RESCUE ARCHAEOLOGY

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Summary

Rescue archaeology is an accepted form of field archaeology in many countries today. Unlike scientific archaeology, rescue archaeology is normally initiated for reasons outside of archaeology itself. A developer may initiate a construction project that will affect an archaeological site. As part of the authorization process for the project, plans will be sent to various authorities. These authorities will forward information to a rescue

archaeologist in order to obtain advice. If possible, the site or the archaeological remains should be preserved. If this is not possible, the rescue archaeological process will be initiated, beginning with a survey of archives, maps, and sites and ending with varying excavation steps and documentation of the site and publication of the excavation results.

The legislation surrounding rescue archaeology and the funding systems of these excavations differs from country to country. Some nations consider prehistoric remains to be the property of the state, whereas others consider them to be private property, although formally protected by legislation. Rescue archaeology can be funded either by the state or by developers, according to the *polluter pays principle.* A national institution or a rescue archaeological unit undertakes excavations and surveys according to budgets and methods suggested by the authorities giving permission. The results are later presented in reports and as regional synthesis in scientific journals.

It is probable that rescue archaeologists will operate in international teams and in countries outside of their own within a few years. International standards for rescue archaeology therefore have to be developed. At the same time, the rescue archaeological units working internationally must be accredited to an acknowledged standard of quality, similar to the ISO 9000 used today.

1. Introduction

Rescue archaeology is the dominant form of field archaeology in much of Europe and America today. The ratio of rescue excavations to excavations undertaken as part of scientific projects varies, but rescue projects account for the larger part of the total annual budget spent on archaeology in many Western countries. Trained professionals educated at academic institutions undertake rescue excavations. Working in rescue archaeology has, however, not been considered as interesting as participating in excavations organized by academic departments. Relatively few academic institutions have specific programs for rescue archaeology, and basic training has often been given in state organizations or archaeological firms. Most archaeological data, however, are collected in this field of archaeology, and many of the technical and methodological inventions in archaeology are made during rescue excavations.

The reasons for initiating the rescue archaeological process are normally outside the realm of archaeology. A developer or a state entity will initiate a project that may affect prehistoric remains. As part of the project, plans and drawings are sent to various authorities for authorization. A rescue archaeologist will then be asked for advice. The aspects of the project considered will include: a) Will it affect any known sites, or will new sites appear during the working process of rescue archaeology? b) Is it possible to relocate the project in order to avoid prehistoric remains? c) If not, what actions are to be taken from an archaeological point of view?

Rescue archaeology can be considered an exception to standpoints generally taken in cultural heritage management (CHM). From the view of CHM, archaeological remains should be protected and destruction of prehistoric remains avoided. This may also be the standpoint of rescue archaeologists contracted for a specific project. In reality, however,

there are always construction projects that cannot be relocated and where rescue archaeology is the only way to collect information from the site that will be destroyed.

2. Definition of the Concept

The concept *rescue archaeology* includes all types of excavations that operate in a legal framework. The term is used widely throughout the world for archaeology operating in CHM. The concept of *rescue,* however, is not always relevant, since excavation in itself involves destruction. Another widely used term for the same process is *contract archaeology.* Rescue archaeology (or contract archaeology) involves six different entities:

1. The *archaeological contractor* or organization that undertakes the excavation. This entity may be a private firm or part of a state entity or county museum.

2. A *consultant,* working either as a subcontractor for a rescue archaeological unit or as an independent unit giving advice to contractors, developers, or permit-giving authorities.

3. The *developer* paying for the excavation. The developer is often a private company but may also be a state agency that finances or undertakes works affecting an archaeological site or a monument.

4. The *permit-giving authorities* that a) *authorize* archaeological excavation of the archaeological site, b) decide what *funds*, *questions*, and *methods* are appropriate for each individual project, and c) *permit* the developer to continue work after the archaeological site has been surveyed or excavated.

5. The *scientific community,* which may be interested in the results derived from rescue archaeology but often is uninterested in taking part in the rescue projects.

6. The *general public,* which often visits the rescue excavations and wants access to the results in an easily understandable form. The public may also be interested in the preservation of the prehistoric remains.

Rescue archaeology operates within a legal framework. This means that the archaeological entity undertaking the excavation is not free to choose the excavation object or the extension of investigation or the methods involved in the excavation. The decisions about these are instead based on CHM and different laws connected with it. Those aspects may lead to the conclusion that in order to preserve a site or monument excavation has to be avoided. A decision of this type will also affect the plans of a developer, which may have to make changes in an ongoing project.

Rescue archaeology may be funded by private or public means. Private funding often means that the developer (or polluter) pays the cost of the excavation, which is sometimes referred to as the polluter pays principle. According to this principle, only the party that causes damage has to bear the costs. Public funding means that the state or a state agency pays the costs of excavation. There are examples of both types of funding in Europe. In Sweden, the developer always funds rescue excavations according to the polluter pays principle, whereas in some German states it is the opposite. Here the state or province funds most of the rescue excavations. In a state-funded situation, a museum or a state-owned institution gets a specific budget for rescue excavations and is free to divide the budget between a number of rescue projects.

In Sweden, the archaeological site itself is the deciding factor. If a site is considered to be of great scientific value, the permit-giving authorities are willing to grant larger budgets for the excavation. In extreme cases, authorities may even stop the development project if the site is considered important enough. However, the site is not the only deciding factor; the *project* and *excavation plans* suggested for each individual excavation are also considered (**see *Section 8. The Working Process in Rescue Archaeology***). These plans include such factors as questions to be answered, excavation methods, analyses, and publication strategies. In Sweden, the developer has no freedom to choose between different excavation plans from various institutions in rescue archaeology. This decision can be made only by permit-giving authorities.

3. Prerequisites for Rescue Archaeology

For rescue or contract archaeology to work, a number of prerequisites have to be fulfilled. The most important is working legislation that protects cultural monuments and environments. The legislation must protect the monuments from looting and takes away any specific privileges of ownership over the monuments. A landowner cannot expect to treat a prehistoric monument as private property. A monument must be excavated only by a proper institution with authorization from a permit-giving authority. Another important factor is access to the area that is to be excavated. If a site is to be excavated, the archaeologists must have access to the land on which the site is located. This can be solved either by purchasing the ground on which it is situated or by a legal procedure that gives the archaeologists access to the area. In most cases, however, there are no conflicts of interest between landowners and rescue archaeology staff (although there may be between the owner and the expropriator), and legal actions are not normally needed.

A third important factor is a register of monuments, covering large areas and giving monuments legal status. It is difficult to protect a prehistoric monument if it is not registered and thereby given legal status. In Sweden, monuments are registered during a nationwide *archaeological survey*. As a result, they are included on maps and in a nationwide register of prehistoric monuments. Archaeological sites can also be encountered during the initial steps of a rescue archaeology project. This also leads to the inclusion of the site in registers and on maps.

A fourth important factor is that the roles between contract archaeologists, developers, and permit-giving authorities are clearly defined. The procedures and steps taken during the legal procedures surrounding a rescue excavation must be clear and transparent. A developer must not be able to choose the lowest bidder among institutions working in rescue archaeology. This selection should be done by the permit-giving authorities, which should take into account factors other than price alone. A contracted rescue archaeology unit cannot consider itself an authority but may only suggest what questions, methods, and budgets are appropriate for each project. The final decision lies with the permit-giving authorities. Last, but not least, respect for rescue archaeology and CHM among the general public is essential. We cannot expect to obtain funding for rescue archaeology if we are unable to inform the public of our results in an easily understandable way. Every rescue project should therefore have its own publication and

information strategy, making the results accessible both to the scientific community and to the public **(see** *Section 8.3. Publication Strategies***)**.

4. The Development of Rescue Archaeology

Rescue archaeology has been closely linked to the legal protection of the archaeological heritage and the formation of archaeological museums and institutions. Laws protecting prehistoric remains were introduced at different times in different countries. The first steps were made during the fifteenth century in Italy. In 1462, Pope Pius II issued a decree protecting old monuments and houses in the Vatican. In 1471, Sixtus IV prohibited the exportation of statues and all types of cultural heritage from the same area. Another early example was the 1666 Swedish law of antiquities. This law prohibited the excavation or destruction of prehistoric monuments and extended to all classes of society with the exception of the aristocracy, which was supposed to take care of its own monuments. In England, state involvement with field antiquities can be traced back to Henry VIII, when the king's office took care of outmoded royal strongholds and redundant ecclesiastical buildings. Different countries introduced early legislation protecting prehistoric remains at different times: England in 1882, the United States in 1906, and Argentina in 1913 **(see** *Section 7. The Legal Framework and the Administrative Framework of Rescue Archaeology***)**.

Modern legislation concerned with rescue archaeology is, however, of a rather recent origin and can be dated to the period after World War II. An example of this is German legislation drawn up between 1953 and 1993. Some of the legislation establishes the polluter pays principle, stating that the damage-causing party (the developer) should bear the cost involved in rescue archaeology, but other legislation claims that the costs are to be borne by the state. Around the same period, large rescue excavations were undertaken in post-war Europe, for example, the excavations in Roman Cologne around the Dome. In the 1960s, the rate of development throughout the world increased, often resulting in major highway projects. Development forced countries to create environmental legislation, such as the *National Environmental Policy Act of 1969* (NEPA) in the United States. This legislation was followed by the *Archaeological and Historic Preservation Act of 1974*, which provided funding for archaeological work on all federally funded projects in the United States. From the 1980s, a new excavation strategy was introduced in Europe, consisting of uncovering large areas of topsoil with the help of machines. The strategy was started in Holland but soon spread to other European countries and led to the discovery of whole Bronze and Iron Age villages that had been undetectable with older excavation techniques. From the 1990s, measurements made with total-stations and data processing carried out with databases were introduced to rescue archaeology. This new technology made the processing of data from large sites far more rapid. Measurements using global positioning systems (GPS) have since been introduced, and the older separate data processing systems have been replaced by integrated ones such as the intrasite information system (Intrasis), developed and used by the National Heritage Board. This system combines the properties of database, CAD, and geographic information systems (GIS). Excavation techniques in rescue archaeology, however, have not changed as much as measurement and data processing techniques. This is probably the area where most advances in rescue archaeology will be made in the twenty-first century.

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Biographical Sketches

Dr. Nils Johansson—Born in Ryda, Sweden, in 1957, Nils Johansson received a doctoral degree in archaeology from Göteborg University, Sweden, in 1996. He was a staff member and project leader at the National Heritage Board, Archaeological Excavations DEPARTMENT, Kungsbacka, Sweden, from 1993 to 2001, assistant director at the same office 2001/02, and director and head of office from 2002 onwards. Previously worked with the National Archaeological Survey in Sweden, and on rescue excavations undertaken by county museums. Participation in projects: Emergence and growth of centers—An example from the Santa Maria Valley, Northwestern Argentina. This was a cooperative project between Göteborg University and Universidad Nacional de Tucuman, Argentina. Dr. Johansson has also participated in the Nicaragua project (directed by the National Historic Museum in Sweden), where he lectured on Archaeological Heritage Management at Universidad Nacional de Nicaragua. Currently responsible for all rescue archaeology projects at the National Heritage Board in Kungsbacka, Sweden. Major publications: Johansson Nils (1995), Tre boplatser i Spekeröds dalen—arkeologi längs väg E6 i Bohuslän 1986–1989, *Arkeologiska Resultat: UV Väst rapport 1995 I*, Kungsbacka, Sweden. Johansson Nils (1996), *Burials and Society. A Study of Social Differentiation at the Site of El Pichao, Northwestern Argentina, and in Cemeteries dated to the Spanish Native Period,* GOTARC, Series B, Gothenburg Archaeological Theses No. 5, Göteborg University, Sweden. Johansson Nils and Cornell Per (1998), Was there a Santa Maria culture? Some considerations on a commonly used concept in Argentine archaeology, *Current Swedish Archaeology* **6**. Johansson Nils (1998), Boplatser och fossilt odlingslandskap vid Stenstorp i Slöinge socken, Boplatser och fossilt odlingslandskap—Arkeologi längs väg E6/ E20 i södra Halland, del III: *Arkeologiska Resultat: UV Väst Rapport 1998 21*. Johansson Nils (1999), Undersökningen i Övre Glumslöv—det förhistoriska skedet. *Gårdar i Övre Glumslöv—från stenålder till nyare tid* (red. Katalin Schmidt Sabo), UV Syd Rapport 1999 **102**, Lund, Sweden.

Dr. Lars G Johansson—Born in Mölndal, Sweden, in 1952. A-level at the local high school 1971. In 1979 married Friederike, born Paarmann, German citizen; Anna born 1982 and Emelie born 1984. Studied archaeology, etnography, history, classical archaeology 1971–1976. Ph.D. student in archaeology 1976–1979. Enjoyed a Fellowship Grant from the German Academy of Scientific Exchange (Deutsche Akademische Austauschdienst), Bonn, from October 1976 to November 1979. M.A. (1976) in archaeology, classical archaeology, ethnography and history; Ph.D. (1979) in archaeology. As a student worked for the "Landesmuseum für Vor- und Frühgeschichte," Schleswig, Germany (Cultural Heritage Administration of Schleswig-Holstein), 1972–1977. Lecturer at the University of Göteborg, 1978. Staff member of the Landesmuseum für Vor- und Frühgeschichte, Schleswig, Germany, 1979–1983. Staff member of the National Heritage Board of Sweden, Department of Archaeology, West Swedish branch, Gothenburg, 1983–1988. Assistant Director of the same branch 1988–1994. Director and Head of Service 1994–1999. Dr. Johansson was controller of the National Heritage Board of Sweden, Stockholm, from 1999 to 2002 and director of the Vänermuseum, Lidköping, Sweden, from 2002 onwards.