



Themata 5 E-learning Archaeology, the Heritage Handbook





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E-learning Archaeology

the Heritage Handbook

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Management cycle and information system in archaeological heritage sector *by Andris Šne*

→ **LU** Stages in heritage management *by Andris Šne*

sco Introduction

The protection of heritage sites nowadays does not mean only a limitation of human activity but it is more connected with the necessity to recognise values and improve the quality of human life. It is a part of sustainable development that attempts to achieve the integration of economic and social development and principles of environment and heritage protection. But the requirements of current economic development are rapidly wiping out many archaeological sites. Today, most ancient sites and monuments are given attention only when they are found to be in the way of planned land development. But when there is no threat, there is usually silence.

There are a series of conflicting interests that must be reconciled during the construction works. On the one hand, the past monuments should not paralyse modern investment. But at the same time, no single piece of heritage should be destroyed. The solution would depend on various factors. Of fundamental importance are the legal background, the management of financial resources, the cooperation with construction authorities and the background of archaeological praxis in any particular country.

sco Stages in the heritage management cycle

The management of heritage will relate to the formation of particular attitudes and policies and their implementation in various fields. In the last decade it became increasingly popular to view the methodology of the management of different fields in the terms of the cyclical process, for example, environmental, educational, information, project etc. management cycles that all can be described as series of actions: plan-do-check (review)-act (revise)-report. This cyclical understanding of management might be applied also to archaeological heritage sector.



The management cycle might be named among the most recent innovations in the praxis of heritage management, relating it to a cyclical process, based on documentation and registration, followed by archiving, evaluation and protection/conservation or excavation, interpretation/synthesis and communication (presentation and maintenance), which provide necessary feedback (see table).

> **Animation**

Throughout the cycle, all the stages are interrelated with the legislative issues and public concerns discussed in earlier and later modules. But also there will be differences among countries, especially if a state is listing the protected sites and thus closely connected selection criteria for the protection and heritage legislation; whilst, also there will, everywhere, have to follow a line from early planning application to the final report of archaeological research for each site. In Latvia, where protection of archaeological sites is based on the list of state protected monuments, the whole cycle will take place only in the case of newly discovered sites.

In this module, we are going to talk more about the management of particular sites but not so much about the landscape (landscape perspectives have already been widely discussed in the other modules). The experiences, approaches and praxis from the heritage management field in Latvia are used as case studies in the module while the wider theoretical background of the management cycle is more based on studies from the Netherlands, Sweden and other West European countries.

One small remark deserves attention, namely the terminological issues concerning heritage management. There are wide varieties of terms that coincide or partly overlap with 'heritage management' like cultural resource management (CRM; that is more used in the USA) or conservation archaeology, also public archaeology. But in this module the term 'archaeological heritage management' will be used.

→ **LU Inventarisation of archaeological heritage**
by Andris Šne

**sco In pursuit of archaeological sites:
registration, documentation and archiving**

> **Animation**

Every kind of archaeological research should start with an evaluation of already known materials of any kind, previous survey and excavation reports (desk top assessment). This allows identification of the expected character, extent,

quality and values of the known or potential archaeological resources in their appropriate scale and context (according to the task of the archaeological research). The desk studies are followed by field walking, including also borehole and test pitting or even machine trial-trenching that will provide more detailed insight into the site or research area. This, further, would also form basis for the argumentation for the necessity of carrying out the excavations.

Before entering the field it is necessary to collect all the available documentary and visual information about the study area. This may include the earlier reports of the surveys and stray finds, aerial and ground photos, evidence of oral tradition/folklore, historical and contemporary maps, lists of buildings and owners etc.

A field survey is the first step to making a study of a selected area (also in the research projects, not only due to threats to some site or area). In the survey, the investigation involves everything from natural vegetation and soils through settlement patterns to individual artifacts as an indication of human behavior. It is possible to achieve views of the distribution and general characteristic of the sites, and these may vary from different chronological periods. Usually, a large part of any available evidence will be connected with medieval and modern inhabitation as these present more recent and intense ages of human activities in the region. The survey results could reflect long-term developments in agriculture, settlement pattern, a society and economics, which should be studied later. The most commonly used and simplest method of conducting a survey is fieldwalking. The main aim here is to collect artifacts (stray finds) from the ground surface (the easiest way is to walk over the ploughed fields) as well as to follow the changes of the soil or ground relief to detect the features of cultural layers, fortifications or burials. The area selected for the detailed study might be defined by a grid that allows for a systematic and evenly made survey. The finds should be recorded and later put on the overall map to show the distribution of the results. Potsherds, flint flakes, charcoal, human bones and metal artefacts or their pieces will provide an insight into the settlement, cemetery, production site, etc. But not all areas will be accessible for such a systematic walk, thus there is need for flexibility in how to approach the area.

It should be taken into consideration also that the absence of stray finds does not mean that no occupation existed in the study area. Even in small areas, for example, due to the land cultivation or geological factors it may happen that no finds may appear on the surface. Other criticisms that field archaeologist should bear in mind include statements to



the effect that there is no positive relation between the surface and sub-surface deposits; that the complexity of archaeological structure is not well enough represented by the surface data; or that the surface finds lack analytical potential.

Fieldwalking may be accompanied by several simple and short-term means in order to get closer to the character of soil and ground in a study area. Thus, it is easy to make shovel-testing and shouldow excavations to observe the character of soil or deposits below the surface. In such a way it is possible to estimate the territory of settlement sites that otherwise had not left visible marks on the surface. Similar results may be also achieved with the help of geological small sounding. Among the field methods widely used since the 1960s in Scandinavia and Germany might be the spot test method. It allows an easy identification of cultural layer by examining the concentration of phosphates in the different layers of ground.

The equipment needed for the field survey might remain simple as one hundred years ago. It is reasonable to have GPS, electronic distance measurement and other modern devices but still it is the experienced human eye that is the most sensitive instrument here.

The observation stage is followed by the documentation that will lead to the interpretation. Every spot of some archaeological interest must be described, fixed on the camera and on the maps. Extensive complexes of site/s will be recognizable sometimes only after careful mapping of the archaeological features.

Results of field surveys like final reports, finds, samples etc. should be stored to be used for further research and/or management of the site or area. They become essentially important in both rescue archaeology and decision making about the particular site or area. The opportunity to consult these records at an early stage of making land use prospects or territorial developments may lead to necessary corrections in the developmental projects or serve the argumentation from heritage institutions. But, in any case, as large as possible the amount of prior information may be, it can not prevent surprises and unexpected discoveries during the excavations.

sco Risk in heritage preservation

It is both human activities and natural processes that affect the present situation and possible preservation of the particular archaeological site. The circumstances that cause different damages to archaeological sites are very varied.

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Human historical experience knows lots of cases when

heritage was destroyed during wars and conflicts. In several regions the threats will include earthquakes or fires, while the sites located along the coasts and banks are affected by the floods, sea and river erosion and rising water level as well as destabilization of dunes by water impact. The latter case led to the discovery of Staldzene Bronze Age Hoard on the western Latvian seashore of the Baltic Sea, in Ventspils during the autumn storms of 2001. The hoard was found in a slump of sand from a cliff, and due to the collaborative efforts of the local museum, local community and heritage specialists, almost 200 pieces of bronze artefacts (approximately 5-6 kg of bronze) were uncovered.

Human activities like developments (new house building, infrastructure, pipelines etc.), agriculture, mining, dam projects that have altered water levels on the rivers, tourism etc. will all have their impact on the conditions of archaeological sites. The archaeological interest usually is satisfied here by the large number of rescue excavations carried out within the framework of building a highway etc. reconstruction and building projects. But at the same time we should recognize that even in a small country it is impossible to monitor every individual building site and consequently potentially interesting finds or sites are passed by and disappear undiscovered.

Sand and gravel pits present a different story. Lot of burials and also settlements and hillforts are situated in sand and gravel areas and so they are under the threat of possible destruction. Another important threat is also criminal/illicit archaeological digs due to which archaeological sites are looted and destroyed. Consequently, as recently as in the autumn of 2003, the Babrauščina hillfort dating back to the Bronze and Iron Ages in the eastern part of Latvia was almost completely destroyed. The looters chose the site on the basis of local folklore about the hidden treasures in the hill and they rented a bulldozer and moved aside the southern and central parts of the hillfort thus causing the largest damages ever done to the Latvian hillforts. But in close cooperation with the police, local people and heritage institutions, the looters were very soon identified and prosecuted.

In general, archaeological sites are endangered for a number of reasons, and they occur most often in different combinations: climatic impact, wet and dry depositions, macro- and microbiological growth, and human impact. Archaeological sites might also be suffering from tourism. Tourist facilities and holiday villages near or at archaeological sites may become a source of pressure for the site. The risks will differ also according to the character of the archaeological site, for example, underwater archaeological

sites (actually the underwater heritage is separate issue) are under pressure from the development of harbours and sand digging. Forest land is very friendly to the archaeological sites but it endangers them heavily when forest industry arrives at site and wood is cut using heavy techniques.

Due to the numerous and various risks to the heritage maintenance and preservation the preservation of every site looks impossible; it happens that sites are gone even in the most heritage friendly countries. So for example, according to ICOMOS information, the average loss of archaeological sites in Norway is estimated to about 0,7-0,5% each year (there mostly resulting from agricultural work; ICOMOS 2003, 153).

→ LU Stakeholders in the archaeological heritage management by Andris Šne

sco The present issues in heritage evaluation

National narratives, economic interests and political power are the main factors that will be considered in the management of archaeological heritage. But they are not the only ones as, for example, there are sacral associations of archaeological sites (and landscapes alike), and it does not matter whether these assumptions are rooted in past or present, they may affect the argumentation used in assessing the significance of the site and the position of stakeholders. In central Latvia, the site Pokai i in woodlands within a territory of several hectares contain huge stones and hundreds of stone heaps. The meaning of these stone constructions is still unknown and also archaeological research (carried out in 1996 in and around three stone heaps) did not help to clarify the origins and function of site. The site is well maintained and became a tourist destination, and visitors with the help of guided tours receive an explanation of the site in an esoteric discourse. But due to the unclear archaeological and historical character of the site, it is not included in the list of state protected cultural monuments.

It is true that nowadays there is not so many heritage problems left that could not be solved on a technical basis. But decisions about the heritage issues are affected by both formal relations (that is regulated by legislation) and informal relations and by the political attitude. Otherwise, it may be stated that there is a view from above, that speaks on behalf of the whole society and which is based on experts' statements, national and international legislation, and the view from below, involving the positions of owners, local communities and developers.

sco Principles of heritage management

The Charter for the Protection and Management of the Archaeological Heritage adopted by ICOMOS established in 1990 states that:

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'the protection of the archaeological heritage must be based upon effective collaboration among professionals from many disciplines. It also requires the cooperation of government authorities, academic researchers, private enterprise and the general public. .. [Principles of heritage management] include the responsibilities of public authorities and legislators, principles relating to the professional performance of the process of inventORIZATION, survey, excavation, documentation, research, maintenance, conservation, preservation, reconstruction, information, presentation, public access and use of the heritage...'

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Stakeholders (or persons/persons' groups with an interest in, or concern for, a particular issue that has appeared on the agenda or is carried out by an organization or individual) in the archaeological heritage sector will include both regulators and operators. There might be distinguished several groups of interests concerned with heritage:

- > owners;
- > local/regional municipalities;
- > local community;
- > the representatives of tourism industry and locally based business;
- > state institutions of heritage protection;
- > archaeologists, historians and other representatives of scientific circles;
- > non-governmental organizations;
- > and tourists and visitors of the site.

These groups of interests will hold different views on how to manage the particular site or landscape. Some groups will base their views on political values (politicians), some will use scientific value (experts and heritage institutions) while the others will talk about the economic costs and benefits.

sco Site management as a compromise among stakeholders

Local municipalities due to their shortage of resources and limited understanding of heritage values and benefits often leave the heritage issues neglected. But at the same time there are future land-use plans that are the responsibility and duty of the local municipality and that will have the biggest single impact on the archaeological heritage. Also, the European

Convention on the Protection of the Archaeological Heritage (Valletta Convention, 1992) emphasis the role of planning in the heritage management as well as the importance of general public in presenting and managing archaeological heritage. The site management should be based on the integration of natural and cultural interests; and actually it should include the landscape where the particular site is located. And then the territorial planning enters the game, which is the primary document for the development of some economic business projects but which at the same time is very valuable instrument for providing information about heritage and nature sites and protection of the sites. If it is created and accessible, a national-scale archaeological record may play a similar role as it would provide information to all interested parties prior to the development projects being established. As it can be seen, then, current safeguarding of sites goes through the planning process. Practically, the role of planning is valuable in relation to site identification on maps for future development needs.

Despite their concerns, the local inhabitants in Latvia will not often involve themselves in active discussions about the development of a site. This relates to quite simple level of life, the social and demographic processes in the countryside (aging of rural population, migration of the educated youth to towns and cities, limited employment possibilities on the countryside etc.) as well as a low awareness of and skepticism about any possibilities to influence the decision making even at the local level. Probably this situation would change alongside a general increase of prosperity that would allow people to devote time not only to their economic survival but also to an improvement of their environment. The part of the public that is used to being (or like to be) actively involved in decision making is represented, nevertheless, by a wide variety of local societies, for example, folklore societies, friends of nature and heritage, sports organizations, groups of experimental archaeologists (but not always academic ones) etc.

The essential issue is comprised of the acceptable changes that could cause compromise among the interests of different stakeholders. But it should be acknowledged by all parts that heritage sites have to function in a living society. It is not enough just to declare – hands off from heritage! (that is characteristic to an understanding of heritage protection as strict preservation) – and at the same time just to hope that a site will be integrated per se in contemporary society. Under the economic pressure prevalent since the 1980s, the heritage management in several studies is viewed like products that function in a market, usually in the tourism business. Both approaches are integrated in an understanding of heritage protection as integral part of a sustainable development. The

crucial issue comprises the resources that have to be invested in the heritage field (and it always might be argued that instead of heritage they should be used for social and economic purposes). It would be reasonable to expect a management plan for heritage sites that should include both plans for conservation means and measures, maintenance and (if necessary) restoration plans and also a visitor strategy and business plans. This document, the management plans, should be agreed upon among the different stakeholders.

sco What is the institution of heritage management?

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In 1985 ICOMOS decided to form the International Committee on Archaeological Heritage Management (ICAHM) that consists of archaeological experts from five countries. Among the first objectives of this institution was the survey of existing regulations and conventions relevant to archaeological heritage management.

The result of this survey was the Charter for the Protection and Management of the Archaeological Heritage adopted by ICOMOS in 1990 in Lausanne, Switzerland.

In the Directory of Archaeological Heritage Management Organizations (Directory 1995) an archaeological heritage management institution was regarded as

- > an institution which delivers archaeological research permits and controls the professionalism and ethical standards of the archaeological work,
- > an organization responsible for the updating of their inventory of archaeological discoveries,
- > an organization responsible for managing archaeological sites (one or more) dedicated to research and exhibition.

Thus archaeological research issues should be among the core concerns of the institution of archaeological heritage. As a rule, national heritage institutions that are involved in the protection of archaeological heritage aim to preserve as much as possible of the archaeological heritage by limiting unnecessary excavations. The main backbone of the idea is to escape any threats to archaeological sites and monuments through the use of appropriate and competent planning, which respects archaeological sites. Archaeological excavation often goes hand in hand with the destruction of the site and thus in a wider sense to the destruction of the environment/landscape. Also, according to the Valletta convention excavations chiefly should be carried out where the site is actually in danger of being destroyed.

There might be differed several ways, however of preserving the archaeological site: preservation in situ (actually, conservation) and preservation by record (archaeological excavation in

advance of development by the developer). The first option, preservation in situ, has also some modified opportunities like removal of the monuments (the transfer and the re-erection of monuments in new locations) and reburial of monuments (preservation of ancient monuments in situ by re-covering of monuments with a conservating and long-lasting substance). Concerning archaeological heritage, it is hard to imagine the removal of site, for example, a hillfort, but it may be discussed when the movable property (like cult stone) is brought under discussion.

sco Evaluation of the archaeological site

When an archaeological site or finds are discovered, a number of factors determine their potential value and their future means of exploitation. The first step is to define what should be protected, that is, what is included in the list of culture monuments. It is followed by understanding about the means of protection, what to protect in listed sites and areas and what kind of policy could be realised. And the final step is the realisation of a heritage protection policy. It is important to note that in Latvia it is not necessary to have the consent of the owner of the site under question to decide about its inclusion in the list of state protected monuments.

The emphasis on the preservation of a site raises the question of what is being worthwhile preserving – the physical remains, the reconstruction or the sense of place? In some countries, there is the equation protection = preservation while no protection = excavation. But anyway, the evaluation of a site includes different aspects, as any site includes all or part of the following values:

- > scientific values;
- > cultural values (that are constituted from value of identity, artistic or technological value and representativity);
- > social and economic values (they include economic value, functional value, educational value, social value and political value related to the visibility of the site and image of the site in public).

It would be naïve to believe that it is always possible to avoid disturbance of the archaeologically important sites in the course of business projects (house and roads building etc.). The economic, social, ecological and other factors play an important role in the choice of business's location, and an archaeological site or archaeological risk can be only one of the factors considered but not the prevailing one. The main point is that an archaeological interest should be taken into consideration and that the expected archaeological values should be respected. In Latvia, legislation requires full archaeological investigation and documentation in a case where the destruction of heritage is authorized. But at the same time it

may happen that the discoveries have to be evaluated in a hurry, without or before detailed research is done, and also practical difficulties of preserving excavated remains may appear.

Archaeological rescue work

Similarly to heritage institutions also archaeologists aim to prevent archaeological information from being lost. Usually rescue excavations (especially in the 1980s) were considered not only as a part of preventive care but even as the aim of preservation. But nowadays rescue excavation forms the ultimate step in heritage management. The modern idea is to foresee and avoid destruction rather than undertake excavation, be it rescue or salvage, of archaeological sites.

Rescue research still occupies a major part of archaeological institutions. The development of road and house building offers wonderful possibilities for archaeology. It allows making wide scale surveys and collecting new material, including by means of excavations. In such a way, economic development has triggered the development of landscape archaeology. As Roger Thomas (1991) has stated in relation to the accumulation of archaeological data through extensive rescue work, 'we are ... the victims of our own success.'

sco The organisation of archaeological research

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In some countries there are special institutions that are authorised to carry out archaeological research. The heritage institutions hold the rights to issue permission and to lead excavations on some site; but, nevertheless, also the acceptance of the landowner is a necessary precondition for the permission and research. Nowadays, there is a tendency towards the licensing of archaeologists, which will not leave room for non-qualified archaeologists or amateur archaeologists. But it is professional organisations that establish the criteria for archaeological work and its assessment.

Current academic archaeology should take into consideration also the social needs of people and the changing social and mental environment. We have to move from seeing an archaeological site as an object (I am digging here, this is my site) to seeing it as a point of mediation between the past and present and a point where different views are met. Academic archaeologists should include in their agenda the question how to explain their aims so that they are accepted by the developers who, as almost a rule, represent opposing interests? The expenses, character and results of archaeological research (both field survey and excavations) will clearly depend on the terms used in

project management QQT – quantity, quality and time. Mainly of legislative character but still often discussed is the question: who should finance the archaeological research? The obligation to pay for the archaeological surveys and excavations might be placed upon companies or institutions in the process of obtaining planning permission to build or work in any other way on archaeologically sensitive land. But still the question of funding for rescuing archaeological sites is very important. There may appear a situation that available funding is limited while the threats to sites are increasing. So, for example, what should be done if funding allows to do research only of one site, but within the complex of several sites one is going to be completely destroyed by building works, some are heavily damaged by still continuous tillage but the others are well preserved in pastures? Thus, there is the possibility:

- > to make total excavations of a site threatened with complete destruction to save a record of its information;
- > to carry out excavations of the well-preserved site because it is in better condition and might provide more information (also, there will be no hurry in excavation works as in previous case);
- > and to carry out excavations in selected parts of several sites including the one threatened with destruction to get information about the whole complex.

Each choice will have favorable arguments and the final solution will depend as much on the interests of archaeologists as on the owner or developer of the site.

- > sco Exercise

→ LU Archaeological excavations by Andriš Šne

sco Archaeological excavation

After the decision has been made to destroy a site for roads, dams, or urban development (well, also for the scientific research) the archaeologists are appeased by being allowed to study what will be lost, mostly, even partly. In fact, however, excavating is often wrongfully considered to be identical to archaeological research in general.

Although stimulating and enjoyable, the excavations are expensive, time consuming and stressful activity. The leader of the archaeological team often has to deal with lots of questions like the facilities and equipment, safety means in the field, finds and structures uncovered during the excavations and their documentation/preservation, relationships with

the local community and the media as well as report on and (hopefully) publication of the excavation results.

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There are major differences in the way archaeologists excavate in different countries. Of the highest importance there is the purpose of the excavations but also the excavation strategy will depend too on the character of the site. So, circular burial mounds are excavated in quadrants and only in the final stage of excavations are the vertical baulks separating quadrants removed. Keyhole excavation involves research in small and/or narrow trenches to establish the dimensions of a larger site (a minimalism of this method is shovel-testing used in field surveys). So, for example, this is one way to locate fortification and inhabitation areas of a hillfort or settlement. Of course, it is important to have analogies of similar but widely excavated sites to reach some conclusions.

An opposite of keyhole excavation is open-area excavations. This methodology was developed as long as a century ago in Scandinavia, Germany and the Netherlands where archaeological sites were placed on flat areas. And still essential is the paradigm stated by Mortimer Wheeler that good excavations should satisfy the demands of the vertical and horizontal aspects of a site. Vertical sections illustrate the entire history of a site as well as present evidence about the relationships among the horizontal layers. Therefore also in open air excavations the research area will be separated by the vertical sections to follow stratigraphy of the horizontal layers. Stratigraphic analyses will be based on the principle of superposition that layers of soil or any other material are deposited in the chronological order, with the oldest at the bottom. In the early 1970s Edward Harris in Britain developed the Harris Matrix that allows for a systematic summarising sequence of the units of stratification.

But any kind of excavation aims to record as much information as possible, due to the fact that it leads to the destruction of the site or its parts. There is also the ethical issue of what and how the site is recorded for it is the excavating archaeologist who in situ decides what is of some importance and interest or not. The documentation of the archaeological excavations is what remains afterwards and, as such, it should contain detailed descriptions of the excavated areas and findings, drawings and photos of structures, layers and sections, tables and pictures of artefacts, bones, samples and other evidence, all accompanied by the required measurements, coordinates etc.

sco Urban archaeology

Alongside documenting their findings, archaeologist should take care also of the preservation, i.e., conservation of the finds in situ, because every object removed from the ground is immediately placed at risk. Therefore, to preserve artefacts, the main task in the field is to maintain the conditions as closely as possible to the ground situation. The same applies also to the remains of building structures uncovered during excavations if they are made either from wood or stone. Wind, rain, and air pollution will all affect the conditions of the structures after exposing them to the modern environment. This is a situation particularly characteristic to excavations in urban areas, where usually they are later on destroyed in the course of construction works.

In the urban areas of Latvia, there has become a strong and accepted tradition to split up archaeological research into excavations and 'watching briefs' when construction works are observed archaeologically, so that anything which is unearthened can be rapidly investigated. The first is done before the building or other activities taking place on previously little touched ground. The watching brief is the most popular kind of research in urban environments, especially in Old Riga, where it was undertaken during reconstruction works, building and repair of communication lines lying under the surface, new building erected on the basements of previously existed houses etc. The appropriate kind of archaeological procedure in terms of an endangered site is specified in the approval process of any construction project by the heritage institution (in Latvia this is the State Inspection for Heritage Protection). It is necessary to coordinate all the activities of an archaeologist excavating some historical part of urban area and an architect who attempts to reconstruct some building on the same site. We have the bad example of Cesis medieval castle, where the archaeological research of the castle has seriously endangered its general condition and preservation, as a case in point. Since the 1970s, the main attention of conservators was focused on the preservation of archaeologically uncovered remains in the castle and thus of leaving aside the existing parts of buildings and fortifications.

On the basis of the research the excavation report is prepared but it is not a thorough publication of the research results and detailed interpretation of obtained material; it functions rather as the primary source for the later research. Ian Hodder (1999) was very right when he argued that objectivity during excavations is an illusion; the interpretations of finds and the site start 'at the trowel's edge' and it is the leader of the excavations who, considering various opinions, will develop one or some of them. So anyway, there is a great responsibility on the excavator to make accurate records, the

precision and efficiency of which may be increased with the help of modern equipment and digital technologies.

Thus any strategy of research should be guided by the principle of observation, recording and stratigraphic and contextual analysis. In order to make field documentation easier and faster (which is very important in rescue excavations), there might be used standardized forms (already pre-printed when entering the field) for burials, structures, contexts etc. The report that the leader of the excavations produces after the end of the field work should include an account of the excavated features and structures (building remains, burials etc.), and detailed descriptive catalogues of finds and samples with drawings, plans and photos.

sco Presentation and interpretation of the site: issue of reconstruction

Archaeological sites are formed through the time not only by a range of depositional and postdepositional processes but also by different meanings ascribed to them. Furthermore, this is additionally strengthened by the images of the past that are promoted through their presentation to the public. Though not as often as in case of architectural heritage, archaeology has used restoration and reconstruction of different sites as a means of such presentations. One interesting way of presenting image of a medieval, for example, is the site of Dinaburga castle (Dünaburg) destroyed in early 18th century and preserved in the form of ruins until the present day (only fragments of wall basements are nowadays visible). Archaeological excavations were carried out (1982-1987, 2000, 2007) and on the basis of the information obtained the model of the castle was worked out and put on the top of the hill on the bank of the Daugava River.

Reconstruction of the archaeological site may serve one or both functions – site interpretation and experimental research. Before the practical works are started it is necessary to decide what kind of authenticity we are going to attain. Nowadays, we may see that every monument contain several layers (or plasters) of the past. And it needs to be decided which chronological period/s to follow when the reconstruction of some monument is debated. This mostly concerns architectural heritage, but partly it touches upon Medieval (and thus archaeological) structures as well. So, for example, the outlook of Ventspils castle (built in the mid 14th century) was reconstructed on the basis of its 19th century situation while its inner structure followed to a large extent the Medieval image (but with a glass roof over the inner yard). But the prehistoric Platere hillfort (Ogre district) is the only hillfort where artificial castle ruins were built around 1860, and they consist of a tower and semicircular wall.

The scope of conservation and reconstruction will differ in archeological heritage as compared with architectural sites. Conservation advocates minimal intervention, using traditional skills as well as experimentally advanced techniques. It does not aim at renewal of form or material. The site may be conserved simply by building an enclosure or shelter. The separation of conservation effort from interpretative effort is an important principle, even in such simple matters as making sure that when conservation works are being carried out they are explained and incorporated into the presentation of the site. Reconstruction will include also new installations or even replicas of lost structures. This is legitimate for the greater visual legibility and structural integration of the site or its parts.

sco Reconstructed archaeological sites

In 1999, archaeological excavations were carried out in one of the few Late Bronze Age ship settings in Latvia aiming at their reconstruction. The Bilavas stone setting (Talsi District) was chosen for reconstruction due to several reasons:

- > it was constructed from larger stones that makes it visually more effective and impressive;
- > the location of the ship-setting, close to the road, makes for easy access;
- > there had been two settings so one of them could be destroyed by excavations.

These excavations which included all the setting and their surroundings provided detailed information about the construction of the stone structure. Twelve stones were still left in their original location while eight were moved and in the course of reconstruction were put in their original position. Altogether, 17 stones were missing from the setting, and these (as much as possible similar to the original size and form) were collected from the neighboring fields. These were placed in empty spots and supported in the desired position by smaller stones. The inner section of the ship was covered with 10-20 cm diameter stones from former cobbling, collected from the spoil heap. So, eventually, the ship setting developed an outlook and form close to the original.

Esthetical value can not be put as a priority, as this may lead to the formation of Disneylands instead of archaeological sites. Not all of the objects that are the most attractive to tourists include authentic structures and elements or they may include heavily transformed authentic elements. An example of the latter phenomenon is the Turaida Medieval castle, where long-lasting archaeological studies have been carried out (since 1976) in addition to rebuilding works of castle's structures. Unfortunately, the final result only weakly reflects the Medieval fortification from the Age of Crusades.

Experimental research in the course of reconstruction was undertaken on the 9th century Araiši lake dwelling that nowadays is the main element of the only archaeological park in Latvia (commonly called The Araiši Lake Fortress, Cesis District). The reconstruction is based on the remains of a well preserved complex of timber buildings uncovered during archaeological excavations (1965-1969, 1970-1975), and using collected data, ethnographic parallels and replicas of ancient tools, today there are 14 reconstructed buildings. It is stated that in the course of the experimental archaeology the rebuilding had reached around 80% of its original substance (in construction and outlook but not raw materials).

> sco Exercise

→ LU Maintenance of archaeological monuments by Andris Šne

sco Maintenance of archaeological monuments

The number of archaeological sites and protected monuments increases every year through field surveys and the discovery of previously unknown sites in connection with construction works. However, most sites remain completely unknown to the general public and even to local residents. An uncultivated thicket of bushes in the middle of a field, hill or stone cairn hidden in the vegetation, will be passed unnoticed.

Heritage institutions monitor the impact of land-use planning on antiquities, and they issue official rulings and statements concerning protection and conservation to land-owners, municipalities, planning bodies and officials. But actually it is the responsibility of the owner of the archaeological site to maintain it. Maintenance works always require the consent of the land owner, and heritage institutions act as advisors and experts. It is impossible to believe that all archaeological sites and monuments will be managed and cleared. Thus, the sites that are managed are those that have an owner who is interested in the monument or that are of the highest scientific and social (including economic) value.

In order to increase the interest of the owners of the archaeological sites located on their properties, the national legislation may offer tax reductions. So, for example, the owner of an archaeological site will not have to pay taxes for that part of their land that is protected as archaeological monument. They may also receive some financial aid from the state institutions if they are proposing means of maintaining and studying important monuments. Undoubtedly, such a situation will differ among countries and their national legislation.

The maintenance of an archaeological site consists of taking care of its archaeological features and the surrounding landscape. The ancient structures of hillforts, settlements, cemeteries and other archaeological sites are seldom repaired or reconstructed in connection to the maintenance work. Most archaeological sites are not visible above the surface but still cairns, barrows, hillforts, Medieval ruins and cult hills are among the well known and visible sites. Each site demands an individual maintenance plan and regulations that guide the practical activities on and around them.

sco Practical means of archaeological site maintenance

Archaeological sites are covered by grass, forest and bush vegetation in the countryside. The maintenance of an archaeological site is a very long process that lasts for years. But anyway the first stage is basic clearance which often involves a heavy-handed thinning out of the vegetation. All vegetation that prevents visibility and harms the monuments, as well as possible garbage is to be removed from the site and its immediate surroundings. On the sites with visible structures such as wall, moat, stone circle etc. it is not necessary to uncover these structures in order to make them explicitly visible. There are, indeed, several well cleared hillforts in Latvia that may serve as study examples – like Talsi, Tervete, and Daugmale hillforts.

After attainment of the proposed appearance of the site is reached, only light grooming is necessary. This requires less investment than the initial clearance. Manual labour or grazing animals might be employed to maintain the site (depending on the character of the particular site). It is recommended to use sheep in the caretaking of an archaeological site.

The care of sites may be linked with the issue of employment in respective municipality. As the care of archaeological sites requires not extensive but regular maintaining activities, then a municipality may solve the issue of its upkeep by directing its unemployed to take care of the sites (cleaning etc.). In such a way the aims of heritage preservation will happily overlap with the aims of employment policy as well as tourism development.

Heritage sites should tell their story providing individual historical and anthropological interpretation of the site; it is not enough to state dating, typology etc. information. But at the same time, there is a danger of transforming a heritage site into a commodity and making it a product of consumerism. A heritage site should, rather, be regarded as a structur-

ally important element in the environment embedded in the relations between humans and nature.

> sco Exercise

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