C. 2000 with refereces) has resulted in Pre-Roman Iron Age dating of a hearth in front of a rock with petroalyphs. Awaiting the results of the analysis of the charcoal samples from Torp that hopefully will be carried out within a not so distant future, it is easy see a parallel to Oppen that is further strengthened by the abundance of big flakes of fire-cracked stones. However, the type of engravings and their large number at the Torp make it likely that they were made earlier, more often and during long time. Taken as a whole than the site looks like something that would best be described as a aggregated complex starting in the Late Neolithic and ending in the Early Iron Age, perhaps as Late as the Roman Period since new information from recent excavations and analysis in Northern Bohuslän and Östfold in Norway seem to point to a revival of rock art or rather the use of it in that period.

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