EAC Occasional Paper No. 10

Europae Archaeologiae Consilium

Setting the Agenda: Giving New Meaning to the European Archaeological Heritage

Edited by Peter A.C. Schut, Djurra Scharff and Leonard C. de Wit

Cultural Heritage Agency
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Proceedings of the International Conference
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Cover image:
Egon Schrama's sculpture 'Visserijoorlog' (Fishery war) marks the location of a 16th-century shipwreck in Almere, the Netherlands. The authorities decided to preserve the shipwreck in the ground using a special technique called *inkuilen*, which involved covering the wreck with plastic and a layer of earth to maintain a high water level. The province of Flevoland has initiated a series of markers of this kind to give new meaning to the archaeological heritage.
Photo: © R.J. Stöver, erfgoedfoto.nl, Amersfoort

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In memoriam Willem Willems

On December 13th 2014, after a short illness, Willem Willems passed away. Willem was one of the primary instigators of the Europae Archaeologiae Consilium (EAC), playing a key role in its formation, and was its founding Secretary.

Willem was one of the giants of archaeology in the Netherlands, across Europe, and indeed… around the world. He was one of the small team convened under the auspices of the Council of Europe responsible for the drafting of the treaty for the protection of archaeology (Valletta Convention), and in this role made an indelible contribution to the evolution of European archaeology. Besides being an excellent scientist and teacher, Willem was one of the key architects of the modern discipline of archaeological heritage management. He occupied a central, indeed pivotal, position in European archaeology and worked enthusiastically and tirelessly to bring together colleagues from different traditions and bind them to a common purpose. Willem was a warm hearted person, true and faithful in all his contacts with his colleagues, students and friends.

The decision of the Board of the EAC to dedicate Occasional Paper No. 10 to his memory is more than appropriate, and signals and reflects his particular and outstanding contribution to European archaeological heritage management. Time after time Willem took the initiative in bringing people together for the sake of archaeology. Good tempered, with humor and seemingly inexhaustible practical creativity he made numerous efforts to find improvements to the way that archaeological heritage management is carried out in Europe and the rest of the world. He understood that 'conditio sine qua non' for being successful in the field of international cooperation is endurance and a clear view on what you want to achieve – Willem was absolutely steadfast in working towards his vision for European archaeological heritage management– a vision focused on striving to attain the highest possible standards of heritage management, but at the same time ensuring that heritage management practices are always rooted firmly in pragmatic and real-world situations.

That is exactly what EAC wanted to formulate during the annual symposium of 2014 in Amersfoort: Setting the Agenda: Giving new meaning to the European archaeological heritage.

In his article 'Malta and its consequences: a mixed blessing' (EAC Occasional Paper No. 9, 151–156) Willem showed delicately but firmly, and with his characteristic humor and insight the need for such an agenda. He played an important role in the Amersfoort symposium, chaired a session, and was most influential in the formulation of the Amersfoort Agenda which is the most crucial part of this book.

We remember Willem Willems as an ardent champion of European archaeology and as a very good and loyal friend. We feel inspired to go forth in his spirit. The agenda as formulated in this book will help us to meet that challenge.

Adrian Olivier and *Leonard C. de Wit*

Introduction

The challenge

The European Archaeological Council (EAC) is seeking to formulate a strategic agenda to meet today's challenges for archaeological heritage management in Europe. To this end, it organised a working conference in Amersfoort in the Netherlands on 20–21 March 2014.

Over the past three years, the annual EAC symposium has focused on the role and meaning of archaeological heritage in Europe. The results have given us insights into current developments and challenges for archaeological heritage management, amongst other things through a consideration of the positive and negative effects of the Valletta Convention (EAC Occasional Paper 2014). The 2014 symposium built on the work of past years, shifting the focus to the future with the theme of 'Setting the Agenda: Giving new meaning to the European archaeological heritage.' The time is right to think about linking 'Valletta' to 'Faro', the Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005), which recognises the need to put human values at the centre of an enlarged and cross-disciplinary concept of cultural heritage.

With society changing rapidly, the archaeological community needs to be aware of these social, political, technological and economic developments and respond to – or at least be prepared for – the challenges of the new era.

The 1980s saw the emergence of an initiative to make agreements at European level in order to afford better protection for the sources of our history. The Council of Europe Convention on the Protection of the Archaeological Heritage (Valletta 1992), which resulted from this process, continues to inspire and has helped reshape archaeological heritage management in many countries in Europe. As a result, fewer important archaeological sources have been lost without our knowing.

At the same time, some people have questioned whether our efforts have succeeded in achieving the Convention's aims. The rise in the number of archaeological investigations has not necessarily expanded our knowledge of the past. And the ever-evolving information technology has not been used to its full potential in terms of storing and sharing digital data and information – a vital step in the production of new knowledge and in strengthening the discipline's links to society. In addition, ongoing professionalisation has had an impact on the involvement of people outside the archaeological profession, such as amateur archaeologists. The archaeological community is expected to think about its standards and values, and open them up to discussion.

The economic crisis is also an important factor. Public resources for archaeology are in decline and the private sector's willingness to meet the costs of archaeological research is also coming under increasing pressure. Their archaeological responsibilities are often seen as a burden, rather than a source of inspiration, pleasure or pride.

More than two decades on, we need to launch new initiatives to explore ways to treat archaeological values as sources of knowledge about Europe's past. It seems a good idea to connect these challenges with the principles of the Faro Convention and thus give new meaning to archaeological heritage management in Europe.

We aim to have an interactive, open discussion on the topics which require greater attention on a European scale and which can inspire all members of the EAC. The symposia of the past three years and the resulting publications have provided fantastic input for the working conference that was held in Amersfoort in March 2014.

Topics for a strategic agenda

Through the working conference, the EAC sought to provide a foundation for a strategic agenda, as well as to explore possibilities for an action programme to improve archaeological heritage management in Europe. During break-out sessions the participants discussed possible agenda topics around the following three main themes.

1. The spirit of the Faro Convention: embedding archaeology in society
Recognising the need to put people and human values at the centre of an enlarged and cross-disciplinary concept of cultural heritage

Emphasising the value and potential of cultural heritage wisely used as a resource for sustainable development and quality of life in a constantly evolving society (Preamble, Faro Convention)

Archaeology is not just for archaeologists. Many people are passive but interested consumers of the results of archaeological research – they visit museums, read books, engage in education, and visit excavations, heritage

sites and archaeological parks. Others have a more active role in community archaeology, as amateurs, through re-enactments or by monitoring whether local authorities have embedded archaeology in their spatial planning policy.

These are questions that need to be answered: Do we have a role to play in involving other groups, local communities and the public at large, and if so, what is that role? Is the concept of community archaeology worth promoting and how should it be embedded in the often strictly professional legal framework? What is the most successful approach? Is there a need for an international initiative? We need to give the future a past by making the past visible and perceivable when implementing spatial plans.

2. Dare to choose

Recognise the public interest associated with elements of the cultural heritage in accordance with their importance to society (Article 5a, Faro Convention)

2.1 Quality or quantity?

For each form of selection, we need a good idea of what archaeology we can expect to find where, how these values can be effectively traced, and what has probably been lost as a result of economic activities such as farming. The clearer our idea of such matters, the more transparent and rigorous our choices can be. There has to be further development of the maps and methods we need to help us. An international exchange of ideas about how to tackle this is of course vital. If we wish to achieve this exchange within Europe, what are the main themes to address?

2.2 What do we want to know?

Not all archaeological information is equally important. In situ and ex situ selection is a key issue, given the need to maximise the added value of archaeological research and to ensure that archaeological heritage management remains as efficient and cost-effective as possible – not least to ensure ongoing public support. The first question to consider is: What questions about the past do we want archaeological research to answer? This needs to be explored at an international level, so that national and regional agendas can also address cross-border issues.

3. Managing the sources of European history

Enhance the value of the cultural heritage through its identification, study, interpretation, protection, conservation and presentation (Article 5b, Faro Convention)

3.1 The harvest of Valletta: Adding to our knowledge of the past

Despite the sharp rise in the amount of archaeological research being conducted, there have been few syntheses that bring the resulting information together to build a new bigger picture and raise new questions about the past. You would expect this to be the natural stuff of academic endeavour, but the link with universities is weak.

Here the questions that need answers are: Is there enough interaction between academic and commercial archaeology? Are academics aware of what developer-led archaeology has yielded? To what extent does the (commercial) research agenda for individual excavations focus on knowledge profits at a higher level? Is the right information being generated? Or are those working in archaeological heritage management simply unwilling or unable to take on this task effectively? How do we build a bridge between the major stakeholders so that they can study, share and disseminate information while at the same time strengthening one another? Do we want to achieve a synthesis on a European scale and if so, what should the main themes be? What does this mean for national heritage management?

3.2 Exchanging information in the digital era

The Parties undertake to develop the use of digital technology to enhance access to cultural heritage and the benefits which derive from it (Article 14, Faro Convention)

All over Europe, information is being generated about our past. Every survey and every excavation supplies information in the form of digital data, documentation, finds and publications. Access to this information at a European level could be considerably improved by agreeing on standardisation and by forging connections, connections and more connections. Would an archaeological knowledge map of Europe be feasible? What are the benefits and challenges of an archaeological knowledge map or shared database? Can an initiative like 'Europeana' inspire the archaeological community?

The process

The main aim of the presentations was to inspire and prepare participants for their discussions during the break-out sessions. The presentations were selected to provide an overview of the topics, but also to show opposing opinions or an artist's refreshing perspective.

The presentations in the 'Spirit of the Faro Convention' theme were primarily intended to highlight the different aspects, possibilities and interactions of all participants in archaeology, community and society and the relevance of archaeology to society. Public participation is a basic necessity, with the public not just as an incidental bystander and passive consumer but also an active participant and stakeholder. Should we actively invite the public to communicate their wishes and perhaps even give them a vote in decisions? This is not just a question of expanding opportunities for public participation, but more especially of changing attitudes to enable a more democratic approach.

In this publication Graham Fairclough reflects on developments in society and changing ideas about the archaeologist's role by examining the differences between the Valletta and Faro Conventions. He addresses an important question, wondering whether it is not archaeology, but archaeologists that need to be more deeply embedded in society. At the symposium Monique van den Dries also reflected on this journey from 'Valletta' to 'Faro' and discussed how engagement with the public has evolved. In this volume she takes the discussion one step further by looking at recent facts and figures that have primarily come from the Discovering the Archaeologists of Europe (2012-2014) survey. In the context of deinstitutionalisation and the growth of bottom-up social structures, Roel During discusses the challenges and perspectives for heritage specialists and archaeologists wishing to climb the ladder of heritage participation. At the Amersfoort symposium Guy Königstein gave an interesting presentation from an artist's point of view.[1]

'Dare to choose' is a topic which is interpreted in different ways in the member states and which also inspired active discussion during the symposium. Dries Tys and Margaret Keane presented two opposing opinions, triggering a lively debate that illustrated the range of feelings and opinions. The question is not simply whether or not to choose, but also how to cope with the choices we make. The break-out sessions highlighted common aims, such as a desire to be transparent, explicit and informed about choices in the archaeological heritage management process.

In his paper Dries Tys presents a reflection on the current situation for preventive archaeology as a consequence of implementing the Valletta Convention. He proposes an approach in which archaeological sites are selected for their knowledge potential and scientific and social significance. Another approach is introduced by Hauke Jöns, who discusses the possibilities of applying sampling strategies when analysing archaeological excavations. Margaret Keane sheds light on the topic from an Irish perspective, examining the development of discussions on archaeological heritage protection measures and the interpretation of Valletta. In addition, Bert Groenewoudt looks at the situation in the Netherlands and explains some Dutch initiatives designed to make 'Malta' excavations relevant to heritage management, science and society.

The theme of 'Managing the sources of European history' includes two central topics in addition to the end goals. The first is the benefits that digitisation and European cooperation can bring in relation to new perspectives – not only at an academic level, but also to disseminate comprehensible information to a wide audience. Archaeology's role within European projects continues to be limited. This relates closely to the second topic. We are very good at exchanging information through publications, symposia, etc. but to reap maximum benefit we need to do more than simply exchange results – we also need to share information and work towards a common goal at a higher level. The Archaeological Atlas of Prehistoric Europe, the JADE project and the ARCHES project are just some examples of the value of working closely together. Three examples are presented here: Franco Niccolucci sketches the context of computer technology in archaeology and introduces the ARIADNE project, its activities, challenges and opportunities; Hauke Jöns discusses the background, outcomes and future perspectives of the international, interdisciplinary SPLASHCOS network; and Paulina Florjanowicz's contribution explores the situation in Poland, touching upon various challenges to ensure that all the sources gathered are both well managed and usable.

The results

We have defined many questions and raised new challenges for the future. Since the goal of the Amersfoort symposium was to establish a new agenda which, first and foremost, should be a source of inspiration to all EAC members, it was clear that it had to be a joint product of all the members. The symposium participants were therefore challenged to play an active role in setting the agenda. The presentations on each topic were primarily intended as inspiration and to reveal different, sometimes controversial, aspects of the topic. Participants were then divided across a number of break-out groups.

[1] http://www.guykoenigstein.com/winchester_objects.html

Their main task was to discuss and propose issues in need of more attention that should be added to the new agenda. Each participant wrote down three ways to achieve this goal. All these statements were analysed and then presented in the Amersfoort Agenda. This draft was distributed to participants and EAC members for comments, which were integrated into a final version that was discussed and adopted by the EAC board. Both the Agenda and the break-out session reports are included in this EAC volume.

Of course the Amersfoort Agenda is not intended as an amendment to the Valletta Convention. It is primarily a source of inspiration, a vision document, with a focus on specific topics that were chosen to give the Valletta Convention renewed impetus for the next decade and to achieve a stronger connection with the Faro Convention.

We will have to take up this challenge for the future without our esteemed colleague Willem Willems, who has recently passed away. He was a driving force behind developments in European archaeology as well as this symposium. We are most thankful for his invaluable advice and for his work on the symposium and the creation of the Amersfoort Agenda. He will be missed both as a friend and colleague.

We are very grateful for the active role of all the participants, especially Jos Bazelmans, Adrian Olivier and Paulina Florjanowicz who chaired the main sessions. Without the chairs of the 15 break-out groups and the assistance of young archaeologists and students from the universities of Groningen, Amsterdam and Leiden who compiled the minutes for the break-out sessions, it would not have been possible to shape this complex process an agenda. Specific mention must also be made of a parallel break-out group of students and young archaeologists who discussed the topics from a refreshing point of view. We would like to thank Réka Viragos for all her valuable support and advice in the preparations for the symposium and publication. Special thanks also to Annette Visser for her excellent work in revising all the English texts in this volume and to Marie-Jeanne Ghenne for translating all the abstracts into French. Working with the publisher Archaeolingua has been an enjoyable experience; without their hard work the volume could not have been published in time. In closing we would like to thank all the authors for their time and effort and for sharing their knowledge and personal experiences in the valuable contributions to this volume.

Reading guide

This EAC Occasional Paper no. 10 has a different format than previous publications. It mainly comprises two parts. The first presents the Amersfoort Agenda in both English and French, with a view to setting the agenda for the future of archaeological heritage management in Europe. The second part contains ten articles by the symposium's speakers and other authors, grouped by session theme. The contributions add depth to the Agenda and present a range of topics, approaches and opinions within the three themes. The reports of the break-out sessions are included as an annex after the French summaries. They provide a glimpse of the participants' discussions and input that formed the basis for the Amersfoort Agenda.

Peter A.C. Schut, Djurra Scharff and *Leonard C. de Wit*

Amersfoort Agenda

The Cultural Heritage Agency of the Netherlands building in Amersfoort, which was the venue for the 2014 annual Europae Archaeologiae Consilium meeting.

Amersfoort Agenda – Setting the agenda for the future of archaeological heritage management in Europe

The 15th annual symposium of the European Archaeological Council (EAC), hosted by the Cultural Heritage Agency of the Netherlands (RCE), took place in Amersfoort on 20–21 March 2014. This year's challenging theme was *Setting the Agenda: Giving new meaning to the European archaeological heritage*.

The EAC and RCE welcomed over 90 participants from 25 different countries, including archaeological heritage managers, several key players from the Dutch archaeological world and archaeology students from four Dutch universities. The central aim of the symposium was to formulate a strategic agenda to meet the current challenges facing archaeological heritage management in Europe.

By organising the symposium, the EAC has provided a strong foundation for this new strategic agenda. All participants in the symposium worked in groups to formulate agenda subjects during break-out sessions, which focused on three contemporary themes:

1. The spirit of the Faro Convention: embedding archaeology in society
2. Dare to choose
3. Managing the sources of European history

In each session the participants wrote down their statements about subjects for the future agenda. This input constituted the basis for preparing the agenda. The session reports, including lists of participants' statements, are published in this volume and can be accessed through the EAC website.

As a follow-up to the symposium, this document presents the themes and items for the strategic agenda. For each of the three main themes there are three agenda items that serve as inspiration for the future of archaeological heritage management in Europe. Each theme is introduced by a word cloud showing the most important keywords at a glance. Following a brief explanation of the links between the items, a table presents an overview of subthemes and an impression of participant input during the break-out sessions.

This agenda is a vision document with a focus on specific subjects to move from 'Valletta' to 'Faro'. It's good to have an agenda that can provide guidance to the central aim of 'giving new meaning to the European archaeological heritage'. But is also important to undertake appropriate actions to ensure that the aspirations take shape in practice. The EAC will therefore seek cooperation with relevant European projects and partners and will promote the agenda and its principles as a focus alongside its existing interests and activities. The members of the EAC are also cordially invited to take actions on national level to support the further implementation of the agenda. This agenda is a resource for members to be used as much as they can and want.

Disclaimer: The impressions (in italics) are a selection from the input; statements have been conflated and adapted to increase readability. They are individual opinions and therefore do not represent a common vision of the EAC and/or representatives of state archaeological services.

Theme 1 The spirit of the Faro Convention: embedding archaeology in society

Agenda items

- **Stimulate and facilitate society's involvement in archaeology, while at the same time encouraging archaeology's involvement in society by linking it to other policy domains and the societal challenges of today's world**
- **Know the public: analyse the wants, interests and expectations of stakeholders in society regarding their involvement in archaeology, preferably through interaction with those stakeholders**
- **Integrate archaeology into education for children and young people**

Explanation

The theme of this session was 'The spirit of the Faro Convention: embedding archaeology in society'. One of the agenda items for this theme was the desire within the discipline to encourage and facilitate the participation of society in archaeology. However, it is important to be aware of different motivations and forms of participation, and to be realistic. The idea that we need to 'educate' society should be complemented by bottom-up participation and more horizontal relationships between archaeologists and other stakeholders.

One of the main outcomes of the session was that we should not only encourage the involvement of society in archaeology, but also specifically put effort into embedding archaeology in society. This means monitoring changing trends and then forging connections with other policy domains, such as education, the economy, the environment and social challenges, especially with a view to sustainable development. For both these aspirations we need to know who we mean by 'society' or the 'public' and what they want and expect in relation to participation in archaeology. If we want answers to these questions, we will need to engage in dialogue with the different stakeholders.

Another agenda item was the need to integrate archaeology into education for children and young people. Archaeology could be embedded in school curricula by exploring and modifying the concept of history. If history is the school subject where you learn how to interact with place and the past, this would automatically bring archaeology to the forefront. By embedding archaeology in education, the discipline can encourage interest in the past and the environment at a young age, which may provide multiple benefits for both archaeological heritage management and society. As most threats to archaeological heritage are caused by a lack of awareness about the values of archaeological remains to society as a whole, it would seem beneficial to invest in integrating archaeology into education at an early stage. Ultimately, efforts in

the field of education are also essential for maintaining public support for archaeology.

Lastly, we may want to add a note concerning the Faro Convention of the Council of Europe (2005) on the value of cultural heritage for society. As archaeological heritage management practices and mentalities are changing, perhaps the time is right to reconsider the spirit of the Faro Convention and embrace innovative views, as expressed for example in the recent conclusions on cultural heritage adopted by the Council of the European Union (2014) and a Communication adopted by the European Commission (2014). The zeitgeist calls for an acknowledgement of the multiple values of archaeological heritage for society and recognises the potential role of archaeological heritage in sustainable development.

Subthemes and impression of break-out session input	
Stimulate and facilitate society's involvement in archaeology, while at the same time encouraging archaeology's involvement in society by linking it to other policy domains and the societal challenges of today's world	
The involvement of society in archaeology needs to be stimulated and facilitated	· *Discuss and define fields and activities in which voluntary archaeologists can operate and those which are reserved for professionals.* · *Encourage participatory knowledge creation.* · *Explore different forms of participation, also by learning from others' best practices.* · *Devise practical instructions or tools to support participation.* · *Stimulate different forms of participation by different groups: local history societies, local inhabitants, children, etc.* · *Create a climate in which bottom-up participation is both possible and appealing.* · *Promote a better understanding of archaeology through participation.* · *Encourage greater public participation in decisions about preserving archaeological sites.* · *Encourage open access to archaeological sites and data.* · *Discuss roles and responsibilities (government, contractors, heritage organisations, etc.) in facilitating participation.* · *Explain archaeology and its potential benefits in a way that is easy to understand.*
Explore and use modern methods to involve society	· *Learn about crowdsourcing as a way for citizens to actively work with archaeologists.* · *Make visualisations of archaeological knowledge so that the public can connect with archaeology.* · *Better storytelling: we archaeologists are often poor storytellers – we place too much emphasis on scientific stories.* · *Use digital (social) media to disseminate ideas, research and stories, and also for interaction.* · *Collaborate with creative industries.* · *Learn the language of 'non-archaeologists' and adapt our own language for better comprehension.* · *Invest in syntheses and explore new dissemination and interaction methods.*
Archaeology needs to be mainstreamed into other policy domains and linked to society's challenges	· *The archaeological discipline should search for connections with current societal challenges (e.g. spatial, environmental, social, economic) in order to realise the benefits for society.* · *Archaeologists need to be aware of, and act upon, societal developments.* · *Archaeology could have a role in other policy domains and challenges, such as integration and socialisation.* · *We need to get better at discussing, formulating and realising the values and benefits of archaeology for society.* · *Connecting the past with the present: archaeology can challenge current ways of thinking and living.*

Know the public: analyse the wants, interests and expectations of stakeholders in society regarding their involvement in archaeology, preferably through interaction with those stakeholders	
Increase understanding of the public: get to know their demands, interests and expectations through dialogue	· *Research the effects of public participation.* · *Find out what the public wants to know.* · *Analyse why the public is or should be interested in archaeology.* · *Investigate how the public wants to get involved or acquire knowledge.* · *Understand what the public wants and values, and be willing to accept this.* · *Develop instruments to survey the wants and effects of public participation.*
Discuss who we view as the target public. Who do we want to share knowledge with? Who do we want to participate in archaeology?	· *Discuss whether we only want to involve members of the public who are already interested.* · *Define different target audiences.*
Integrate archaeology into education for children and young people	
Integrate archaeology into school curricula, preferably through its links with the subject of history	· *Promote the integration of archaeology into curricula at primary and secondary school.* · *Explore the links with history education in schools.* · *Encourage interest in the past at a young age by involving children in archaeology and local history in both the field and the classroom.*

Theme 2 Dare to choose

Agenda items

- **Be conscious, explicit and above all transparent about the choices being made and the consequences of selection in the archaeological heritage management process**
- **Develop a sound infrastructure to support the making of informed choices: identify research frameworks and criteria, and enable access to current archaeological knowledge and data**
- **Adopt a broader perspective when making choices: open up boundaries within the discipline and involve other stakeholders (and their interests) in the process**

Explanation

The theme of this session was 'Dare to choose'. The archaeological discipline puts effort into achieving the greatest possible scientific added value and supporting the potential values of archaeological heritage for society. Both of these aspirations can result in choices being made at different stages and levels of the archaeological heritage management process. Although visions of and approaches to making choices vary widely, some common aims can be observed.

A recurring idea within this theme was the desire to be transparent and explicit about the choices being made in the archaeological heritage management process. It is important to communicate and explain these choices not only to archaeological colleagues, but also to other stakeholders in society. The break-out sessions also highlighted the need to be conscious of the long-term impact of choices in archaeological heritage management.

A second agenda item was the ability to make informed choices. To do so, we need to develop sound infrastructures that afford access to current archaeological knowledge. It is essential that we identify research frameworks and criteria because we need a good understanding of the basic point of departure. It would be invaluable to develop common ideas about which information we should base choices on in the archaeological heritage management process.

Another agenda item highlighted in this session was the desire to adopt a broader perspective when making choices in archaeology. First of all, this means improving cooperation between all professional archaeological stakeholders (local and regional heritage management authorities, companies, universities). The discipline could encourage the development of local and regional networks as well as participation in European programmes. Adopting a broader perspective also means involving, and recognising the interests of, other stakeholders of archaeological heritage in the valuation and decision-making process. We therefore need to discuss the question of who should choose, and to explore ways to balance the different interests involved.

Subthemes and impression of break-out session input	
Be conscious, explicit and above all transparent about the choices being made and the consequences of selection in the archaeological heritage management process	
Be conscious, explicit and transparent about the choices being made	· *Not everything is excavated, recorded or researched with the same intensity; we need to acknowledge that choices are always being made.* · *We need to be cautious about dismissing material as not significant. Being cautious and conservative is sometimes the brave thing to do.* · *Choice is obligatory in all research, including archaeological research. Make conscious choices. Reflect on what to do and what not to do.* · *Research the long-term consequences of choices on archaeology and take them into consideration when making choices.* · *Many excavations produce unexpected results which are of value for research and lead to interesting data and finds. We need to remain flexible in the face of surprises.* · *If archaeologists do not make choices, choices will be made for them.*
Develop a sound infrastructure to support the making of informed choices: identify research frameworks and criteria, and enable access to current archaeological knowledge and data	
Know your basic point of departure: identify research frameworks to be able to make informed choices	· *Choices depend on current states of knowledge about the past, so there is a need for a good overview of archaeological knowledge (gaps) and archaeological potential.* · *Take into account the limitations of existing knowledge.* · *A clear view of research questions and goals is needed at all stages of the archaeological heritage management process.*
Develop criteria and standards in the decision-making process	· *Criteria for assessing significance of sites need to be developed.* · *Selection criteria should not be solely academic; we also need to take into account the values of the other users and stakeholders, the context and current political/economic/social realities.* · *There are always possibilities for choice – not only in relation to which sites to rescue, but also which analytical methods to apply to the data.*
Adopt a broader perspective when making choices: open up boundaries within the discipline and involve other stakeholders (and their interests) in the process	
Adopt a broader perspective and explore ways to involve others in making choices	· *Involve other stakeholders in society in the valuation and decision-making process.* · *Discuss the possible roles of other groups in society in making choices and explore ways to involve them in that process.*
Negotiate criteria and balance interests and values with other stakeholders	· *Combine academic questions with social benefits and needs; assess the best method to balance societal (and developer) interests against quality of archaeological investigation.* · *Keep in mind all users and stakeholders of archaeological heritage and make choices on the basis of all these values.* · *Society needs delivery: return content to society and developers through proper dissemination.*
Improve collaboration within the discipline and heritage sector by developing networks	· *Encourage cooperation between all archaeological stakeholders (authorities, commercial archaeologists, academics) by developing networks at local or regional level.* · *Encourage European cooperation: build a European knowledge base.*

Theme 3 Managing the sources of European history

Agenda items

- **Use emerging digital technologies to share, connect and provide access to archaeological information; this will require improved collaboration and the development of (and participation in) European networks**
- **Encourage cooperation with other disciplines and share data in order to create a shared benefit**
- **Aim for the greatest possible access to digital archaeological resources for various user groups and exploit digital databases to their full potential, including uses for the greater public**

Explanation

The theme of this session, 'Managing the sources of European history', is very relevant today because of the rapidly growing quantity of archaeological research, and hence data. There is a need within archaeology for effective management of new and existing digital data; emerging digital technologies may offer many opportunities in this respect. If we don't want to miss the boat, we will need to promote and encourage these opportunities.

The main agenda item within this theme was the need to share, connect and provide access to archaeological information with the help of digital technologies. The key to this aspiration is to improve collaboration – we need to share rather than exchange. It is essential to encourage the development of European data-sharing networks and projects in the field of archaeology. The ARIADNE project is an excellent European initiative in this regard and participation in this project should be strongly encouraged.

Improving collaboration should not be confined to within the discipline, however, as there are ample opportunities for cooperation with other disciplines, such as the environmental sector. Since ever more data is being generated on topics that could also be of value to archaeological heritage management, the second agenda item was the need for cooperation and data sharing across disciplines.

As a corollary to this ambition to share digital data, the discipline will need to discuss the potential risks and problems relating to data use and management. Firstly, it is important to realise that data is not the same as knowledge. Easy access to more standardised, interlinked data does not necessarily lead to new and different stories about the past. It is therefore important not to lose sight of the focus on interpretation and knowledge gains. A second concern is the importance of not forgetting that the original sources of knowledge are the archaeological objects and landscapes themselves. The management of digital archaeological data should not overshadow the management of actual archaeological sources, both in situ and in archives.

A third agenda item was the need to aim for the greatest possible access to digital archaeological resources for various user groups. Archaeology should embrace the trend towards open access. However, these new digital opportunities might require a reconsideration of our working ethics, including the question of what we do and do not wish to share. The development of shared digital databases offers benefits not only to the professional world; it also provides potential benefits for society. We will need to exploit digital databases to their full potential and explore the possible uses for the greater public. The discipline could also put more effort into researching existing data and facilitating syntheses.

Subthemes and impression of break-out session input	
Use emerging digital technologies to share, connect and provide access to archaeological information; this will require improved collaboration and the development of (and participation in) European networks	
Improve collaboration within the European archaeological sector, for example by encouraging the participation of member states in European programmes and networks (e.g. ARIADNE, LoCloud)	· *Work with each other, not alongside one another.* · *Encourage involvement in European Union projects and programmes, such as ARIADNE.* · *Establish more European programmes in archaeological data management.* · *Develop European guidelines and research agendas.* · *Create a networking platform to prepare common visions.* · *Introduce a single-host digital portal to give access to different databases.* · *Make sure the systems are user-friendly and achievable.*
Be aware of the potential risks and problems of data use and management	· *We should not forget that the original or primary sources are the monuments, landscapes and objects themselves.* · *Data is not yet knowledge: it has to be interpreted to ascertain the meaning.* · *Archaeological sources are monuments and data – they should be managed together.*
Encourage cooperation with other disciplines and share data in order to create a shared benefit	
Encourage cooperation and share data with other disciplines and stakeholders	· *Actively seek connections and cooperation with other disciplines (e.g. creative industries, innovation, environment, spatial planning); share data and explore new technologies.* · *Strive towards an interdisciplinary and cross-sector approach in the process of getting from data to knowledge.* · *Data export: integrate into other disciplines and take societal needs into account.*
Aim for the greatest possible access to digital archaeological resources for various user groups and exploit digital databases to their full potential, including uses for the greater public	
Strive towards free access to archaeological resources in the digital world	· *Discuss whether open access to archaeological resources and research results is desirable and possible.* · *Public access to archaeological information increases public interest (cf. 'ignorance breeds ignorance').* · *Data relating to archaeological heritage management should be accessible to academics and society.* · *List what datasets/sources should be made publically available.* · *Overcome language barriers: use a common glossary and always publish in the local language and English.* · *The rapid changes in digital technology require a reconsideration of our working ethics, including the question of what we do or do not wish to share with others.*
Exploit the full potential of digital databases, especially regarding possible uses for the public	· *Explore ways to make archaeological heritage visible to society using digital techniques (e.g. virtual museum, social media, web-based viewer, 3D scans of objects, digital repository for reports, newsletter).* · *Develop forms of interactive public participation.* · *Archaeological data needs some processing before it is useable for society.* · *Make use of emerging data technologies that facilitate the gleaning of knowledge from massive datasets.* · *Improve and facilitate the synthesis of archaeological data.*

References

Council of Europe 1992: *European Convention on the Protection of Archaeological Heritage (Revised)* (Valletta Convention), European Treaty Series 143, http://conventions.coe.int/Treaty/en/Treaties/Html/143.htm.

Council of Europe 2005: *Framework Convention on the Value of Cultural Heritage for Society*, European Treaty Series 199, http://conventions.coe.int/Treaty/EN/Treaties/Html/199.htm.

Council of the European Union 2014: *Conclusions on cultural heritage as a strategic resource for a sustainable Europe*, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/educ/142705.pdf.

European Commission 2014: *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Towards an integrated approach to cultural heritage for Europe*, COM (2014) 477, http://ec.europa.eu/culture/library/publications/2014-heritage-communication_en.pdf.

Objectifs d'Amersfoort – Instauration des priorités pour l'avenir de la gestion du patrimoine archéologique en Europe

Le 15ème symposium annuel de l'Europae Archaeologiae Consilium (EAC), organisé par l'Agence du patrimoine culturel des Pays-Bas (RCE), a eu lieu à Amersfoort les 20 et 21 mars 2014. Le thème passionnant de cette édition avait pour titre : *Définir un programme : Donner un nouveau sens au patrimoine archéologique européen*.

L'EAC et le RCE ont accueilli plus de 90 participants issus de 25 pays différents, y compris des gestionnaires du patrimoine archéologique, plusieurs acteurs principaux du monde de l'archéologie néerlandaise et des étudiants en archéologie de quatre universités néerlandaises. L'objectif central du symposium était de formuler un programme stratégique destiné à relever les défis actuels auxquels la gestion du patrimoine archéologique est confrontée en Europe.

En organisant le symposium, l'EAC a créé des bases solides en vue d'établir ce nouveau programme stratégique. Tous les participants au symposium ont travaillé en groupes restreints afin d'aborder les sujets à l'ordre du jour lors des sessions axées sur trois thèmes actuels:

1 L'esprit de la Convention de Faro : ancrer l'archéologie dans la société
2 Oser choisir
3 Gérer les sources de l'histoire européenne

Au cours de chaque session, les participants ont rédigé leurs propositions concernant les sujets du futur programme d'action. Cet apport a fourni les bases des préparatifs du programme d'action. Les rapports des sessions, y compris les listes des propositions énoncées par les participants, sont publiés dans ce volume et consultables sur le site Internet de l'EAC.

Faisant suite au symposium, ce document présente les thèmes et les sujets destinés au programme stratégique. Chacun des trois thèmes principaux est associé à trois points du programme servant de sources d'inspiration pour l'avenir de la gestion du patrimoine archéologique en Europe. Chaque thème est introduit par un nuage de termes offrant une représentation synoptique des principaux mots clés. Après une explication sommaire des liens entre les différents points, un tableau offre une liste des thèmes secondaires et donne une idée de l'apport des participants lors des sessions en groupes restreints.

Ce programme offre une vision axée sur des sujets précis afin de faciliter le passage de « La Valette » à « Faro ». Il est bon de l'avoir car il permet de se diriger vers un objectif central : donner un nouveau sens au patrimoine archéologique européen. Cependant, il est également indispensable, de prendre les mesures idoines pour concrétiser ces aspirations dans la pratique. L'EAC cherchera dès lors à coopérer avec des projets et partenaires européens concernés et se concentrera sur la promotion du programme d'action et de ses principes tout en poursuivant ses intérêts et ses activités actuels. Les membres de l'EAC sont aussi invités à prendre des mesures au niveau national pour poursuivre la mise en œuvre du programme. Ce programme constitue une source et les membres sont conviés à s'en servir autant que possible et autant qu'ils le souhaitent.

Clause de non-responsabilité : Les propositions (en italique) offrent une sélection des énoncés fournis ; ces derniers ont été assemblés et adaptés afin d'améliorer la lisibilité. Elles sont le reflet d'opinions personnelles et ne représentent donc pas une vision commune de l'EAC ni de représentants des services archéologiques publics.

Thème 1 L'esprit de la Convention de Faro : ancrer l'archéologie dans la société

Points à l'ordre du jour

- **Stimuler et faciliter l'implication de la société dans l'archéologie, tout en encourageant la participation de l'archéologie dans la société en l'associant à d'autres domaines d'action et aux défis de société du monde actuel**
- **Connaître le public : analyser les besoins, les intérêts et les attentes des parties prenantes au sein de la société concernant leur engagement vis-à-vis de l'archéologie, de préférence par le biais d'un dialogue**
- **Intégrer l'archéologie à l'enseignement des enfants et des jeunes**

Explication

Le thème de cette session était « L'esprit de la Convention de Faro : ancrer l'archéologie dans la société ». L'un des points à l'ordre du jour pour ce thème était le souhait exprimé au sein de la discipline d'encourager et de faciliter la participation de la société aux activités archéologiques. Il est cependant essentiel de prendre conscience des diverses motivations et formes de participation et de rester réaliste. L'idée qu'il faut « éduquer » la société doit être complétée par une participation de la base, ainsi que par plus de relations transversales entre les archéologues et autres parties intervenantes.

Parmi les principaux résultats de la session figure le fait que nous devrions non seulement encourager l'implication de la société dans l'archéologie, mais également déployer des efforts spécifiques pour ancrer l'archéologie dans la société. Ceci signifie qu'il faut suivre les tendances qui évoluent, puis forger des liens avec d'autres domaines d'action, comme l'enseignement, l'économie, l'environnement et les défis sociaux, en vue surtout d'encourager le développement durable. Pour aboutir à ces deux aspirations, il faut savoir qui on désigne en termes de « société » ou « de public », quels sont leurs besoins et leurs attentes par rapport à la participation aux activités archéologiques. Si nous voulons des réponses à ces questions, nous devons engager un dialogue avec les différentes parties prenantes.

Citons comme autre point à l'ordre du jour le besoin d'intégrer l'archéologie à l'enseignement des enfants et des jeunes. L'archéologie pourrait être insérée aux programmes scolaires en explorant et en modifiant le concept de l'histoire. Si l'on définit l'histoire comme la matière enseignant aux élèves à dialoguer avec les lieux et le passé, cela ramène l'archéologie automatiquement au premier plan. En intégrant l'archéologie à l'enseignement, la discipline peut encourager l'intérêt pour le passé et l'environnement à un jeune âge, ce qui peut potentiellement être bénéfique, à de nombreux points de vue, tant pour la gestion du patrimoine archéologique que pour la société. Comme les menaces dont le patrimoine archéologique fait l'objet, résultent majoritairement d'un manque de conscientisation quant à la valeur des vestiges archéologiques pour la société

dans son ensemble, il semblerait salutaire d'investir afin d'inclure l'archéologie à l'enseignement à un stade précoce. Au final, les efforts déployés dans le domaine de l'enseignement sont également essentiels pour conserver le soutien du public vis-à-vis de l'archéologie.

Enfin, nous souhaitons ajouter une remarque concernant la Convention de Faro du Conseil de l'Europe (2005) sur la valeur du patrimoine culturel pour la société. Étant donné que les pratiques et les mentalités de gestion du patrimoine archéologique évoluent, il est peut-être temps de réexaminer l'esprit de la Convention de Faro et d'adhérer aux points de vue innovants, exprimés par exemple dans les récentes conclusions concernant le patrimoine culturel adoptées par le Conseil de l'Union Européenne (2014) et dans une Communication adoptée par la Commission Européenne (2014). Le climat actuel appelle à une reconnaissance des valeurs multiples du patrimoine archéologique pour la société et reconnaît le rôle potentiel de ce dernier dans le développement durable.

Thèmes secondaires et apport des sessions en groupes restreints	
Stimuler et faciliter l'implication de la société dans l'archéologie, tout en encourageant la participation de l'archéologie dans la société en l'associant à d'autres domaines d'action et aux défis de société du monde actuel	
Le rôle de la société dans l'archéologie doit être stimulé et facilité	· *Discuter des champs et des activités au sein desquels les archéologues bénévoles peuvent opérer et les définir par rapport à ceux réservés aux professionnels.* · *Encourager la création de connaissances participatives.* · *Explorer plusieurs modes de participation, y compris en apprenant des pratiques d'excellence d'autrui.* · *Concevoir des instructions ou des outils pratiques pour encourager la participation.* · *Stimuler plusieurs formules de participation aux différents groupes : sociétés d'histoire locale, habitants locaux, enfants, etc.* · *Créer un climat au sein duquel la participation de la base est possible et attrayante.* · *Faire la promotion d'une meilleure compréhension de l'archéologie par la participation.* · *Encourager une plus grande participation du public dans les décisions concernant la préservation des sites archéologiques.* · *Encourager l'accès ouvert aux sites et aux données archéologiques.* · *Discuter des rôles et des responsabilités (gouvernement, entrepreneurs, associations du patrimoine, etc.) pour faciliter la participation.* · *Expliquer l'archéologie et ses bénéfices potentiels de manière simple.*
Explorer et utiliser des méthodes modernes pour faire participer la société	· *Se familiariser avec la technique du crowdsourcing comme moyen pour les citoyens de travailler activement avec les archéologues.* · *Créer des visualisations des connaissances archéologiques afin que le public puisse comprendre l'archéologie.* · *Améliorer nos récits : en tant qu'archéologues nous sommes souvent de piètres conteurs ; nous insistons trop sur les récits scientifiques.* · *Utiliser les médias numériques (sociaux) pour diffuser nos idées, des études et des récits, ainsi que pour dialoguer.* · *Collaborer avec les industries créatives.* · *Apprendre le langage des « non archéologues » et adapter notre propre langage pour améliorer la compréhension.* · *Investir dans la synthèse et explorer les nouvelles méthodes de diffusion et de dialogue.*
L'archéologie doit être intégrée à d'autres domaines d'action et associée aux défis de la société	· *La discipline archéologique devrait rechercher les liens avec les défis actuels de la société (aux niveaux spatial, environnemental, social, économique, par ex.) afin de réaliser les bénéfices pour la société.* · *Les archéologues doivent prendre conscience des évolutions de la société et agir en conséquence.* · *L'archéologie pourrait jouer un rôle dans d'autres domaines d'intervention et défis, comme l'intégration et la socialisation.* · *Nous devons améliorer nos compétences afin de discuter, de formuler et de réaliser les valeurs et les avantages apportés par l'archéologie à la société.* · *Connecter le passé au présent : l'archéologie peut remettre en question les modes de réflexion et de vie actuels.*

Connaître le public : analyser les besoins, les intérêts et les attentes des parties prenantes au sein de la société concernant leur engagement vis-à-vis de l'archéologie, de préférence par le biais d'un dialogue	
Améliorer la compréhension du public : se familiariser avec leurs exigences, leurs intérêts et leurs attentes au moyen d'un dialogue	· *Étudier les effets de la participation du public.* · *Découvrir ce que le public souhaite savoir.* · *Analyser pourquoi le public s'intéresse à l'archéologie ou devrait s'y intéresser.* · *Examiner comment le public souhaite participer ou acquérir des connaissances.* · *Comprendre ce que le public veut et apprécie et être prêt à l'accepter.* · *Développer des instruments pour examiner les besoins et les effets de la participation du public.*
Discuter du public que nous identifions comme étant notre public cible. Avec qui voulons-nous partager nos connaissances ? Qui voulons-nous impliquer dans l'archéologie ?	· *Discuter de la question de savoir si nous voulons faire participer uniquement les membres du public déjà intéressés.* · *Définir plusieurs publics ciblés.*
Intégrer l'archéologie à l'enseignement des enfants et des jeunes	
Intégrer l'archéologie aux programmes scolaires, de préférence par ses liens avec l'histoire.	· *Promouvoir l'intégration de l'archéologie aux programmes dans les écoles primaires et secondaires.* · *Explorer les liens avec l'enseignement de l'histoire dans les écoles.* · *Encourager l'intérêt pour le passé à un jeune âge en faisant participer les élèves, sur le terrain et en classe, à des activités liées à l'archéologie et à l'histoire locale.*

Thème 2 Oser choisir

Points à l'ordre du jour

- **Être conscients, explicites et surtout transparents quant aux choix faits et aux conséquences dans le processus de gestion du patrimoine archéologique**
- **Développer une solide infrastructure pour soutenir la prise de décisions en connaissance de cause : identifier les cadres et les critères de recherche, et permettre l'accès aux connaissances et aux données archéologiques actuelles**
- **Adopter un point de vue plus diversifié lors des choix : lever les frontières au sein de la discipline et impliquer d'autres parties prenantes (et leurs intérêts) dans le processus**

Explication

Le thème de cette session était « Oser choisir ». La discipline archéologique déploie des efforts afin d' améliorer la valeur ajoutée scientifique et de soutenir les valeurs potentielles du patrimoine archéologique pour la société. Ces deux aspirations peuvent entraîner des choix à plusieurs niveaux et étapes du processus de gestion du patrimoine archéologique. Malgré la diversité des visions et des approches quant aux choix à faire, il existe cependant plusieurs objectifs communs.

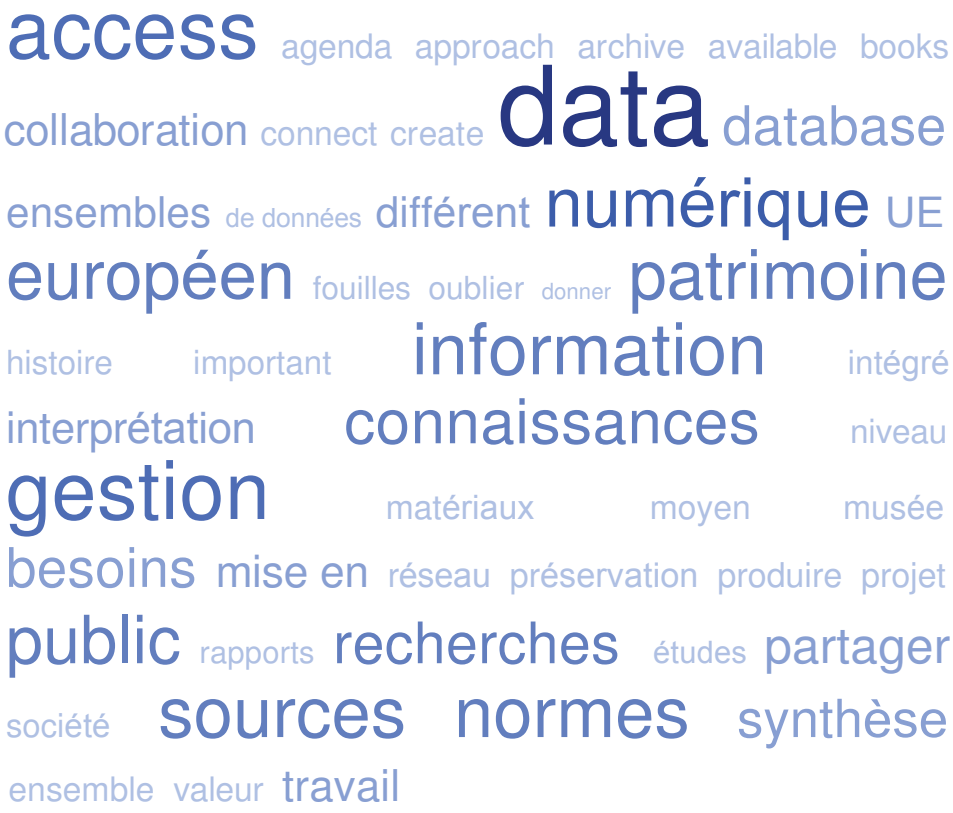
Citons comme idée récurrente dans le cadre de ce thème : le souhait d'être transparent et explicite quant aux choix effectués dans le processus de gestion du patrimoine archéologique. Il est essentiel de communiquer et d'expliquer ces choix non seulement aux collègues archéologues, mais également aux autres parties prenantes au sein de la société. Les sessions en groupes restreints ont également révélé le besoin d'une prise de conscience de l'impact à long terme des choix en matière de gestion du patrimoine archéologique.

Ajoutons comme second point à l'ordre du jour la capacité de faire des choix informés. À cet effet, nous devons développer des infrastructures solides offrant un accès aux connaissances archéologiques actuelles. Il est essentiel d'identifier les cadres et les critères de recherche, car il nous faut bien comprendre le point de départ fondamental. Il serait extrêmement utile de développer des idées communes sur la question de savoir sur quelles informations nous devons appuyer nos choix dans le processus de gestion du patrimoine archéologique.

Cette session a mis en lumière un autre point à l'ordre du jour : le souhait d'adopter un point de vue plus diversifié lors des choix faits en archéologie. Tout d'abord, cela signifie améliorer la coopération entre toutes les parties prenantes du domaine archéologique professionnel (autorités locales et régionales de gestion du patrimoine, sociétés, universités). La discipline pourrait encourager le développement de réseaux locaux et régionaux, ainsi que la participation aux programmes européens. L'adoption d'un point de vue plus diversifié signifie également qu'il faut faire participer au processus d'évaluation et de prise de décision d'autres parties prenantes au patrimoine archéologique, tout en reconnaissant leurs intérêts. Il nous faut donc discuter de la question de savoir qui devrait choisir et explorer les moyens d'équilibrer les différents intérêts en jeu.

Thèmes secondaires et apport des sessions en groupes restreints	
Être conscients, explicites et surtout transparents quant aux choix faits et aux conséquences dans le processus de gestion du patrimoine archéologique	
Être conscients, explicites et transparents quant aux choix faits	· *out n'est pas fouillé, consigné et étudié avec la même intensité ; nous devons reconnaître que des choix sont toujours effectués.* · *Il nous faut être prudents lorsqu'il s'agit de rejeter des matériaux qui n'auraient aucune portée. Faire preuve de prudence et de conservatisme est parfois un acte courageux.* · *Les choix sont obligatoires dans toute recherche, y compris en archéologie. Il s'agit de faire des choix conscients. Il nous faut réfléchir sur ce que nous devons faire et ce que nous devons éviter.* · *Nous devons étudier les conséquences à long terme des choix sur l'archéologie et en tenir compte lorsque nous faisons des choix aujourd'hui.* · *Les fouilles sont nombreuses à produire des résultats inattendus et précieux pour la recherche, engendrant des données et des découvertes intéressantes. Nous devons rester flexibles face aux surprises.* · *Si les archéologues ne font pas de choix, ces choix seront faits pour eux.*
Développer une solide infrastructure pour soutenir la prise de décisions en connaissance de cause : identifier les cadres et les critères de recherche, et permettre l'accès aux connaissances et aux données archéologiques actuelles	
Connaître notre point de départ fondamental : identifier les cadres de recherche pour être en mesure de faire des choix en connaissance de cause	· *Comme les choix dépendent des connaissances actuelles concernant le passé, il y a le besoin d'établir un bon aperçu des connaissances (et lacunes) et du potentiel archéologiques.* · *Tenir compte des limites des connaissances actuelles.* · *À toutes les étapes du processus de gestion du patrimoine archéologique, il faut une vision claire des questions et des objectifs de la recherche.*
Développer des critères et des normes au sein du processus de prise de décision	· *Il s'agit de développer des critères pour évaluer l'importance des sites.* · *La sélection des critères ne devrait pas être uniquement théorique ; nous devons également tenir compte des valeurs des autres utilisateurs et parties prenantes, du contexte et des réalités politiques / économiques / sociales actuelles.* · *Pour les choix, les possibilités ne manquent jamais, non seulement par rapport aux sites à sauver, mais également aux méthodes analytiques à appliquer aux données.*
Adopter un point de vue plus diversifié lors des choix : lever les frontières au sein de la discipline et impliquer d'autres parties prenantes (et leurs intérêts) dans le processus	
Adopter un point de vue plus diversifié et explorer les moyens d'impliquer autrui dans les choix à faire	· *Impliquer d'autres parties prenantes au sein de la société dans le processus d'évaluation et de prise de décision.* · *Discuter des rôles possibles d'autres groupes de la société dans les choix à faire et l'exploration de moyens de les faire participer à ce processus.*
Négocier les critères et équilibrer les intérêts et les valeurs avec d'autres parties prenantes	· *Combiner les questions académiques avec les avantages et les besoins sociaux ; évaluer la meilleure méthode pour trouver un équilibre entre les intérêts de la société (et des aménageurs) et la qualité des études archéologiques.* · *Tenir à l'esprit tous les utilisateurs et toutes les parties prenantes du patrimoine archéologique et faire des choix fondés sur toutes ces valeurs.* · *La société a besoin de résultats : il s'agit de rendre du contenu à la société et aux aménageurs grâce à une diffusion adéquate d'informations.*
Améliorer la collaboration au sein de la discipline et du secteur du patrimoine en développant des réseaux	· *Encourager la coopération entre toutes les parties prenantes archéologiques (autorités, archéologues commerciaux, universitaires) en développant des réseaux au niveau local ou régional.* · *Encourager la coopération européenne : bâtir une base de connaissances européennes.*

Thème 3 Gérer les sources de l'histoire européenne



Points à l'ordre du jour

- **Utiliser les technologies numériques actuelles pour partager, connecter et fournir un accès aux informations archéologiques ; ceci nécessitera une collaboration améliorée et le développement (ainsi que la participation au sein) de réseaux européens**
- **Encourager la coopération avec d'autres disciplines et partager les données afin de créer le partage des bénéfices**
- **Aspirer à l'accès maximal aux sources archéologiques numériques pour différents groupes d'utilisateurs et exploiter pleinement le potentiel des bases de données numériques, y compris les utilisations pour le grand public**

Explication

Le thème de cette session, « Gérer les sources de l'histoire européenne », est très actuel puisque nous assistons à une croissance rapide des études archéologiques et, par conséquent, des données archéologiques. Au sein de l'archéologie, il y a un besoin de gérer efficacement les données numériques actuelles et nouvelles ; les technologies numériques actuelles peuvent offrir de nombreuses occasions dans ce cadre. Si nous ne voulons pas rater cette opportunité, nous devons promouvoir et encourager ces occasions.

Le point principal à l'ordre du jour pour ce thème était le besoin de partager, de connecter et de fournir un accès aux informations archéologiques avec l'aide des technologies numériques. La clé à cette aspiration est l'amélioration de la collaboration ; nous avons besoin de partager plutôt que d'échanger. Il est essentiel d'encourager le développement de réseaux et de projets européens de partage de données dans le domaine de l'archéologie. À cet égard, le projet ARIADNE est une excellente initiative européenne et la participation à ce projet devrait être fortement encouragée.

L'amélioration de la collaboration ne devrait pas se limiter à la discipline, toutefois, car les occasions de coopérer avec d'autres disciplines, comme le secteur environnemental, ne manquent pas. Comme nous assistons à une génération de données accrues sur des sujets susceptibles d'être précieux pour la gestion du patrimoine archéologique, le second point à l'ordre du jour était le besoin d'une coopération et d'un partage de données à travers les disciplines.

Cette ambition de partager les données numériques crée, corollairement, la nécessité au sein de la discipline de discuter des risques et des problèmes potentiels liés à l'utilisation et à la gestion des données. D'abord, il est important de réaliser que les données se distinguent des connaissances. L'accès sans difficulté à des données plus standardisées et étroitement liées ne donne pas nécessairement lieu à des théories nouvelles et différentes sur le passé. Par conséquent, il est essentiel de ne pas perdre de vue la dimension de l'interprétation et les gains en termes de savoir. Citons comme second souci la nécessité de se rappeler que les sources d'origine du savoir sont les objets et les paysages archéologiques proprement dits. La gestion des données archéologiques

numériques ne devrait pas faire de l'ombre à la gestion des sources archéologiques concrètes, présentes *in situ* et dans les archives.

Le troisième point à l'ordre du jour était le besoin d'aspirer à un accès maximal aux sources archéologiques numériques pour différents groupes d'utilisateurs. L'archéologie devrait adopter la tendance vers un accès libre. Toutefois, ces nouvelles opportunités numériques pourraient requérir une remise en question de notre éthique de travail, y compris la question de savoir ce que nous voulons ou non partager. Le développement de bases de données numériques partagées offre des bénéfices non seulement au monde professionnel ; il apporte également des bénéfices potentiels à la société. Nous devrons exploiter les bases de données numériques au maximum de leur potentiel et explorer les utilisations possibles pour le grand public. La discipline pourrait également renforcer les efforts dans l'étude des données existantes et la rédaction de synthèses.

Thèmes secondaires et apport des sessions en groupes restreints	
Utiliser les technologies numériques actuelles pour partager, connecter et fournir un accès aux informations archéologiques ; ceci nécessitera une collaboration améliorée et le développement (ainsi que la participation au sein) de réseaux européens	
Améliorer la collaboration au sein du secteur archéologique européen, en encourageant, par exemple, la participation des états membres aux programmes et aux réseaux européens (ARIADNE, LoCloud, par exemple)	· *Travailler les uns avec les autres, pas les uns à côté des autres.* · *Encourager la participation aux projets et programmes de l'Union Européenne, comme ARIADNE.* · *Établir plus de programmes européens en gestion de données archéologiques.* · *Développer des directives européennes et des programmes de recherche.* · *Créer une plateforme de réseaux pour préparer l'élaboration de visions communes.* · *Introduire un portail numérique à hébergement unique pour offrir un accès à différentes bases de données.* · *Veiller à ce que les systèmes soient conviviaux et réalisables.*
Être conscient des risques et des problèmes potentiels de l'utilisation et de la gestion de données	· *Nous ne devrions pas oublier que les sources originelles ou primaires sont les monuments, les paysages et les objets proprement dits.* · *Les données ne constituent pas encore des connaissances : il faut les interpréter pour établir leur signification.* · *Les sources archéologiques sont les monuments et les données ; ils devraient être gérés ensemble.*
Encourager la coopération avec d'autres disciplines et partager les données afin de créer le partage des bénéfices	
Encourager la coopération et partager les données avec d'autres disciplines et parties prenantes	· *echercher activement des liens et des coopérations avec d'autres disciplines (les industries créatives, par exemple, l'innovation, l'environnement, l'aménagement spatial) ; partager les données et explorer les nouvelles technologies.* · *Aspirer à une approche interdisciplinaire et intersectorielle dans le processus de passage des données aux connaissances.* · *Exportation de données : intégration à d'autres disciplines et prise en compte des besoins de la société.*

Aspirer à l'accès maximal aux sources archéologiques numériques pour différents groupes d'utilisateurs et exploiter pleinement le potentiel des bases de données numériques, y compris les utilisations pour le grand public	
Aspirer à un accès libre aux sources archéologiques dans le monde numérique	· *Discuter de la question de savoir si l'accès libre aux sources archéologiques et aux résultats de recherche est souhaitable et possible.* · *L'accès public aux informations archéologiques augmente l'intérêt du public (cf. « l'ignorance engendre l'ignorance »).* · *Les données liées à la gestion du patrimoine archéologique doivent être accessibles aux universitaires et à la société.* · *Répertorier les ensembles de données / sources qui devraient être disponibles au public.* · *Surmonter les barrières linguistiques : utiliser un glossaire commun et toujours publier dans la langue d'origine et en anglais.* · *Les modifications rapides des technologies numériques requièrent une remise en cause de notre éthique de travail, y compris une réponse à la question de savoir ce que nous voulons ou non partager avec autrui.*
Exploiter pleinement le potentiel des bases de données numériques, surtout en ce qui concerne les utilisations possibles pour le public	· *Explorer les moyens de rendre visible le patrimoine archéologique pour la société en utilisant les techniques numériques (musée virtuel, par exemple, médias sociaux, visionneuse en ligne, numérisation 3D d'objets, dépôt numérique pour les rapports, bulletin d'information).* · *Développer des formes de participation interactive du public.* · *Les données archéologiques nécessitent un certain traitement avant d'être disponibles pour la société.* · *Se servir des technologies de transfert de données actuelles qui favorisent le recueil de connaissances au sein de volumineuses séries de données.* · *Améliorer et faciliter la synthèse de données archéologiques.*

Références

Conseil de l'Europe 1992 : *Convention européenne pour la protection du patrimoine archéologique (révisée)* (Convention de La Valette), Série Traité européen no. 143, http://conventions.coe.int/Treaty/FR/Treaties/Html/143.htm.

Conseil de l'Europe 2005 : *Convention-cadre du Conseil de l'Europe sur la valeur du patrimoine culturel pour la société*, Série Traité européen no. 199, http://conventions.coe.int/Treaty/FR/Treaties/Html/199.htm.

Conseil de l'Union Européenne 2014 : *Conclusions sur le patrimoine culturel comme une ressource stratégique pour une Europe durable*, http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/fr/educ/142706.pdf.

Commission Européenne 2014 : *Communication de la Commission au Parlement Européen, au Conseil, au Comité économique et social européen et au Comité des régions. Vers une approche intégrée du patrimoine culturel européen*, COM (2014) 477, http://ec.europa.eu/culture/library/publications/2014-heritage-communication_fr.pdf.

The spirit of the Faro Convention: embedding archaeology in society

Archaeological research into a Cistercian monastery in the small village of Essen.
The local community, a provincial archaeologist and the municipality are working together in this participatory project to research and manage archaeological heritage.
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1 | 'I wanted to be an archaeologist' – A 21st-century crisis of confidence?

Graham Fairclough

Abstract: Presented at the EAC 2014 symposium on 'The spirit of the Faro Convention: embedding archaeology in society', this chapter originated as a response to specific anxieties voiced in the symposium's briefing notes about the future social relevance of archaeologists. This anxiety was framed in the light of three main factors – differences in the way 'archaeology' is treated in the Valletta and Faro Conventions, the current ideological trends in many European countries towards a re-balancing of the relationship between public and private sectors of governance (the 'small government' neo-liberal agenda) and a pulling-back (in the post-2008 economic conditions) of government support for archaeological heritage management. The present paper argues, however, that the resulting sense of crisis may reflect an internal crisis of identity rather than an externally-imposed crisis. It adopts a reflective approach, wondering whether it is archaeologists, not archaeology, who need to be more deeply embedded in society by virtue of a readjustment of our own attitudes.

Keywords: archaeologist, Faro Convention, European Landscape Convention, society, professionalism

First thoughts – how did we all get here?

Personal credentials come first. The perspective of this chapter is (more or less un-)ashamedly autobiographical and personal; it is also deliberately subjective as befits my instinct that archaeology has three feet in the humanities, and only its fourth (albeit a front foot) in the sciences. It is set in the context that I know best, that of heritage management and conservation in England, with occasional implicit awareness (probably over-proprietorially) of the situation in Ireland and the rest of the UK. There is also a shadow of awareness of many other parts of Europe – although I hasten to say, very apologetically, despite many years of travelling and 'conferencing' across Europe, I do not know other countries well enough (especially east of where the wall used to run, and to its south east) to draw them into this discussion. This is a salutary reminder if one were needed of the continent's diversity and the cultural, national and local contingency of anything we might refer to as 'European best practice' or even the 'development of a European approach'.

I wanted to be an archaeologist from what now seems a ridiculously early age. By not always foreseeable pathways I achieved this, and somehow became an archaeologist. I excavated sites and places of many dates, analysed buildings archaeologically instead of art-historically, and moved on to interests in urban (and other forms) of morphology. Ultimately I 'found' the idea of landscape, first landscape archaeology, then – I hope – merely 'landscape'. For most of my career, however, I worked with English Heritage, and occupied myself with various forms of heritage management, from straightforwardly and comfortingly narrow (*sic*) approaches to monument designation and management, to more broadly-based conservation processes that involved spatial planning as well as monument protection, and on in the '90s to strategic designation reviews, evaluation and ultimately (again) to the characterisation of landscape. The relevance of all this to the subject of this chapter is that throughout these decades I continued to think of myself as an archaeologist, even though not all other archaeologists might have shared that view. I was also aware that for most of the general public archaeologists are defined by their digging, which I had mainly stopped doing by the mid-1980s. At the other end of the telescope, I became more and more aware that other disciplines (i.e. not 'archaeologists') also saw the field of archaeology as their domain. Latterly, I have worked in the knowledge that I was myself trespassing by means of the vehicle of landscape and heritage onto the neat, sheep-grazed grass swards of other disciplines.

At EAC's 15th annual symposium in Amersfoort, my presentation attempted, in a relatively informal and supposedly ludic way, to suggest that the practice of archaeology exists beyond as well as within the professional, full-time, academic and scientific sector that we have worked so hard to develop since the 1980s and before, and even longer in some countries. In the long run of its history, archaeology has already shifted its locus many times, from 16th – 19th-century antiquarianism, to the beginnings of scientific rigour in the later 19th century, via a mid-late 20th century outburst of robust amateur (in the best sense) interest and involvement, to the late 20th-century professionalisation of the discipline that was just about foreseeable, if not always demonstrable, by the late 1960s. The (mid-) late 20th-century professionalisation of archaeology in Europe was in some ways a democratisation, through

increased meritocratic opportunities, so that in many countries becoming an archaeologist no longer required private wealth or aristocratic patrons (see for example archaeologist Noel Fojut's description in his account (Fojut 2009, 14) of the Faro Convention's writing process). The State – i.e. society – became the patron, through university funding, through heritage management, through the use of state regulations to create (or allow to be created) institutions for rescue (or preventative) archaeology – the differences in the terms of this discussion are merely semantic. An unravelling of this has begun in recent years under cover of post-2008 economic stress, disguised (notably in the UK) as an empowerment of 'big society. It is represented specifically by 'small government' ideas and a more or less conscious (rather than an accidental by-product) deepening of what perhaps these days are best called socio-economic distinctions (because in its post-Marxist triumphalism, neoliberalism does not recognise 'class'). In occasional pessimistic moods, this might be called the creation or strengthening of a new underclass.

Is there a crisis?

By 2000, as Noel Fojut has also observed (2009, 17), 'political will' in Europe had turned away (at least exclusively) from the protection of evidential values (which Fojut called 'intrinsic', a problematic word) towards protecting and promoting instrumental, economic and institutional values as well. The practice of archaeology had of course been particularly associated in its own mind – and in that of the public (we might note again the almost kneejerk and apparently ineradicable popular equation of archaeology with excavating) – with the first of these values. However, other disciplines and practices (e.g. planners, architects) more often saw the other types of value in what was increasingly termed 'heritage'.

When I was asked following the Amersfoort symposium to write a chapter for the 15th symposium proceedings within the session theme 'The Spirit of the Faro Convention: embedding archaeology in society', I asked myself what is the connection between the Faro Convention and archaeology and archaeologists. The Faro Convention does not use the word archaeology at all, except when unavoidable in its obligatory reference in the preamble to the Valletta Convention (Council of Europe 2005). The more developed 'book of the convention' ('*Heritage and Beyond*', Council of Europe 2009) also uses the word 'archaeology' rarely, in only four places. Two of those usages are incidental, almost accidental, and the third is a comparison with 'dance' ('disciplines as different as archaeology and dance', Fairclough 2009, 39); the fourth usage (actually the first, in the book's Preface) is almost dismissive: a 'preoccupation with traditional principles of conservation and archaeology has been replaced by a profound preoccupation with the processes of education, the economy, and the enrichment of cultural life' (Council of Europe 2009, 7). There are however 16 instances of the adjective 'archaeological', although nearly all are insubstantial and inconsequential (e.g. in the middle of long lists of related aspects of heritage); of the more substantive mentions, most, it has to be said, came in my own chapter and that by Noel Fojut. Archaeologist(s), i.e. those who (we assume) 'do' all the archaeology, are mentioned only twice, and again only in lists of various disciplines operating in and around the heritage field.

For some archaeologists, this invisibility is lamentable, a sign of loss of status or a downgrading, even a dangerous silence, especially when compared, for example, to the Valletta Convention (Council of Europe 1992), or an indication that the Faro Convention is not a concern for archaeologists. For others on the other hand, it could be seen as a sort of maturity, demonstrating that we do not need to hide behind the word and its 'otherness' because we have become firmly embedded in wider, inter-disciplinary and 'mainstreamed' activity. In the UK, 'PPG16' – the Planning Policy Guidance within the UK planning guidance on the treatment of archaeology (intended as both the activity and the material), a precursor of Valletta – was hailed when finally issued by government in 1991 as having put archaeology centre stage in the spatial planning process.

Both viewpoints have their flaws. The former view attempts to defend fences and barriers, not all of which are real or perhaps worth defending. It suggests, for example, that only 'archaeologists' can deal with heritage. It is a defensive, pessimistic viewpoint, a *laager* mentality, in which the gains and progress made since the 1960s in strengthening the heritage sector and its legislation, and in enlarging its political acceptability, are seen not as steps forward (and thus potentially temporary positions) to a larger and perhaps ultimately different goal but as the end in themselves, a final achievement that is vulnerable to loss or erosion precisely because it is 'final'. Drawing such an equivalence between value and risk is of course at the heart of much heritage discourse. It bears resemblance to a particular type of heritage thinking that does not see far beyond the possibility of threat, risk and destruction and therefore frames its actions defensively and negatively. When the advances of the 1980s and '90s are defended too strongly, however, it is easy for that defence to extend against further evolution and change. Such a defensive mentality can stand in the way of a deeper embedding in society at large.

The second viewpoint, on the other hand, while having the advantage of optimism, can err too far in the other direction in assuming that all parties within heritage are equally signed up to integration with other disciplines, to greater inclusion, to different approaches. In the UK, the term 'historic environment' was coined and used at least from the early 1990s to bridge the rifts (which were – are – disciplinary, philosophical and ideological) between so-called archaeological aspects of heritage (below ground, earthen, ruined) and the so-called architectural (buildings, townscape). As the years went by, however, it became clear that generally speaking only one side of that division was interested in new approaches and thinking.

Where does all this fit in the 21st-century 'crisis'? Have archaeologists been forgotten, written out of the Convention and thus out of political support and funding? Or have we successfully argued for holism, integration and interdisciplinarity only to discover that it is either too difficult to achieve, or requires

too many concessions – or that our partners are not truly enthusiastic, a coalition of the unwilling? Or is the concept of studying the past through material remains now so automatically interdisciplinary that the word archaeologist covers only a small part of the subject and its practice, and that many of those who 'do' archaeology fall outside conventional definitions of archaeologist – as physicists, chemists, historians, art historians, biologists and so on. Or (worse? better?) they are 'ordinary' people who do not belong to any discipline or profession, because studying the past, drawing it into your present-day life in the way that archaeological heritage management does, is an act that lies beyond disciplines, beyond the academy and beyond the professions? I'll return to this below; it involves issues of landscape and the Florence Convention (Council of Europe 2000).

I have always believed that the success in the UK of the heritage and conservation movement (which once – when I started travelling widely in other European countries, at about the same time that EAA, and shortly afterwards the EAC, began to operate – was said to be in the vanguard of such things) had less to do with, or was not fully explained by, any higher quality of theory or practice, or higher resources, and more to do with an inherent conservatism in the British population that set up favourable conditions. In my view this was caused, or at least underpinned, by a distinctively peculiar attitude to property and property values, and perhaps by two other things that are sometimes regarded as exceptional to Britain: an unusual continuity in political systems since the 17th century that makes the past seem automatically and ideologically relevant to the present day, and (perhaps paradoxically) an extremely early and thus now chronologically distant disconnection between people and their pre-industrial past that creates a nostalgia and a romanticism. In similar fashion, industrial archaeology became a sub-discipline only once our equally early post/de-industrialisation had begun to make itself felt – by mid-century. All this appears to encourage people in Britain to actually prefer to live in and amongst old buildings and to fight the slightest change to their surroundings; and I think it is this that drove the growth of the UK conservation and heritage movement. Other countries may have had different drivers, as well as different chronologies of heritage evolution.

Who are the archaeologists?

We come then to the question of who carries out archaeology, who are the ones who 'do' archaeology, 'who archaeolog' (as the new, rather grand, mother-in-law of one of my friends asked many years ago of the strange group of people my friend had invited to the wedding)? There is another question – why does heritage management work? Who makes it work? If 'archaeologists' is the answer to all these questions, then what actually is an archaeologist? It's a word I do not want to lose. I wanted to be one, and have been shaped by the word in many ways, but the range of what it represents has surely, in one way or another, outgrown the word. 'Archaeo-' . Do we only study old things? '-ology'? Do we only study? Is it only a branch of knowledge?

Does everyone do archaeology, in one sense or another? If (as Michael Shanks wrote somewhere, although I cannot now find the reference) '(a)rchaeology is (...) how people get on with the material world...', then everyone is probably an archaeologist, just as everyone is involved with landscape, knowingly or not. If so, 'archaeology' is not only our own certain idea of studying the past, but there are as many different ways of engaging with the present past as there are people. The European Landscape Convention's idea of landscape might be a way forward, as might a more explicit focus on the political or the ideological, and thus on people. On the other hand, one of the most frequently repeated (misquoted?) statements about archaeology in the Anglo-American world is Mortimer Wheeler's comment (e.g. 1954, v): 'the archaeologist is digging up, not things, but people', which seems to suggest that our fellow citizens are of interest only when they are dead. Another oddity is that attempts by archaeologists to 'involve' or 'engage' the public, to encourage 'participation', to 'share the excitement', usually end with 'us' telling them what 'we' have discovered or persuading them to act as archaeologists in our approved manner. All well and good, but is it enough? Faro envisages 'communities of heritage' that 'value specific aspects of cultural heritage' from community and customary interests – 'constantly evolving values, beliefs, knowledge and traditions' as the Convention describes it. Where is the role of the archaeologist? So, we may have a problem. But it is perhaps mainly one of confidence (lack of) and clarity (lack of – what is archaeology actually *for*?), and if so, one might argue, solutions might be in our own hands.

On the other hand, in asking how much has been achieved since the Valletta Convention, we might also ask why it achieved anything at all. After all, it is rather difficult now to point to very much that was achieved by its precursor (the first convention on the 'Protection of the Archaeological Heritage', signed in London in 1969); 'London' seems to have left little legacy, at least in day-to-day memory, although it is still in force, for example in Italy, which has not ratified the revised Valletta Convention. We might consider that it was not words on the page of a treaty that made the difference, but the social context into which they were published. Would Valletta have changed practice so much if it had been published in 1983 or 2003?

Valletta and its aims

In documentation preliminary to the symposium, the organisers raised a number of questions about the current state of archaeological work and practices in Europe 20 or so years since the Valletta Convention had been launched. The briefing note for the symposium, 'Setting the Agenda: Giving new meaning to the European archaeological heritage', suggested, *inter alia,* that some people 'have questioned whether our efforts have succeeded in achieving the goal of the (Valletta) convention', that '(Valletta) has not necessarily expanded our knowledge of the past', and that

'(increased) professionalisation ... has had an impact on the involvement of people outside the archaeological profession'. But what actually was the aim of Valletta? The statements just quoted imply that the aims included increasing archaeological knowledge and strengthening the profession. It appears that these things are seen to go hand in hand. Archaeological knowledge is created by archaeologists; they can do that job most effectively through professionalisation, therefore non-professionals are not fully archaeologists? I do not think any of these statements are conscious beliefs, but the unintended consequence of unexamined assumptions.

Other aims of Valletta were cited as being to increase 'our funding', and save 'our' evidential and scientific resource to enable continued and future exploration and expansion (by 'us') of knowledge. This is a fairly circular set of aims (which, ironically, given the connections between circularity and recycling, we supported with the rallying cry of 'non-renewable resource'). Where is the concern for other values beyond the evidential? Where is the concern for other views, opinions, aspirations, 'ownerships' or rights beyond those of (professional) archaeologists?

As a final aside, it is worth remembering that the way in which conventions, guidelines, even acts or parliament and other laws, are actually operationalised and implemented is very often not the same as how they are worded. Much of the large amount written about heritage legislation, for example (and comparatively across Europe in particular), does not take into account the nuances, inconsistencies and downright distortions of real-life practice. Real-life practice is impacted only partly by law, of course. Other factors have perhaps equal influence, such as – obviously – the constraints of funding, and of the political and institutional context within which decisions are taken, but also opposite tendencies, an ambition to head for new frontiers, to push boundaries, always finding ways to stretch regulations that little bit further. Then there is the balance between single-mindedness and compromise, when different values, such as those attached to archaeological sites by different groups, compete. There is the clash between archaeological and, say, ecological values, and the obvious meeting and reconciliation in one way or another of economic and preservationist pressures; the balance between collective and individual rights, between national and local valuations, and between minority and majority needs – all influence practice in sometimes unseen or opaque ways. Most of all, perhaps, and this should appeal to archaeologists, all laws belong to their own temporal (and temporary) context, and times change, as they say; indeed, times change faster than laws; the landscape – and perhaps even the environment – changes faster than laws, so what Valletta or Faro says is not also a true or accurate reflection of practice.

So Valletta can be taken to be – or perhaps more accurately has been taken to be – an instrument for strengthening and in some countries even creating the archaeological profession. This is more or less what PPG16 (and its later analogues in Scotland and Wales) became in the UK throughout the 1990s, building on strong trends already evident during the 1980s; regulation following practice, as with Valletta. What do the Valletta Convention's own words suggest it was intended to do? What words does it use? First its title: in the words 'protection of the archaeological heritage' we might overlook that surprisingly old-fashioned 'the' (who now, if not speaking of 'heritages', does not acknowledge the plurality of values ascribed to heritage)? Or does it tell us that Valletta was interested only in the things that archaeologists most value about heritage, that is, its evidential, scientific resource. We have all spoken or written in such shorthand, unintended, terms. But nevertheless, the title is 'protection of the archaeological heritage' not the 'protection of the archaeologist's heritage' or the 'strengthening of the archaeological profession'.

Let us look at the individual words in Valletta. 'Heritage' is used 35 times. Once (in the preamble) this is prefaced by the word 'common', but the other 34 usages follow the word 'archaeological'. In contrast, in the Faro Convention (2005) and the book 'Heritage and Beyond' (2009), heritage is used *passim*, but preceded by the word 'cultural' or 'common', not 'archaeological'. 'Archaeological' is used 48 times in Valletta (34 times before 'heritage', 14 adjectivising other words such as site, research, investigations); in contrast it is used only once in Faro and 16 times in 'Heritage and Beyond'. Finally, Valletta mentions archaeologists twice and archaeology three times (never in Faro, only twice and once in the book). That is a significant difference – the replacement of specific mentions of archaeology by the generic term 'heritage', which we have to assume includes archaeology. This has been a familiar trend in heritage and conservation discourse in the UK and other countries since the 1980s, as the different facets of heritage conservation (archaeological sites, buildings, townscapes) have been slowly integrated into a holistic concept of the historic environment. But not in all countries, and the separation of 'archaeology' from other planning or heritage disciplines and professions (and thus its continued narrower meaning) is more marked in many places than it is in the UK.

Archaeologists are thus scarcely mentioned in Valletta, even though the adjective 'archaeological' is common. But whilst almost invisible in Valletta, they are there, hiding inside the Trojan horse of 'archaeological heritage'. This worked as a mechanism to allow Valletta to strengthen the profession because underlying and guiding its operationalisation was an assumption that archaeologists are necessary for the study and management of the archaeological heritage. After all, one of the demands of the concept of a profession is that entry to it is circumscribed, its methods are regulated, and it claims exclusive rights to certain activities, resources and customs.

What did Valletta do?

So we must turn to Valletta's aims (the various emphasises below are mine). Article 1.1 says that 'The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and *as an instrument for historical and scientific study*'. In addition, Article 2 speaks of '...a

legal system for the *protection* of the archaeological heritage...'. In general terms, the Valletta text uses a majority of prohibiting, regulating, excluding and/or appropriating language that is suitable for creating a controlling professional structure. In Article 3, we read:

i. '...*authorisation* and *supervision*…(of archaeological activities)'
   a. 'to prevent any *illicit* excavation…'
   b. 'to ensure...a *scientific* manner ... non-destructive methods...wherever possible... (subsequent)... *proper* preservation... (etc.)'
ii. '...only by *qualified*, specially *authorised* persons'
iii. '...prior authorisation…(for) the use of metal and *any other* detection equipment or process…'

Cui bono? Who benefits from these restrictions? The answer seems to be those formally qualified to be archaeologists. Thus Article 5 is called 'Integrated conservation of the archaeological heritage', i.e. planning controls to *ensure rescue/prevent loss of archaeological evidence*. The aim is to protect heritage so it can be used in future as evidence, for research by archaeologists. The following examples show the same pattern: Article 6: 'Financing of archaeological research and conservation' – 'to increase the material resources *for rescue archaeology*'; Article 7: 'Collection and dissemination of *scientific* information' (we might ask who collects? Who uses?); Article 8: 'Exchange of material, pooling of information' (between whom?); and Article 9: 'Promotion of public awareness' (by whom? Why is the public not already aware, through participation?).

One of many commonly accepted models of why heritage is valued includes the following (leaving aside, for brevity's sake, the whole set of instrumental values to do with economic value):

- Evidential value: past human activity
- Historical value: connecting past to the present
- Aesthetic value: sensory and intellectual stimulation
- Communal value: meaning, identity, belonging.

The Valletta Convention focuses almost exclusively on the first. The Faro Convention (Council of Europe 2005), in contrast, acknowledges all of those values, and others, and does not privilege the evidential. For some, this threatens to exclude archaeologists, to refocus on aspects of heritage that archaeologists do not deal with, or do not have a monopoly on. We might remember the quotation from the Preface of 'Heritage and Beyond' – a 'preoccupation with traditional principles of conservation and archaeology has been replaced by a profound preoccupation with the processes of education, the economy, and the enrichment of cultural life' (Council of Europe 2009, 7). Heritage is not just archaeological, and is not just about evidential values. We can therefore ask whether a broad(er) definition of the *practice* of archaeology can lead to a broader understanding of the *identity* of archaeologists, of who archaeologists are.

One way of reading Faro is to see archaeologists as capable of working with all of Faro's ways of thinking. Another is to say that all – or rather, any – heritage community or specialist interest group or discipline can also work with archaeological materials and values. Faro offers the prospect, if not of taking down fences between disciplines or sectors, then at least of opening many gates through them, or removing border controls. This quotation from the abstract - 'Archaeology is not just for archaeologists. Large numbers consume the results of archaeological research as *passive* but interested followers...' (from the Symposium abstract) – contains some truth, but perhaps the problem is that we are using the word archaeologist in a counter-productively narrow way. It may be time to accept that all those other people who do things with the material remains of the past are also archaeologists, of a different sort perhaps, but archaeologists nevertheless. Have we (archaeologists) become prisoners of our own narrow definitions of what being an archaeologist is all about? We routinely complain that the general public, journalists and Hollywood (TV has improved in this respect) think archaeology is only about excavation and tearing objects from the ground or the tomb. Is it our own fault? There are other sorts of archaeologist.

There are many 'famous' archaeologists who are not Archaeologists with a capital A. We should exclude the fictional ones such as Harrison Ford and River Song; those mentioned here are all (with various degrees of 'construction') real people who express or have expressed a wish to have been or to become an archaeologist. Bill Wyman (a Rolling Stone), famously is one such; he co-wrote the book Bill Wyman's Treasure Islands: Britain's History Uncovered, History Press (2005). Lewis Moody (an England rugby team captain): 'As a boy I'd spend hours digging holes in our garden and get really buzzed finding clay pipes and old bottles. I watch Time Team with Tony Robinson religiously'. Eva Mendes (a Hollywood actress): 'I'm a wannabe archaeologist. I could just excavate – I always think I'm gonna find a hidden tomb somewhere.' McKenzie Crook, British film actor, who in late 2014 appeared on British TV in the BBC sitcom 'Detectorists' and Penelope Lively, novelist and self-styled 'archaeologist manqué'; her novels are archaeological in their treatment of time and its passing. There are many types of archaeologist...

New modes of doing archaeology have started to appear. To take examples only from the UK, England has 'DigVentures', in its own words 'an innovative social enterprise committed to designing, developing and delivering community archaeology projects', often working through crowdsourcing (Link 1). In Scotland, a professional archaeological company, Northlight, carries out the management and investigation of archaeology including to community groups and the public sector, operating in the belief that '...business is about more than the accumulation of wealth... reinvesting our surpluses from commercial work, we develop initiatives and projects ... to bring social and environmental benefits and build positive relationships ... to enhance the relevance and value of cultural heritage to society by encouraging engagement with the past for the benefit of people's lives in the present and future' (Link 2). Similar enterprises exist in Scandinavia and other countries. There are archaeological research programmes predicated on large-scale community

involvement – for example Carenza Lewis' programme 'Access Archaeology Cambridge' (Link 3) and SHARP (the Sedgeford Historical and Archaeological Research Project), 'a long-term archaeological research project, whose primary objective is the investigation of the entire range of human settlement and land use', one of the largest independent archaeological projects in Britain and firmly rooted in the local community (Link 4; SHARP 2014).

These are beginnings. Are they practical and feasible as new models for a 'new' (or is it a reinvention?) type of archaeologist? Is it the re-creation of an 'amateur' sector?

The Faro Convention is not Valletta 2

The Faro Convention has wider concerns than Valletta, notably the ideas of democracy, participation and human rights into which it roots heritage, and whose achievement it suggests heritage can contribute to (as opposed simply to protecting itself as a renewable resource). It defines heritage very much more broadly, not just as things, but as relationships and processes. It encourages new paradigms, just as the 'critical heritage' or 'new heritage' movement does (Fairclough et al. 2008; Holtorf & Fairclough 2013). It seeks to draw people and human values to centre-stage of an enlarged and cross-disciplinary – or to be more accurate trans- or even post-disciplinary – concept of cultural heritage: 'Every person has a right to engage with the cultural heritage of their choice, while respecting the rights and freedoms of others' and 'the need to involve everyone in society in the ongoing process of defining and managing cultural heritage' (Preamble).

Table 1.1 juxtaposes typical Faro Convention statements against a few key articles from Valletta, to demonstrate the distance between the two conventions in terms of theory and philosophy. There is little overlap in vocabulary and perhaps even less in concerns, ideas and principles. This is how far Council of Europe thinking has moved in the twenty or so years between the compilation of Valletta and the writing of Faro. The important question for EAC, in terms of mapping the short-term directions of archaeology, is whether archaeological thinking has kept pace.

The road from Valletta to Faro was not straight, however, nor singular. One track, as hinted above, travelled though the realm of human rights, while another – perhaps of more direct interest to archaeologists – moved through the landscape. Faro's precursor is not really Valletta but its elder sister, Florence, the European Landscape Convention (Council of Europe 2000), which began its long discursive evolution in c. 1993, at the time of the issuing of Valletta, and reached maturity in 2000. Faro's wide definition of cultural heritage – 'all aspects of the environment resulting from the interaction between people and places through time' (Art. 2) – owes much to the ELC's definition of landscape: 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors' (Art. 1a).

More fundamentally, Faro's conviction that heritage is instrumental in providing or contributing to social and economic benefits and wellbeing echoes the ELC's view that landscape as a tool contributes to sustainability, social cohesion, environmental health and many other aspects. Both conventions suggest that landscape and heritage are issues of human rights. For landscape, this argument is taken further in the ESF/COST science policy briefing 'Landscape in a Changing World' (ESF/COST 2010). Its messages apply implicitly to heritage as well, not least because the effect of the Faro and Florence Conventions when read alongside each other is to dissolve many of the boundaries between landscape and heritage. A line of thought that sees landscape as an aspect of heritage, recognises heritage and the inherited past (archaeology, if you like) as one of the fundamental contributors to landscape's character, and recognises that both landscape and heritage are intangibles whose significance and meaning depends on human perception and people's attribution of values, soon leads to a questioning of whether the two concepts are just different ways of describing and working with the same ideas.

Similar unifying concepts such as biodiversity or ecosystems services that have emerged from other disciplines are also largely the same concept expressed in different vocabularies. This precise overlap between landscape and heritage (Bloemers et al. 2010), or perhaps synergy or fusion is a better word, is at the centre of one of the European Joint Programming Initiative on Cultural Heritage's pilot projects, the CHeriScape network. It is interdisciplinary, but with a strong, if not quite dominant, archaeological dimension in its core team. It works by organising interdisciplinary conferences on a thematic basis to explore the benefits and opportunities of harnessing the powerful landscape and heritage concepts to co-ordinated goals that are above and beyond the protection of our own research resource. (Link 5).

Thus there is a lot more to archaeology and archaeologists than the past, such as heritage, landscape, and much else. Where is the role of the archaeologist? Everywhere! If we have confidence in what we do, laws or prohibitions are unnecessary and we can survive through partnership, integration, co-operation and multi/inter/trans-disciplinary modes. There are solutions and new pathways out there. For instance, interdisciplinarity is commonplace today, social relevance and impact are prerequisites for most publically funded research, and 'clustering' to meet big challenges is fashionable. All of those things come almost naturally to those trained as archaeologists and even to those who are untrained but who strive to use material resources to understand the past, the landscape and the present day. Even funding and employment is out there, somewhere. The Faro and Florence Conventions offer new stages for performing archaeology, new opportunities to use skills and knowledge. 'Ecosystems services' (yet another word to describe the ways in which people interact with, live in and 'see' their world), the environmental humanities, cultural sustainability, politics – these are all arenas in which archaeological practice has a place.

Valletta articles:		Faro's loosely equivalents articles
Article 1	'The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.'	• '…rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights;' • '…individual and collective responsibility towards cultural heritage;' • '… the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal;' • 'the role of cultural heritage in the construction of a peaceful and democratic society, ...sustainable development and the promotion of cultural diversity;'
Article 2	'...a legal system for the protection of the archaeological heritage...'	• 'cultural heritage…which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions.' • '…all aspects of the environment resulting from the interaction between people and places through time;' • 'a heritage community consists of people who value specific aspects of cultural heritage…'
Article 5–10	Art. 5: 'Integrated conservation of the archaeological heritage'- i.e. planning controls to ensure rescue/preventive loss	Art. 5: '…legislative provisions...for exercising the right to cultural heritage'; '…participation in cultural heritage activities;'
	Art. 6: 'Financing of archaeological research and conservation' - '…to increase the material resources for rescue archaeology'	
	Art. 7: 'Collection and dissemination of scientific information'	Art. 7: 'Cultural heritage and dialogue' - '…reflection on ethics…'; '…respect for diversity of interpretations'; '…conciliation to deal equitably with…contradictory values'; '…peaceful co-existence by promoting trust and mutual understanding…'
	Art. 8: '…exchange of elements of the archaeological heritage…pooling of information…'	Art. 8: 'Environment, heritage and quality of life' - '…economic, political, social and cultural development and land-use planning…'; '…cultural, biological, geological and landscape diversity…'; 'reinforce social cohesion by fostering a shared responsibility towards...places…'
	Art. 9: 'Promotion of public awareness'	Art. 9: 'Sustainable use of the cultural heritage' - '…respect for the integrity of the cultural heritage'; '…sustainable management…'; '…skills based on tradition, and explore...contemporary applications'; '…professional qualifications and accreditation…'
	Art. 10: 'Prevention of the illicit circulation of elements of the archaeological heritage'	Art. 10: 'Cultural heritage and economic activity' - '…the economic potential of the cultural heritage'; '…take into account the specific character and interests of the cultural heritage…'; '…respect the integrity of the cultural heritage without compromising its inherent values.'

Table 1.1: Valletta and Faro – comparing language and concepts

Conclusions – embedding archaeologists in society's archaeology

'Embedding archaeology in society'? My conclusion is that 'archaeology' is already embedded in society, in terms of its popularity, general levels of interest, its profile as something glamorous and interesting to claim to 'wannabe'. What is perhaps not embedded is an accurate image of what archaeologists really do and who they really are (see Holtorf 2007; and note that even the 'best' TV depictions stray towards caricature). But that is hardly a novel observation; we have been saying for decades that we need to explain our work better to 'The Public'.

This gives rise, however, to a thought that is perhaps uncomfortable. What if the public do not wish to revise their view of what archaeology (and an archaeologist) is, or should be? Faro implies, through concepts such as 'heritage communities' and participation in and identification with different aspects of heritage, that those other versions of archaeology are already deeply embedded in society and that they are different to 'our' version. What if the professionalised, academically rigorous brand of archaeology is not the qualitative and intellectual mainstream, something to be regulated and buttressed by all the apparatus of a profession, but a secondary channel or a tributary of the river (let's be optimistic and hope it is not an oxbow lake)? Or are we actually downstream, to expand the metaphor – is

professional archaeology only one branch of a delta system?

None of this would necessarily denigrate or reduce the importance of 'doing archaeology properly (professionally)'; that remains crucial for all the obvious reasons. It might however revise how we see its relationship to other ways of 'doing archaeology' that we might otherwise be tempted to think of as inferior or flawed. We can in fact see this process of rebalancing happening over the past generation. Re-enactment, once mainly looked down upon by academic or professional archaeologists, was first accepted, and then adopted in the professional mainstream. Metal detecting, once almost universally condemned, first became a tool used by archaeologists under limited controlled circumstances, then (as in the UK with the portable antiquities reporting scheme) became accepted, its contribution to knowledge growing, and is 'criminalised' only in very limited circumstances. Even excavation, that supposedly defining act of archaeology, was frequently carried out not all that long ago (even at the start of my own career) by so-called 'unqualified', 'non-professional' community groups. It then became almost a closed shop for professional and trained archaeologists, and has recently begun to return to those origins in the form of community archaeology and similar initiatives. The latter change is perhaps forced on us by political and economic circumstances, but is surely bringing more positive benefits. The emphasis of such excavations is again on the act and fun of digging (which surely motivated most of us at the outset?), not necessarily on the intellectual product of new knowledge, although process and product can be combined very easily for many types of reasons. The conviction that excavation should rarely happen except as emergency rescue work, and only ever with fully accredited research questions, represented a high-water point of professional control, and tides always retreat from the high mark. A part in this sea-change has been played by decreased anxiety about the archaeological resource being finite, as we find ever more archaeological sites, partly by virtue of extra fieldwork, partly by recognising that sites are more loosely defined, and partly by broadening definitions, especially temporal ones.

In short, it is worth considering whether the task of the next generation is not to embed archaeology in society, but to embed 'capital-A' Archaeologists into society. We might start by recognising and working with the depth of embedded-ness that exists (and perhaps always has). If we listen instead of speaking – hear what the public is saying, observe what they think and do – instead of just talking, presenting or teaching – we might see a different picture. Perhaps we are the ones who have been left out of, or rather chose to step outside, the big tent of popular socially-embedded interest in the material remains of the past. To re-enter might require us to be more reflective of our own position rather than always trying to 'educate' public understanding. All this of course is also reflective of current ideological and political changes. But the way that archaeology has been practised has always – like almost all forms of socially-constructed human habits – been contingent on changing, passing circumstances and transient consensus. Absolute values are only temporarily absolute.

References

Bloemers, J.H.F., Kars, H. & Van der Valk, A. (eds) 2010: *The cultural landscape and heritage paradox: Protection and development of the Dutch archaeological-historical landscape and its European dimension.* Amsterdam University Press, Amsterdam.

Council of Europe 1992: *European Convention on the Protection of the Archaeological Heritage (Revised)*, European Treaty Series 143, Strasbourg.

Council of Europe 2000: *European Landscape Convention*, European Treaty Series 176, Strasbourg.

Council of Europe 2005: *Framework Convention on the Value of Cultural Heritage for Society* (Faro Convention.), European Treaty Series 199, Strasbourg.

Council of Europe 2009: *Heritage and beyond*. Strasbourg: Council of Europe Publishing, http://www.coe.int/t/dg4/cultureheritage/heritage/identities/PatrimoineBD_en.pdf.

ESF/COST 2010: *Landscape in a Changing World - Bridging Divides, Integrating Disciplines, Serving Society*. SPB41, Strasbourg / Brussels: ESF/COST, http://www.esf.org/fileadmin/Public_documents/Publications/SPB41_Landscape_ChangingWorld.pdf.

Fairclough G.J. 2009: New Heritage Frontiers, in Council of Europe (ed.): *Heritage and beyond*, Council of Europe Publishing, Strasbourg, 29–41.

Fairclough, G., Harrison, R., Jameson J.J.Jr. & Schofield, J. (eds) 2008: *The Heritage Reader.* Routledge, London/New York.

Fairclough, G.J. 2006: A new landscape for Cultural Heritage Management: characterisation as a management tool, in L.R. Lozny (ed.): *Landscapes Under Pressure: Theory and Practice of Cultural Heritage Research*, Springer, New York, 55–74.

Fojut, N. 2009: The philosophical, political and pragmatic roots of the convention, in Council of Europe (ed.): *Heritage and beyond*, Council of Europe Publishing, Strasbourg, 13–21.

Holtorf, C. 2007: *Archaeology is a Brand!: the meaning of archaeology in contemporary culture*. Archaeopress, Oxford.

Holtorf, C. & Fairclough, G. 2013: The New Heritage and re-shapings of the past, in A. González-Ruibal (ed.): *Reclaiming Archaeology: Beyond the Tropes of Modernity*, Routledge, London/New York, 197–210.

SHARP 2014: *Digging Sedgeford: A People's Archaeology* [Faulkner, N., Rossin, G.& Robinson, K. (eds)], Poppyland Publications.

Wheeler, M. 1954. *Archaeology from the Earth*. Clarendon Press, Oxford.

Websites:

Link 1: http://digventures.com/

Link 2: http://www.northlight-heritage.co.uk/index.html

Link 3: http://www.access.arch.cam.ac.uk/

Link 4: http://www.sharp.org.uk/

Link 5: http://www.cheriscape.ugent.be/

2 | From Malta to Faro, how far have we come? Some facts and figures on public engagement in the archaeological heritage sector in Europe

Monique H. van den Dries

Abstract: The 15th anniversary meeting of the Europae Archaeologiae Consilium (EAC), held in March 2014 in Amersfoort (the Netherlands), aimed to set the agenda for national heritage agencies in Europe. Embedding archaeology in society in accordance with the spirit of the Council of Europe's Faro Convention (2005) occupied a prominent place. As the sector's engagement with the public has been on the agenda for several decades now, the author discussed during the meeting how far the discipline has progressed in this respect. The discussion continues in this paper, based mainly on the results of two recent pan-European studies among professionals working in archaeology: an EAC survey (2013) and the Discovering the Archaeologists of Europe (2012–2014) survey, which provide some relevant insights.

Keywords: Malta Convention, Faro Convention, public engagement, EAC survey results, DISCO survey results.

Introduction

In Europe, disseminating archaeological knowledge and raising public awareness are acknowledged to be intrinsic aspects of contemporary archaeology. Ever since the emergence of both systematic care for our archaeological sources and the concept of public archaeology, the archaeological community has been keenly aware of the importance of public support and the fact that archaeology can only exist while the public is interested in it, as this interest generates legislation to protect heritage and funding to study and preserve it. Nowadays, engagement with society is a basic principle that is enshrined in professional standards, conventions and national heritage policies. It is formally supported by almost all members of the Council of Europe, as they have signed the 1992 (revised) European Convention on the Protection of the Archaeological Heritage. Article 9 of this 'Malta Convention' states that each Party should undertake educational actions to develop public awareness of the value of archaeological heritage and should promote public access to important elements of it. The Convention does not say how this should be done, what it means or implies for the audience that is to be involved, nor when these goals are reached, but it is clear that the intention is binding and comes with obligations. Even if Article 9 is not implemented in an individual member state's national legislation, signing the Convention means that a State Party accepts endorsement of and compliance with all its principles.

Taking the audience into account is also a moral obligation: it is not just a self-imposed standard, but it is what society in fact expects from the archaeological sector. We hear this everywhere – from politicians and policymakers to members of the public and any other stakeholder. Whenever a mayor, a member of parliament, or a minister of culture talks about archaeology, they always highlight its values for society – its economic, aesthetic, educational and social values. Tourism, cultural education and active participation in cultural activities in particular are seen as high-impact factors for socioeconomic development.

In fact, European authorities have come to promote the idea that every individual has the right to engage with the cultural heritage of their choice. By this they mean cultural heritage in its broadest sense, including archaeology. This message is grounded in the strong conviction that cultural heritage has societal value and the potential to enhance people's well-being and quality of life. It is explicitly set out in the Council of Europe's Faro Convention on the Value of Cultural Heritage for Society (2005), which aims to involve everyone who so wishes in the process of defining and managing cultural heritage. The message is also actively disseminated through the policies of the European Commission's culture sector, which says that 'Cultural heritage enriches the individual lives of citizens, is a driving force for the cultural and creative sectors, and plays a role in creating and enhancing Europe's social capital. Moreover, it is an important resource for economic growth, employment opportunities and social cohesion, thanks to its potential for revitalising urban and rural areas alike and promoting sustainable tourism' (Link 1). The European Commission (2014) has just sent out a communication to the relevant European bodies, the Parliament, the Council and its relevant committees, to promote a European-wide approach to cultural heritage in order to better protect and enhance the values of heritage for society. Even some national policies nowadays acknowledge that active participation in cultural heritage contributes to a person's well-being and personal development; see, for example, the latest vision on policy of the Dutch Minister of Culture, of 2013, in which she mentions research showing that active participation in culture adds to the well-being and personal development of

elderly people (Ministerie van Onderwijs, Cultuur en Wetenschap 2013, 8).

We can see all around us the archaeological discipline's response to society's wishes and expectations and to the directives on public engagement within professional standards. Many efforts are being made throughout Europe to disseminate research results to the public and to organise educational and other outreach activities. Hundreds of examples can be cited, some highly creative and innovative, others more traditional and conservative. In countries where commercial archaeology has been introduced, such as the Netherlands, it is not only national and local authorities that consider this an important task, contractors do too. Informing and educating the public has even become a business in its own right (Van den Dries & Van der Linde 2012).

On the strength of these observations, we might feel that the archaeological discipline is doing what Article 9 of the Malta Convention intends. Despite the large discrepancies between the various European countries, we might even feel complacent. But should we? How are the parties to the Malta Convention actually progressing when it comes to embedding society in archaeology? And to what degree is the archaeological sector already engaging with society in the spirit of the Faro Convention?

Ideally, the answer to these questions should be deduced from objective, dedicated studies and factual data rather than superficial observations. To my knowledge, however, there are no such pan-European evaluations available as yet. The only two recent pan-European studies to currently shed light on these issues are a survey conducted by the EAC on the views of its members with regard to the implementation of the Malta Convention (Olivier & Van Lindt 2014) and the Discovering the Archaeologists of Europe (2012–2014) project. The first is based on a questionnaire filled out by EAC members from 34 European States; the second is a joint venture in which organisations from 21 countries participated, including the European Association of Archaeologists (EAA). It was funded by the European Commission's Lifelong Learning Programme to explore the nature of the archaeological profession and to profile the labour market (Link 2).

EAC survey results

Given the large number of member states that have so far ratified the Malta Convention (41 as at July 2014, with three more countries having signed it), it is one of the Council of Europe's more successful conventions. European national heritage agencies also continue to regard it as the core text for managing archaeological heritage in Europe (Wollak 2014, 7). A recent survey on its implementation, conducted by the overarching body (EAC) of the heritage agencies, shows that over two-thirds (68%) of the 34 states that participated view the implementation as successful, even though 59% also report that some aspects need further attention before it can be considered as being fully implemented in their respective countries (Olivier & Van Lindt 2014, 169). A majority of the respondents (56%) felt that implementation has resulted in significant achievements (idem.). The Convention has without doubt dramatically changed the way archaeological heritage is managed in Europe.

However, does the same apply to the principles and articles relating to engagement with society and dissemination of knowledge, for which the Convention also provides the main foundation? This does not seem to be the case. The positive testimonies mainly relate to the protection and preservation of the archaeological record and to financial performance measurements. The respondents are far less optimistic about issues relating to audience engagement. Twenty of the 34 participating member states – or almost 60 per cent – indicated that Article 9 has not yet been successfully implemented (Olivier & Van Lindt 2014, 168). In fact, of all articles, Article 9 emerged as the least implemented.

In terms of the level of successful implementation, the difference between Article 9 and the other articles is not huge. It is worth noting, however, because in the areas of dissemination of knowledge (Article 7) and international exchange (Article 8) too, very few respondents reported significant achievements that could be ascribed to the implementation of the Convention (idem). This suggests that valorisation and dissemination are less well-developed across the board. Less than five people reported positive results for each of these three articles, whereas about 30 percent saw significant achievements for each of the other articles. The researchers therefore concluded that these articles are accorded a lower priority than ones relating to preservation, conservation and financing (Olivier & Van Lindt 2014, 169). Although there may be considerable differences between the participants' countries, the overall low success rate for implementation of these articles should be an important argument for EAC keeping the sector's engagement with the public at the top of its agenda.

Results of the DISCO survey

The DISCO project aimed to describe the archaeological profession and labour market throughout Europe by compiling information on matters such as the main tasks carried out by employees, employee contracts, employer appreciation of their skills, and the need for and availability of vocational training (Figure 2.1). Although the issue of public engagement was not the specific focus of this project, some of the results from the various countries do indicate the degree to which this aspect is embedded in the profession within Europe. It should be stressed, however, that although these figures are the best we have at present, we should be cautious about making generalisations. This is because in some cases the respondents were not highly representative, and because the surveys were geared to national circumstances, which suggests that the results are not fully comparable across the different countries.

Time spent on dissemination and outreach activities

The first interesting aspect that was measured in quite a few countries is the size of the workforce involved in

Figure 2.1: 21 countries participated in the 2012–14 study on profiling the archaeological profession in Europe (© Discovering the Archaeologists of Europe Project).

public outreach and other dissemination activities and the amount of time spent on these 'non-archaeological' activities. In Portugal for instance, tasks such as dissemination, publication and exhibiting made up 8% of the job functions, while heritage awareness activities made up another 4% (Costa et al. 2014, 65). In Cyprus, 'museum and visitor/user services' was currently the principal task of only 5.2% (5 out of 96) of individual archaeologists (Prokopiou & Alphas 2014, 61), compared with 19% in the earlier DISCO survey of 2007. In Slovenia and Italy this figure was slightly higher – 21% and 23% respectively (Pintucci & Cella 2014, 18). In Slovenia five organisations from a total of 23 that participated stated that their main activity was museum and visitor services (Kompare, Lazar & Pintarič Kocuvan 2014, 23). These are exclusively public institutions. A slightly larger, unspecified group was involved in educational activities, organising events and promoting heritage (idem, 25). Of the individuals who participated, 15% gave museum work as their main activity (Kompare, Lazar & Pintarič Kocuvan 2014, 48). In Italy, visitor/user services also featured on the list of activities of private organisations (Pintucci & Cella 2014, 48).

In Poland and Germany, these percentages seem to be much higher. In Poland 39% of 887 respondents mentioned that their job involves museum or visitor services (Liibert et al. 2014, 44). This predominantly involved public institutions rather than universities and private organisations. In Germany it was the other way around, with 51% of private companies performing museum activities and 25% of the public bodies (Bentz & Wachter 2014, 23). In Latvia this was measured differently, with respondents indicating on a scale from 1–10 how important the organisations considered the 'popularisation of archaeology'. The scores ranged between 2 and 7, meaning that none saw it as not important and gave it a 1 (Šnē, Vijups & Mintaurs 2014, 19). The fact that none scored this role higher than 7 also indicates that it is not of prime importance either. This is rather remarkable as 8 of the 19 respondents work in a museum.

Only companies were consulted for the Spanish report, but out of a total of 147 respondents, 61% indicated that they conducted dissemination activities, 35% performed educational tasks and 9% provided some form of entertainment (Parga-Dans & Varela-Pousa 2014, 16–7). This seems quite a lot, but the time spent on these activities was rather low; the majority of the 68.5% of companies carrying out educational activities dedicated a maximum of 10% of their time to such activities (idem, 21). The situation is similar for dissemination, with 91.6% spending less than 30% of their time on these tasks (idem, 21). According to the authors, it was a significant line of business (on which they spent most of their time) for only 5% of these companies.

In the Netherlands it emerged that 62% of the 114 respondents saw public and conservation as one of their main activities (Van Londen et al. 2014, 32). For municipalities in particular, this seems to be one of the key tasks, with 34 out of 36 respondents working on this kind of activity (idem, 31). Interestingly, this activity scored only slightly lower than policy and consultancy (64%), but higher than fieldwork and research (59%). Exactly how much time was spent on these activities was not measured, but respondents were asked how the work was spread across the main activities. Only 4% of the 114 participants indicated that 'public and conservation' was their principal or sole activity (idem, 32). This percentage is rather low and has fallen considerably since the first Dutch DISCO report, when 16% of the respondents gave 'museum, visitor and presentation services' as their principal role (Waugh 2008, 22).

In the United Kingdom survey, the activity of 'museum and visitor/user services' accounted for only 8% of the roles that all employers (234) reported on (Aitchison & Rocks-Macqueen 2014, 49). It was the primary task for only 2% of the organisations that responded. This is very low, and has partly to do with the fact that the proportion of respondents from the 'museum and visitor/user services' domain was much smaller than in the previous DISCO project from 2007–2008: 2% compared with 14% then. This could be a consequence of the global economic downturn, which was severely felt in the United Kingdom. The number of archaeologists employed has fallen by an estimated 30% (around 900 jobs), with a loss of at least 31 organisations engaged in archaeology (idem, 45–6) and of three museums (idem, 39).

It would be worth investigating whether the crisis has affected visitor and user services more severely than other activities and sectors within the profession, because there are indications that this might be the case in some countries. In Cyprus, for instance, we see that there were 10 people working on museum and visitor services in 2007, compared with five in 2012, despite a growth in the number of organisations (from 16 to 19) and archaeologists (from 52 to 96), and a virtual doubling of the number of survey participants (Prokopiou & Alphas 2014, 62).

In the United Kingdom the crisis seems to have affected contracts in the 'visitor and user services' sector, as the percentage of permanent positions has fallen compared with the earlier DISCO survey (2007–2008), whereas it has increased in the 'field investigation and research' and 'educational and academic research' sectors (idem, 127–128). The opposite is the case in Cyprus, where the ratio of temporary and permanent contracts was most stable for people providing museum and visitor/user services. It remained the same between 2007 and 2012 (Prokopiou & Alphas 2014, 83).

A curious situation also occurred in the Czech Republic. While employment in the profession as a whole rose by 22% (from 778 to 952) between 2008 and 2013 and the number of organisations increased in all sectors, the museum sector has shrunk (Frolík & Mácalová 2014, 51–2). Moreover, the annual salary of archaeologists working in the Czech museum sector, when averaged across national, regional and local levels, is less than in most other sectors (idem, 47). In the United Kingdom the domain of museum and visitor/user services is also one in which respondents have hardly any plans to invest in the coming years (Aitchison & Rocks-Macqueen 2014, 77).

With some local exceptions, the overall picture revealed by these figures is that public engagement work does not feature prominently as a part of professional activities in many countries. The data might not show the whole picture, however, as some countries measured only the first and main activity of an organisation. This suggests that they may conduct visitor services and public engagement activities that have not been recorded in the DISCO survey. Nevertheless, it is clear that when visitor services do represent a substantial field of work involving many people, the amount of time spent on such activities is relatively low. It does not seem to be a priority for the profession.

Gender balance

Partners from the United Kingdom and Cyprus also measured the gender balance within organisations in relation to their principal roles. In the UK, museum and visitor/user services are mostly staffed by female archaeologists (Aitchison & Rocks-Macqueen 2014, 94), with a proportion of 67% female and 33% male. This is remarkable as overall gender participation rates in archaeology in the UK are nearly balanced, with 46% female and 54% male. In Cyprus the overall balance is the opposite of the UK, with a female dominance of 69% against 31% males. The proportion in visitor services is 60% female and 40% male (Prokopiou & Alphas 2014, 63). Thus there are more women working in visitor services in Cyprus, but fewer than one would expect based on the overall gender balance. It is striking though that in 2007 the proportion of women with visitor-related tasks was also higher in Cyprus – 70%. Interestingly, in the last survey the people involved were all over 30 years of age, and the majority even older than 40. No new, young archaeologists seem to have entered the profession in Cyprus with visitor services as their principal task (Prokopiou & Alphas 2014, 63).

Other observations on a European scale mirror this unbalanced gender division. For instance, a current analysis of session topics and paper presentations at twenty EAA annual conferences shows that more women than men are involved in organising sessions on topics relating to public engagement and heritage education (Van den Dries & Slappendel, in prep.). Given the steadily growing proportion of women working in archaeology in Europe that is visible in many DISCO reports, this might suggest that, if these trends continue, more attention may be paid to engagement with the public in the future.

Quality management

The surveys of the Italian, Cypriot, Irish, Dutch, Romanian and British DISCO partners asked how many organisations in their country have an official quality certificate (such as ISO). Not surprisingly, in most countries only a tiny minority of the organisations hold ISO certification: 17.3% in Italy (Pintucci & Cella 2014, 50), 16% in Cyprus (Prokopiou & Alphas 2014, 37),

10% in Ireland (Cleary & McCullagh 2014, 48), 7% in the Netherlands (Van Londen et al. 2014, 50), and 4% in Romania (Borș & Damian 2014, 51–2). However, this includes organisations that perform public services, which may indicate that in these countries this task is taken as seriously as other tasks when it comes to quality assurance. The Netherlands survey also asked how many apply a quality management system for activities relating to public and conservation – only 5% of the 76 respondents do so.

The United Kingdom has many more organisations with a quality certificate (47%), 12% of which are ISO-certified (Aitchison & Rocks-Macqueen 2014, 65). However, these do not include organisations that are active in the field of museum and visitor/user services (idem, 63). The data is limited, but this in itself is a further indication that quality assurance does not yet seem to be a priority for public outreach activities.

Skills gaps and investment in training

It would also be useful to know how employers value skills with regard to dissemination and outreach activities. Some reports mention public outreach skills as one of the requisite qualifications that employers ask for when hiring personnel. In Norway, for instance, over 50% of all employers said that they require skills in this area (Schenck 2014, 63). This is an indication that engaging with the public, at least disseminating research results, is viewed as an important task. Not all participating countries specified this in the same way, however. Sometimes this question was only asked in relation to archaeological skills, and in many reports outreach activities are not viewed as archaeological skills.

The report on Austria points out a need for more expert skills for activities relating to visitor services, such as exhibition design, saying that there is actually a relatively high demand for such skills (Karl & Möller 2014, 72). On the other hand, when asked about their training plans for the next two years, none of the organisations had exhibition design on the agenda (idem, 75). In other cases, such as Poland, overall satisfaction with employee skills seems to be good, with only 64 of the 152 responding organisations answering questions on skills shortages (Liibert et al. 2014, 45). However, 11% of them indicated that employees lack adequate multimedia skills (idem, 45). The precise context was not specified, but it may relate to communication, visitor and museum services.

In Bosnia Herzegovina, Slovenia and Cyprus, institutions generally claim to be satisfied with the education level and training of their staff upon starting their employment (Lawler 2014, 32; Kompare, Lazar & Pintarič Kocuvan 2014, 36; Prokopiou & Alphas 2014, 147). In the first two countries only five employers (out of 13 institutions in Bosnia Herzegovina and 12 in Slovenia that took part in the questionnaire) stated that they find new staff lacking sufficient understanding and/or training in particular areas of the job (Lawler 2014, 32; Kompare, Lazar & Pintarič Kocuvan 2014, 36). In Cyprus all respondents consider new entrants to the profession to be well or even very well equipped. In Bosnia Herzegovina several people (4 out of 18) nevertheless said that their organisation should improve its public outreach through educational activities, both for the general public and for experts and academics (Lawler 2014, 53). In Slovenia too, the development of 'education and training' skills – together with information technology and project management – has the highest priority of employee training in the next two years (Kompare, Lazar & Pintarič Kocuvan 2014, 41). In Cyprus it was given second priority among the non-archaeological skills, after information technology (Prokopiou & Alphas 2014, 138).

In the Slovak Republic the museum sector was well-represented in the survey, with 35 out of 74 respondents (Krekovič & Staššíková 2014, 25). Notably, it is the museum sector where a majority (10 out of 19 respondents that answered 'yes' or 'no') indicated their dissatisfaction with the quality of education and training of the archaeologists they employ (Krekovič & Staššíková 2014, 45). Here the authors comment that the previous DISCO project showed a higher level of satisfaction with education. They interpret the deterioration in perception of quality of education as a possible consequence of the increasing demands placed on fieldwork documentation or museum activities (idem, 46). As the museums in the Slovak Republic also conduct archaeological fieldwork, it is not clear from the survey whether their dissatisfaction relates to fieldwork skills or to skills needed for dissemination activities. But since their other main activity is organising exhibitions and events with archaeological content (idem, 13), we can assume that they had this activity at least partly in mind when answering the question about quality of education.

The situation is similar in Latvia. The museum sector is the second largest sector represented in the survey, with 8 out of 27 respondents. The interest in vocational training and education on the part of Latvian archaeologists mainly concerned data processing programmes (mentioned 12 times) and project management (mentioned 8 times). In third place was preparation of expositions and virtual reconstructions, both of which were mentioned 7 times (Šnē, Vijups & Mintaurs 2014, 27–8).

In Norway, employers in all sectors (private, state, local authorities and universities) indicated that public outreach is one of the aspects their employees lack at the start of their career (Schenck 2014, 65). The Dutch DISCO project also reports a lack of skills in the area of 'public and archaeology', even though employers are generally satisfied with the skills of their employees. This category was ranked third (with 9%), after a lack of knowledge of policy instruments and of the Dutch Quality Standard, which had 21% and 10% respectively. 'Public and archaeology' had the same score as 'writing skills' (also 9%) (Van Londen et al. 2014, 87). Fortunately, this has improved, as the first Dutch DISCO project of 2007/2008 showed that 11% of the contributors experienced a gap in this area. Unfortunately, the latest survey shows that when it comes to investment in training, money was spent on 'archaeology and the public' in only 7% of cases where training programmes were in place. This category was ranked sixth out of a total of 12 training subjects that could be identified.

In Germany, many organisations working in the area of exhibition design hire external specialists. It is in fact the second highest category (mentioned 10 times by 59 organisations), after information technology, for which expertise is hired. The extent to which they plan to train their own employees in this knowledge domain is relatively small, however; it was mentioned only three times as a potential training topic (Bentz & Wachter 2014, 77).

Estonia seems to show a different picture. Most employers (51%) were satisfied with the skills of their employees at recruitment (Ulst et al. 2014, 57) and only 4% and 7% respectively mentioned public relations (including public presentations, media communication) and practical museology as areas of skills shortage (idem, 60). These figures cannot be studied in relation to the volume of public engagement activities, as this was not investigated in Estonia. It is therefore not clear whether these skills are not viewed as lacking because visitor services are not a main activity or because they are well integrated in education.

In Ireland, employers considered new entrants to the profession as not being very well equipped with skills; 64% (out of 11 respondents) described them as poorly or very poorly skilled for the job (Cleary & McCullagh 2014, 73). The need for training on non-archaeological skills came under the heading of 'education and training'. However, this option was only mentioned by 11% (idem, 73). It was ranked fourth, after information technology (30%), project management (22%), and marketing and sales (22%). Business skills were similarly lacking (11%). Interestingly, when individual archaeologists were asked the same question, the need for training in 'education and training' was ranked third (selected by 15% of 125 respondents), after information technology (20%) and project management (20%) (idem, 88). Unemployed archaeologists (11 respondents) even rated it first (idem, 95–6), indicating that they view it as one of the non-archaeological skills that might help them to find a job.

In summary, there seems to be a lack of skills in public engagement-related work in many countries, while the training opportunities and investment in the development of such skills are very limited.

Temporary contracts and the issue of access to training

Another result from the DISCO project that is relevant in this context are the proportions of permanent and temporary employment in the archaeological sector in Europe. Despite considerably differences from one country to the next, the overall picture is that a substantial proportion of the people (both archaeologists and other staff members) working in archaeology in Europe have temporary contracts. In Austria for instance, 42% of 296 posts on which data was gathered were based on permanent contracts (Karl & Möller 2014, 64). This figure was even smaller in Cyprus and the Czech Republic – both 39% (Prokopiou & Alphas 2014, 80; Frolík & Mácalová 2014, 57). In Spain, companies also have fewer permanent than temporary staff, 45% compared with 51% (Parga-Dans & Varela-Pousa 2014, 28). The lowest number occurs in Italy, where only 16% of the entire active archaeological workforce had a permanent contract (Pintucci & Cella 2014, 21). In Slovenia a slim majority of 55% held a permanent contract (Kompare, Lazar & Pintarič Kocuvan 2014, 45), while in Latvia, the United Kingdom, the Netherlands, Estonia, Germany, Ireland and Romania the vast majority of all employment contracts were permanent – 83%, 82%, 82%, 79%, approx. 75%, 72% and 65% respectively (Šnē, Vijups & Mintaurs 2014, 18; Aitchison & Rocks-Macqueen 2014, 127–8; Van Londen et al. 2014, 78; Ulst et al. 2014, 34; Bentz & Wachter 2014, 63; Cleary & McCullagh 2014, 17; Borş & Damian 2014, 64). In the case of Germany the authors of the report ascribe this high percentage to the fact that 80% of the positions were in public institutions. The same is the case in Latvia. In the United Kingdom the percentage was the average for the whole profession; the percentage of permanent contracts was notably lower – 73% – in museum and visitor/user services. In fact this sector had the lowest percentage of permanent contracts in the United Kingdom (Aitchison & Rocks-Macqueen 2014, 128).

It is important to note the percentages of non-permanent contracts because the surveys in Norway, Ireland and Estonia have revealed that people with temporary contracts have less access to learning through conferences, seminars and vocational training. In Norway for instance, nearly 90% of the respondents with no opportunity for professional development through training and meetings with professionals were temporarily employed (Schenck 2014, 70). In Ireland, 90% of the permanent staff had training opportunities, while for the non-permanent staff this was 50% (Cleary and McCullagh 2014, 18). This division is similar in Estonia; 86% of the permanent employees received training and development, compared with 38% of temporary employees (Ulst et al. 2014, 54).

Unfortunately, no data on training availability in relation to contracts is available for the other countries involved in the DISCO project, but if the decline in permanent contracts proves to be a general trend in many countries, this may have negative implications for the skills that are not yet an intrinsic part of education and that need to be developed through vocational training.

Vocational training

In relation to public outreach training, it was not specifically asked whether post-graduate programmes match training needs, but it can be noted that the training that *is* offered does not always serve these needs very well. In Austria, for instance, half of the 18 organisation that responded to this question indicated that professional training programmes did not match their needs (Karl & Möller 2014, 80). In Ireland employers were also not very positive about 'third-level' courses. Half of the 10 respondents considered these training programmes to 'poorly' match the requirements of the profession (Cleary & McCullagh 2014, 35). This may again have negative implications for the further development of public engagement skills.

Expectations for the future

A final relevant aspect asked by a few of the DISCO partners concerns the expectations regarding specific activities to be conducted in the near future. In the report on Slovenia, 'educational activities, promotion

and publishing' were not a separate category but grouped with 'project management' and 'spatial analyses'. As 80% of the organisations reported a willingness to invest in these fields (by purchasing equipment, training employees, etc.), they are seen as important activities for the future (Kompare, Lazar & Pintarič Kocuvan 2014, 25).

The Dutch report shows that, of the categories where people expect to be conducting *more* activities or which they expect to become more important in 2016, activities for the public had the second highest score (38.6%), after project management (43.3%). An additional 36.4% of the same 44 respondents believed this activity would maintain its importance, and only 15.9% expected its importance to decline. With regard to heritage education, 47.6% of 42 respondents expected it to remain the same in 2016. Another 35.7% believe its importance will rise, and only 9.5% felt it would fall (Van Londen et al. 2014, 55). Thus in the two countries that measured this aspect, there seems to be an expectation that public outreach will increase in importance.

Other indications

The results from these two surveys show that public engagement does not yet seem to be a high priority for the sector as a whole in Europe. They at least confirm the need to keep it on the agenda. This is supported by some other signals, too. First of all, we hear throughout the discipline that public support for archaeology and the promotion of its societal benefits still need to be improved, and that we still have lots of challenges to face. For example, an evaluation of the effectiveness of the revised Monuments Act, commissioned by the Dutch Ministry of Education, Culture and Science in 2011, found that 84% of the Dutch archaeological community saw a need for improvement in public support for archaeology (Keers, Van der Reijden & Van Rossum 2011).

Secondly, there are indications that our audiences are not always satisfied either. Public surveys show that many people feel that more archaeological results should be shared with the public (Van den Dries & Van der Linde 2012). A recent study (2011) among 1000 French people that was carried out by the French national agency showed that a substantial majority (77%) of the participants did not feel sufficiently informed about archaeological work that is conducted in their city or neighbourhood (Institut National de Recherches Archéologiques Préventives 2011).

Moreover, the way we serve the public is not always what the audience most appreciates. Public surveys show that archaeologists should present archaeology in a more 'fun' fashion. We know from the Netherlands, for instance, that a majority of the public is more interested in visiting a theme park or participating in an excavation than in reading popular books (Van den Dries & Van der Linde 2012).

However, it is not just the audience that is not always satisfied. Heritage managers and archaeologists themselves can sometimes be very unhappy with the way the archaeological sector engages with the public, for example with narratives, reconstructions, displays or other (digital) visualisations. Several people, from Europe and beyond, have expressed their concerns in recent decades, as these representations are at times based mainly on speculation or even fantasy and merely serve commercial purposes (see for instance Jameson 2004; Miller & Richards 1995; Oniszczuk 2014).

A third indication that we need to improve our performance when it comes to public involvement, are participation levels in cultural heritage (where participation is defined as public interest in attending cultural heritage activities). Denmark has the highest score for museum visits, with 65% of inhabitants visiting museums (Van den Broek, De Haan & Huysmans 2009, 31–33), followed by Sweden and the Netherlands, both with 62%. In some countries, however, mainly in eastern and southern Europe, percentages barely exceed 30% (the European average is 41%). When it comes to archaeological museums, there are no recent survey results for Europe as a whole, but in the Netherlands it was found that teenagers, young adults, middle-aged adults and migrant groups in particular are highly underrepresented in visitor numbers (Van Kesteren 2010). We also know from some other parts of Europe that the present heritage outreach activities do not really appeal to migrant groups and that increasing participation by minorities is not high on the agenda of the heritage sector, as Prescott (2013) shows for Norway.

Such low and unbalanced engagement figures are clearly not in line with the social inclusion goals of the cultural policy of many European national governments, nor with the current European political philosophy on cultural heritage, which stresses that its narratives should speak to more diverse audiences (European Commission 2014). They also do not fit with the idea that access to and enjoyment of cultural heritage enhances a person's well-being and quality of life, and should be a human right for all, as stated by the Council of Europe among others.

On the road to Faro?

The above-mentioned survey results and other observations allow us, or perhaps even compel us, to conclude that the sector's engagement with the public has not yet reached a satisfactory level and that the dissemination and valorisation aims encouraged by the Malta Convention are not yet well-embedded in daily practice. Less is known about the embedding of the principles of the Faro Convention, since no dedicated survey results are available, but there are reasons why our expectations should not be too high. Nearly a decade after its introduction this Convention has entered into force in only 16 member States (as at mid-2014), with a handful more signing it, despite elaborate attempts through ambitious action plans and publications (e.g. Council of Europe 2009) to promote it. Moreover, we can note that many people, including professional heritage managers and archaeologists, are not very well acquainted with this Convention or its principles and that European archaeology continues to

offer only scant opportunities for participatory research in real-world situations. There is little contribution to knowledge production or decision-making, in both our European home countries and in research projects in non-European host countries, as we recently learned (Van der Linde et al. 2012). In some countries there are indeed occasional digs in which the general public, as opposed to amateurs and volunteer groups, can participate, but these usually have nothing to do with empowering the community members whose heritage is being investigated or who are otherwise affected by the archaeological research. The only exception is perhaps the United Kingdom, where community archaeology can sometimes claim a truly bottom-up approach. But even there the opinion was voiced during one of the DISCO meetings, by experts and politicians alike, that archaeology needs to better exploit its societal values.

Given these observations, we can conclude that European archaeology is still not very inclusive and does not yet involve the audience widely in research and heritage management. In that sense, we are still a long way from working in the spirit of the Faro Convention. This raises the question as to why this should be so and what is preventing us from moving in that direction. An analysis of the situation and circumstances in the Netherlands has pointed out several discourse and system-related obstacles that may complicate the development of a collaborative archaeology (Van den Dries 2014). In particular, fieldwork carried out in the context of planning and building procedures is not usually very well-suited to public participation due to its time and financial constraints. Such issues may play a role in other European states as well, but it is hard to believe that this is the main reason why a majority (almost 60%) of the EAC survey participants indicated that Article 9 has not yet been implemented (Olivier & Van Lindt 2014, 168). There must be other reasons for this and for the fact that Faro has so far been signed by so few member states.

The low level of community involvement and active participation in many countries is therefore worth studying in greater depth. It calls for further analysis as it is totally at odds with the strong public interest in heritage and archaeology. The DISCO and EAC surveys give us some indications, but they also show an urgent need for a dedicated Europe-wide study. It would also be useful to explore what we can learn from sectors that are more successful at public engagement. On the other hand, it would also be helpful to define more concretely what the Faro Convention means for our daily practice and what exactly it expects from us. We need to explore how member states have so far interpreted and implemented its principles and whether this is effective and sufficient.

Where to next?

The results of both the EAC and DISCO surveys show that, despite being stimulated and inspired for over twenty years by the principles of the Malta Convention (1992) and for nearly ten years by the Faro Convention (2005), embedding archaeology in society is not a very high priority for the archaeological profession in Europe. Therefore, if we are serious about integrating *all* the Malta principles in our daily practice and if we need to comply sooner or later with the spirit of the Faro Convention, the topic should indeed be kept on the agenda, as instigated by the EAC with its anniversary meeting. However, if we do so, I believe we should ask why we want to keep it on the agenda. The archaeological community needs to ask itself what its motives are, what the ultimate goal should be, what it needs to achieve and how can measure and monitor these goals.

Perhaps the sector also needs some direction and some kind of a roadmap to bring public engagement to a higher priority level. This could be a task for overarching European archaeological organisations like the EAC and EAA. The EAC has already summed up some agenda items from its anniversary meeting in Amersfoort that can be turned into concrete steps or actions. The DISCO survey can also be mined for necessary actions. The survey shows, for instance, that engagement with the audience – other than stakeholders who are needed for decisions and funding – is not really seen as an intrinsic part of conducting archaeology and archaeological research. In many DISCO questionnaires activities such as conducting public outreach or constructing displays or other presentations for the audience are not defined as 'archaeological skills' but as 'non-archaeological skills'. Although this does not automatically mean that they are viewed as skills not required by an archaeologist, it does say something about the archaeological community's attitude to the priority given to such skills and how they might be ranked if we had to value them.

The DISCO project also shows that these issues are strongly related to the educational system in Europe, both the academic programmes and post-academic vocational training. The profession does not seem to be developing sufficient skills in outreach and public engagement activities. Although nowadays there is much greater emphasis on the societal context in which students will be operating, we still see, in my own country for instance (Van den Dries 2014), a lack of urgency regarding a community-oriented approach in university training. There seem to be some exceptions (Prescott 2014), but in many countries archaeology students are still primarily trained as scientists who study the past, not as experts at handling present-day archaeological resource and heritage issues. It is also not very helpful that some more traditional archaeological scholars like to cultivate an image of heritage work as dull, since it concerns laws and regulations, as just a convenient add-on to projects so that the results of 'real' archaeological research can be communicated to the public, or even as a threat to traditional archaeological research. It would surely be helpful if the educational environment were to give more encouragement to archaeology students to develop skills and expertise in public engagement and community-oriented management.

It must nevertheless also be acknowledged that archaeological work has become much more demanding and complex in the last couple of decades

and that many new facets have been introduced in both fieldwork and laboratory techniques, which require additional skills (see also Prescott 2014). Many, if not all, universities have already had to adapt their training programmes to these changed circumstances and additional labour market requirements. It is therefore logical and understandable that the focus is on the prime skills required to conduct fieldwork, especially since many universities have also been confronted with financial cuts and with less training time due to the implementation of the Bologna Declaration (1999). Therefore it is not just universities that are to blame, but the national and European policy on higher education as a whole.

However, it is too easy to point the finger primarily at the education system. In particular, the fact that Article 9 of the Malta Convention has barely been implemented in many countries obviously cannot be blamed on the educational system. Signing the Convention is a political decision, as is not implementing parts of it. The authorities have a responsibility to facilitate its implementation and to help reach *all* of its goals. For example, national and international governmental organisations could designate funding to help develop easily accessible vocational training, through e-learning facilities, massive open online courses (MOOCs), peer-learning networks, etc.

Pursuing the principles set out in both conventions is a shared responsibility. Now that the highest European authorities and political bodies have officially designated cultural heritage as a shared resource, as a common good, and that engaging with, participating in and benefiting from it are seen as part of the package of human rights, it has become even less relevant whether a nation has signed and ratified the Malta Convention or the Faro Convention. Now that cultural heritage has been encapsulated in the realm of political philosophy and human rights debates, it has become a matter of ethics and moral obligation to act appropriately.

In addition, if we follow the more or less generally adopted principle that the rights of individuals entail duties as well (e.g. International Council on Human Rights Policy 1999), it could be said that individuals have not only a duty to exercise their rights responsibly, but also an obligation to respect the rights of others. Hodder's interpretation of such duties is that archaeologists – given that they produce places, histories and social relations that may have productive but also destructive consequences – should think about the rights of those affected by their actions (Hodder 2010, 864). I agree, but given the present state of affairs in European archaeological practice, this is perhaps still too ambitious. I would say that archaeologists who conduct archaeological research, by means of either public or private funding, should firstly realise and acknowledge that they have access to and sometimes control over a resource of social and economic capital, which they therefore ought to employ for the benefit of both society and the archaeological sector. As a consequence, the sector should update its codes of conduct, such as the EAA Code of Practice, accordingly.

A final indication from some of the DISCO reports, and which I would like to exploit in this context, is the positive sign that the sector seems to be slowly working its way out of the downturn caused by the global economic crisis. Since this means we may be on the eve of a new, restorative phase, this could be the right moment to set some new signposts. The EAC's anniversary meeting, which had the topic of embedding archaeology in society prominently on its agenda, could therefore serve perfectly as a historic landmark that changed the course of the European archaeological profession, pointing it in the direction of Faro. The EAC has already cited the low level of public engagement as one of the challenges within the context of implementing the Valletta principles in Europe, so it could take up this challenge and show, by providing directions and best practices, how Faro could be an inspiration to further embed archaeology in society, and society in archaeology. Together with the EAA, it could also help by keeping the sector well-informed on relevant international policy developments, by translating communications from European authorities into practical guidelines and by exerting its influence not only to create or direct/redirect funding opportunities but also to have the sector use them to the full. For the present, the public embrace of heritage is a boat that is going full steam ahead. We must avoid a situation in which the archaeological sector misses that boat and thus misses out on the opportunities for enrichment that this entails.

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References

Aitchison, K. & Rocks-Macqueen, D. 2014: *Discovering the Archaeologists of the United Kingdom 2012–14*. Landward Research Ltd, London, http://www.discovering-archaeologists.eu/national_reports/2014/UK%20DISCO%202014%20UK%20national%20report%20english.pdf.

Aitchison, K. 2009: *Discovering the Archaeologists of Europe: transnational report*. Institute for Archaeologists, Reading, http://www.discovering-archaeologists.eu/DISCO_Transnational_Report.pdf.

Bentz, M. & Wachter, T. 2014: *Discovering the Archaeologists of Germany 2012–14,* Bonn University, http://www.discovering-archaeologists.eu/national_reports/2014/DE%20DISCO%202014%20Germany%20national%20report%20english.pdf.

Borș, C. & Damian, P. 2014: *Discovering the Archaeologists of Romania 2012–14*, National

History Museum of Romania, Bucharest, http://www.discovering-archaeologists.eu/national_reports/2014/RO%20DISCO%202014%20Romania%20national%20report%20english.pdf.

Broek, A. van den, Haan, J. de, & Huysmans, F. 2009: *Cultuurbewonderaars en cultuurbeoefenaars. Trends in cultuurparticipatie en mediagebruik*. Sociaal en Cultureel planbureau, SCP-Publication 2009/8, Den Haag.

Cleary, K. & McCullagh, N. 2014: *Discovering the Archaeologists of Ireland 2012–14*, Institute of Archaeologists of Ireland, Dublin, http://www.discovering-archaeologists.eu/national_reports/2014/IE%20DISCO%202014%20Ireland%20national%20report%20english.pdf.

Costa, C., Duarte, C., Tereso, J., Lago, M., Viegas, C., Grilo, C., Raposo, J., Diniz, M., & Lima, A. 2014: *Discovering the Archaeologists of Portugal 2012–14*, Associação Profissional de Arqueólogos, http://www.discovering-archaeologists.eu/national_reports/2014/PT%20DISCO%202014%20Portugal%20national%20report%20english.pdf.

Council of Europe 2009: *Heritage and Beyond*. Council of Europe Publishing, Strasbourg.

Dries, M.H. van den 2014: Community Archaeology in the Netherlands. *Journal of Community Archaeology and Heritage* 1(1), 69–88.

Dries, M.H van den & Linde, S.J. van der 2012: Twenty years after Malta: archaeological heritage as a source of collective memory and scientific study anno 2012. *Analecta Prehistorica Leidensia* 43/44, 9–19.

Dries, M.H. van den & Slappendel, C. in prep.: *Twenty years of EAA annual meetings*.

European Commission 2014: *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Towards an integrated approach to cultural heritage for Europe*, COM (2014) 477, Brussels, http://ec.europa.eu/culture/library/publications/2014-heritage-communication_en.pdf.

Frolík, J. & Mácalová, M. 2014: *Discovering the Archaeologists of Czech Republic 2012–14*, Institute of Archaeology AS CR, Prague, http://www.discovering-archaeologists.eu/national_reports/2014/CZ%20DISCO%202014%20Czech%20Republic%20national%20report%20english.pdf.

Hodder, I. 2010: Cultural Heritage Rights: from ownership and descent to justice and well-being, *Anthropological Quarterly* 83(4), 861–882.

Institut National de Recherches Archéologiques Préventives 2011: *Image de l' archéologie auprès du grand public*, Paris, http://www.inrap.fr/userdata/c_bloc_file/12/12047/12047_fichier_IPSOS-archeologie.pdf

International Council on Human Rights Policy 1999: *Taking Duties Seriously: Individual Duties in International Human Rights Law*. International Council on Human Rights Policy, Versoix.

Jameson Jr., J.H. (ed.) 2004: *The reconstructed past: reconstructions in the public interpretation of archaeology and history*. AltaMira Press, Walnut Creek.

Karl, R. & Möller, K. 2014: *Discovering the Archaeologists of Austria 2012–14*, Internationales Österreichisches Archäologie Forum, http://www.discovering-archaeologists.eu/national_reports/2014/AT%20DISCO%202014%20Austria%20national%20report%20english%20final.pdf.

Keers, G., Reijden, H. van der, & Rossum, H. van 2011: *Ruimte voor archeologie: themaveldrapportages evaluatie Wamz* (concept). RIGO Research en Advies BV (report P18090), Amsterdam.

Kesteren, C.R. van 2010: *What for whom? The presentation of Dutch archaeological collections in Dutch provincial and national museums*. Unpublished Master's thesis University of Leiden, Leiden.

Kompare,T., Lazar, I. & Pintarič Kocuvan, V., 2014: *Discovering the Archaeologists of Slovenia 2012–14*, University of Primorska, http://www.discovering-archaeologists.eu/national_reports/2014/SI%20DISCO%202014%20Slovenia%20national%20report%20englishl.pdf.

Krekovič, E. & Staššíková, D. 2014: *Discovering the Archaeologists of Slovakia 2012–14,* Comenius University, Bratislava, http://www.discovering-archaeologists.eu/national_reports/2014/SK%20DISCO%202014%20Slovakia%20national%20report%20english.pdf.

Lawler, A. 2014: *Discovering the Archaeologists of Bosnia & Herzegovina 2012–14*, Cultural Heritage without borders, Sarajevo, http://www.discovering-archaeologists.eu/national_reports/2014/BA%20DISCO%202014%20Bosnia%26Herzegovina%20nationl%20report%20english.pdf.

Liibert, K., Malińska, M., Wachowicz, L. & Marciniak, A. 2014: *Discovering the Archaeologists of Poland 2012–14*, Institute of Prehistory, Adam Mickiewicz University, Poznań, http://www.discovering-archaeologists.eu/national_reports/2014/PL%20DISCO%20Poland%20national%20report%20english.pdf.

Linde, S.J. van der, Dries, M.H. van den, Schlanger N. & Slappendel, C. (eds) 2012: *European Archaeology abroad – Global Settings, Comparative Perspectives*. Sidestone Press, Leiden.

Londen, H. van, Vossen, N., Schlaman, M. & Scharringhausen, K. 2014: *Discovering the Archaeologists of the Netherlands 2012–14*, University of Amsterdam, http://www.discovering-archaeologists.eu/national_reports/2014/NL%20DISCO%202014%20Netherlands%20national%20report%20english.pdf.

Miller, P., & Richards, J. 1995: The good, the bad, and the downright misleading: archaeological adoption of computer visualization, in J. Huggett & N. Ryan (eds): *Computer Applications and Quantitative*

Methods in Archaeology 1994, BAR International Series 600, Tempus Reparatum, Oxford, 19–22.

Ministerie van Onderwijs, Cultuur en Wetenschap. 2013. *Cultuur beweegt. De betekenis van cultuur in een veranderende samenleving*, Den Haag, http://www.rijksoverheid.nl/ (accessed 19/08/2014).

Olivier, A. & Lindt, P. van 2014: Valletta Convention perspectives: an EAC survey, in V.M. van der Haas, V.M. & P.A.C. Schut (eds): *The Valletta Convention: Twenty Years After – Benefits, Problems, Challenges*, EAC Occasional Paper no. 9, EAC, Brussels, 165–176.

Oniszczuk, A. 2014: The convention in action – Poland almost 20 years after the ratification of the Valletta Convention, in V.M. van der Haas & P.A.C. Schut (eds): *The Valletta Convention: Twenty Years After - Benefits, Problems, Challenges*. EAC Occasional Paper no. 9, EAC, Brussels, 63–68.

Parga-Dans, E. & Varela-Pousa, R. 2014: *Discovering the Archaeologists of Spain 2012–14,* Institute of Heritage Sciences, Spanish National Research Council, http://www.discovering-archaeologists.eu/national_reports/2014/ES%20DISCO%202014%20Spain%20national%20report%20english.pdf.

Pintucci, A., & Cella, E. 2014: *Discovering the Archaeologists of Italy 2012–14,* Confederazione Italiana Archeologi, http://www.discovering-archaeologists.eu/national_reports/2014/IT%20DISCO%202014%20Italy%20national%20report%20english.pdf.

Prescott, C. 2013: Heritage and the new immigrant minorities: a catalyst of relevance for contemporary archaeology?, in P.F. Biehl & C. Prescott (eds): *Heritage in the context of globalization. Europe and the Americas*. Springer Briefs in Archaeology, Archaeological Heritage Management, New York/Heidelberg/Dordrecht/London.

Prokopiou, E.S. & Alphas, E. 2014: *Discovering the Archaeologists of Cyprus 2012–14*, Department of Antiquities, Ministry of Communications and Works, http://www.discovering-archaeologists.eu/national_reports/2014/CY%20DISCO%202014%20Cyprus%20national%20report%20english.pdf.

Prescott, C. 2014: Rising to the challenge? Research-based training in contexts of diversification, in V.M. van der Haas & P.A.C. Schut (eds): *The Valletta Convention: Twenty Years After – Benefits, Problems, Challenges*, EAC Occasional Paper no. 9, EAC, Brussels, 135–142.

Schenck, T., 2014: *Discovering the Archaeologists of Norway 2012–14,* Norwegian Association of Researchers, http://www.discovering-archaeologists.eu/national_reports/2014/NO%20DISCO%202014%20Norway%20national%20report%20english.pdf.

Šnē, A., Vijups, A. & Mintaurs, M., 2014: *Discovering the Archaeologists of Latvia 2012–14*, University of Latvia, http://www.discovering-archaeologists.eu/national_reports/2014/LV%20DISCO%202014%20Latvia%20national%20report%20english.pdf.

Ulst, I., Kobrusepp, V., Kangert, N., Pavlov, D. & Mäesalu, A., 2014: *Discovering the Archaeologists of Estonia 2012–14*, MTÜ Arheopolis/ University of Tartu, Tartu, http://www.discovering-archaeologists.eu/national_reports/ 2014/EE%20DISCO%202014%20Estonia%20national%20report%20english%20final.pdf.

Waugh, K.E., 2008: *Op zoek naar de archeologen van Europa: Nederland. Informatie over en overzicht van de archeologische arbeidsmarkt 2007–2008*. Vestigia, Vestigia Report V595, Amersfoort.

Wollak, K., 2014: Foreword and acknowledgement, in V.M. van der Haas & P.A.C. Schut (eds): *The Valletta Convention: Twenty Years After – Benefits, Problems, Challenges*. EAC Occasional Paper no. 9, EAC, Brussels, 7–8.

Websites

Link 1: www.consilium.europa.eu

Link 2: www.discovering-archaeologists.eu

3 | Heritage in a convivial society: societal change and its challenges for cultural heritage experts

Roel During

Abstract: Due to the receding role of government, cultural heritage is increasingly the concern of laypeople seeking anchors in a rapidly changing society. As a consequence, cultural heritage experts are facing bottom-up claims that go beyond the criteria of canonisation, as well as practices at odds with their scientific expertise. Experts participating in laypeople's initiatives may face difficult dilemmas. These are discussed here through various bottom-up case studies. Given that the participation society is an ongoing process of change in terms of governance, we need to rethink the role and position of experts.

Keywords: participation, bottom-up heritage, social innovation, identity construction

Introduction: heritage and citizenship in a convivial society

In Europe today we appear to be heading towards a convivial society in which social innovation and enterprise play a key role, with serious implications for cultural heritage management. Conviviality is understood here as a complex process of de-institutionalisation, prompting both a need to find new cosmopolitan norms to deal with cultural pluralism and an engagement in bottom-up social structures of self-organisation (Illich 1975; Karner & Parker 2011; Franke 2014). Structures of self-organisation can be seen as social innovations, defined as new strategies, ideas, services and organisations that meet the unmet needs of civil society, and which are social in their ends and means (Pulford & Addarrii 2011). Managing diversity in daily life is a key issue in conviviality, requiring improvisation, rituals and social learning without detailed political interference (Illich 1975). European governments increasingly promote active citizenship and social innovation (Sørensen & Triantafillou 2009; Pulford & Addarrii 2011). One of the main triggers for this trend is the decline of the welfare state, which – according to some – has reached its normative, practical and financial limits (Yerkes & Van der Veen 2011). The financial crisis and subsequent government budget cuts have further boosted the discourses of active citizenship, which – together with self-organisation – has become an important concept for tomorrows' society (Hajer 1995; Tonkens & Duyvendak 2006; Verhoeven 2009; Smith 2010; Scott 2011). Regarding heritage management, government policies explicitly state the need to return ownership to society (Netwerk Erfgoed en Ruimte 2014). The European Commission also acknowledges the need to improve 'participation, interpretation and governance models that are better suited to contemporary Europe, through greater involvement of the private sector and civil society' (European Commission 2014). This is a key issue in the Faro Convention (2005) of the Council of Europe (During 2011). Thus in a convivial society, heritage is not simply the product of rules and criteria imposed by formal institutions; it is also the contingent product of social decision-making in informal settings.

Active citizens in a convivial society seem both disposed and well-prepared to take on responsibility for cultural heritage, with several hundred crowdfunding platforms active in the cultural heritage sector (Piscitelli 2013). These days even huge projects, such as rebuilding the Berlin Castle, are crowdfunded (Link 1). Crowdfunding and citizens' heritage projects cannot be understood as simply a form of participation; instead, they involve a process of co-creation in which citizens exert power in and outside governmental arenas and projects (Duineveld, During et al. 2010; Spies 2013). Governments are less inclined to invest in cultural heritage and in some instances even consider relinquishing monumental objects.[1] Active citizens see this as an opportunity to regain control of their everyday living environment (Van Dam, Duineveld et al. 2014; Van Dam, During et al. 2014; Van Dam, Salverda et al. 2014). Cultural heritage is becoming increasingly relevant in new bottom-up citizens' initiatives, as will be discussed below. It can provide the necessary social capital for self-organisation or represent an anchor in the process of modernisation.

The European Horizon 2020 programme views cultural heritage as a key concept for the ideal of the reflective society (Link 2). Understanding the role that cultural heritage plays in the construction, opening and closing of identities has become a vital issue as it offers new opportunities for directing or controlling the transition from welfare state to convivial reflexive society. In this chapter we wish to elaborate on the implications of this fundamental change in society for cultural heritage theory and practice. From the point of view of heritage management, it would be interesting to explore the issue of what to expect from citizens' initiatives. Here we discuss this question from a different angle and ask what cultural heritage brings to the community. This chapter will shed more light on how this might work

[1] The case of Brederode Castle will be discussed briefly below.

in practice and on the role of the cultural heritage specialist in the convivial society. To explore possible new roles, we draw on the results of an eight-year research programme on citizens' initiatives,[2] selecting various case studies that are beyond or on the periphery of heritage specialists' current practice. The cases have been examined through interviews and an analysis of social and other media. They will be discussed from the perspective of the convivial society and the implications and challenges for cultural heritage specialists.

Public interest in history and heritage

In the convivial society the production of cultural heritage is less the logical consequence of applying a set of uniform selection criteria and more the result of what people wish to retain or pass on to future generations. As discussed below, personal involvement and social decision-making may become more important than rules of accountability. The potential for future heritage then is not so much the collection of old things that will one day meet the criteria of the canon, but simply a community response to perceived changes in life (modernisation) (Robertson 2009; Robertson 2012). This suggests that public interest in changing living conditions, their lack of control over these conditions and the consequences for identity and solidarity will become the drivers behind the selection of new heritage. This does not mean that people will lose interest in the canon. The withdrawal of government care for canonised cultural heritage is a highly contested issue. Budget cuts affect the maintenance and restoration of cultural heritage sites by governmental institutions. In response, local communities are taking up key roles in developing initiatives to protect their heritage and facilitate social innovation (Pulford & Addarrii 2011; Robertson 2012). Heritage is thus becoming more imperative, especially in terms of providing a sense of familiarity, rootedness and identity amidst the changes and stresses brought about by 'big society' (Karnooh 2001; Weber 2001). Increasingly, individuals and communities are re-inventing heritage through bottom-up initiatives such as private museums, oral history and photo collecting on Facebook (Sinn & Syn 2014; White, Patoli et al. 2014). Some do so in a reactive manner, while others seek a satisfactory response to crisis, globalisation and political change through vernacular heritage-making (Robertson 2012). Bottom-up heritage practices in particular are yielding a wealth of diversification when pasts are being pluralised (Ashworth & Graham 2007; Robertson 2012).

The reactive response can be observed in the case of the Ruins of Brederode in the Netherlands. A new policy initiative in 2012 sought to expropriate 34 national monuments that were not home to government institutions.[3] This included several castles, such as the famous castles of Loevestein and Teylingen. The Ruins of Brederode, the very first monument designated in 1863, were placed in the hands of the Central Government Real Estate Agency, with orders to sell. No longer functioning as a museum, it is still used for musical and theatrical performances, exhibitions and educational purposes, and is a place to see medieval and restoration architecture. Here one can see the physical legacy of the noble and illustrious Van Brederode family, responsible for many regional developments, such as the local mill, which is still operational. The new policy provoked a storm of protest, both locally and nationally. A group of concerned local citizens started an action group called 'Te Wapen voor Brederode' (Brederode Call to Arms) and within two weeks they had collected 7000 signatures for their petition opposing the policy. The group has two aims: keeping the monument open for educational and cultural events and ensuring that, if the castle is sold, the new owner will be required to continue this policy. They have succeeded in their first aim and a temporary manager has been appointed. The educational programme involving local schools has carried on and the Central Government Real Estate Agency has had to carry out urgent maintenance to ensure that the building is safe for visitors. Opposition was rapid and well organised because of the strong social bonds within the local community. The action group was joined by 'De Compagnie van Brederode', a professional re-enactment group (Figure 3.1).

Figure 3.1: The professional re-enactment group 'De Compagnie van Bredere' supported the action group (© De Compagnie van Brederode).

[2] The programme is called Transition and Innovation (see Link 3).

[3] Toekomstagenda monumentaal vastgoed in rijksbezit.

The local community has a tradition of organising annual bottom-up events. Horse racing, for example, goes back more than 250 years and the community boasts the oldest drama club in the region ('t Mosterdzaadje, established in 1861). It was therefore hardly surprising that so many became involved in opposing the policy initiative.[4] As yet there are no guarantees for the castle's future because the temporary manager's contract expires in autumn 2014 and nothing has happened with regard to ownership. Opposition of this kind has sprung up in every locality where the government has sought to divest itself of its monuments. The result has been a change of plan, with all the monuments being handed over *en bloc* to a newly established National Monument Foundation. This is just one of many examples of how citizens' initiatives are triggered by new policies and by politicians' appeals for active citizenship.

Examples of bottom-up heritage-making as a consequence of modernisation are very difficult to document without a major research effort. They are closely related to all manner of cultural expression, escapism, sense-making processes, folklore and paganism, attachment to place, commercial brands, etc., but always grounded in the creation of social and symbolic capital. This kind of capital refers to the unevenly distributed resource that depends on individuals' ability to enact the power potentials residing in their membership of social networks (Häkli & Minca 2009). One example is the surprisingly powerful worldwide food community that restricts itself to a paleo diet and uses archaeological knowledge to shape their lifestyle. Their basic claim is that our diet is developing much faster than our DNA patterns, causing all kinds of illness. The community mainly exists on social media and is not organised geographically, although there is a connection with the Caveman Run that is organised in several countries. This takes place on a course without pathways, in which runners 'compete' with our prehistoric ancestors, who are believed to have been capable of running across rough terrain for days on end. The Everyday Paleo Twitter account has 50,000 followers and the Paleo Leap Facebook page has 333,000 likes. Paleo Magazine also has a huge presence on social media (more than 40,000 followers on Twitter and 150,000 likes on Facebook). In fact, there are hundreds of platforms for sharing ideas, recipes and experiences. One member expressed his motivations as follows:

> 'The idea of going paleo is attractive to someone like me, who feels he is living in an unhealthy, vapid world of consumerism. The sprawl of modern humanity is clearly unhealthy for earth's biodiversity and for the stability of our climate. And it makes a lot of sense that our modern lifestyle would prove unhealthy for us: Our bodies were shaped for hundreds of thousands of years to hunt and gather – and yet we insist on sitting down all day while eating things our ancestors would not recognize as food. We keep introducing new things that don't fit into the natural environment or the environment of our bodies.' (Link 4)

This individual is describing his deep concern about modern food and lifestyle, not just for himself but also for the world as an ecosystem. He sees it as natural to yearn for the Garden of Eden, but realises there is no way of going back. He has found his soulmates in the paleo movement, which combines emotional and normative overtones with rational scientific research on health and archaeology. Cutting-edge research on paleo food is being conducted in the Netherlands by Prof. Frits Muskiet, who disseminates his findings through both scientific articles (Muskiet & Carrera-Bastos 2013) and YouTube.[5] This example shows the full complexity of cultural heritage-making in a convivial society: a highly esteemed professor in pathophysiology and clinical chemical analysis is carrying out cross-disciplinary research that goes against conventional advice about food and public health, incorporating archaeological knowledge and disseminating his findings in an arena of resistance to the food industry. His findings are then appropriated and integrated into the emotion-based logic of a food community concerned about their health and the Earth. The people in this community build their own knowledge base using social media, in which they exchange recipes and the effects they experience on their health and wellbeing. These are undoubtedly the people who visit archaeological sites and museums and read the relevant magazines. They are appropriating this heritage, integrating it into their lifestyle and building social capital to exert power over the food industry.

This example shows that appropriation has greater implications than simply giving ownership back to the citizens. Knowledge of archaeological heritage is blended with scientific food research and personal stories to feed narratives of resistance. The convivial society with its plurality of cultural heritage through bottom-up practices confronts the heritage specialist with difficult dilemmas. It is acknowledged that there is widespread appropriation of archaeological knowledge and remains in terms of kinship and ethnicity, which can cause major problems of self-referentiality and give rise to ideological manipulations (Zapatero 1996). Private initiatives focus mainly on living heritage that connects intangible with tangible heritage, whereas the intangible increasingly includes folklore (Robertson 2009), Celtic history and pagan practices, such as Druid heritage (Rutherford 1978). This is where ideological manipulations may come in. Disciplinary boundaries between ecology, archaeology and sociology are traversed with no thought whatsoever. Perhaps the biggest problem lies in the socially constructed rationalities that produce vernacular cultural heritages, often transcending the official definitions. The dilemma is about the role that cultural heritage specialists can or should play: how should they uphold the integrity of their discipline while still facilitating appropriation? These potential problems challenge heritage specialists to understand what happens in the social practice of

4 Telephone interview on 8 August 2014 with Mrs E. Baron-Verhulst, chair of Brederode Call to Arms.

5 See for example the interviews (in Dutch) with Prof. Muskiet of the University of Groningen (Link 5)

heritage-making. Below we discuss the social practices in three cases of bottom-up heritage-making.

Case studies of bottom-up heritage-making

We will use three case studies to explore the process of heritage-making and its relationship to identity and social capital. The cases, all of which address cultural heritage, have been selected from a wider inventory of self-organisation practices (Dam, Salverda et al. 2011; Salverda, Jagt et al. 2012; During 2014). We will discuss the relocation of a historic granary in the small village of Lunteren and of ADO football club's ticket offices in The Hague, and an archaeological study of a medieval monastery.

The granary in Lunteren

An inspiring case of conviviality and cultural heritage can be found in Lunteren, where until recently a dilapidated old granary could be found next to a windmill and ancient barn. The barn and granary date from 1855. With a new building planned on the site, the idea was to get rid of the granary. The project developer and architect, both locals, were not happy to see the granary demolished. The architect contacted the Lunteren Historical Society (Vereniging Oud-Lunteren), which tried in vain to have the granary listed as a heritage building. The municipality felt that restoration would be too costly and that the building was not sufficiently distinctive. The Society then developed a plan to dismantle the building and rebuild it next to the important historic 19th-century location of 'De Appelhof'. The Appelhof is famous for its role in the local history of the Horticulture Society, chaired by the notary who won many international prizes for his apple varieties.

The money for this venture came from a successful crowdfunding campaign among the village's 12,000 inhabitants. They collected EUR 120,000 in two years and all businesses in the village were involved. The money has mainly gone on building materials since most of the local builders provided their labour free of charge. The project developer was also enthusiastic and supportive of this initiative. The local authority, located in the nearby city of Ede, was willing to issue the permit for the building without the usual procedural complications. The granary has now been rebuilt, but not as an exact copy of the old one. A new cellar was created underneath, which can be rented out for various purposes. The cellar has attracted a diaconal federation of four churches that rents it three days a week. The granary is now used as a community meeting point and has a busy cultural programme.

Figure 3.2: Working on the granary restoration (© Stichting de Lunterse Keie).

One of the initiators explained the level of social engagement and why the rebuilding went so smoothly.[6] The initiators knew each other from Lunteren Historic Day (Oud Lunterse Dag), an annual village festival that had been organised for 36 years without any help from the local authorities. In 2006 the organisers established a new foundation, Lunterse Keie, which aimed to increase the sense of community and the organisational capacity to do 'anything that's good for the village'.[7] The Lunteren mentality is one of 'we'll get there under our own steam' and 'we can do it ourselves – we don't need any help from outsiders'. A current project aims to restore a medieval embankment erected to prevent wildlife from encroaching on an old trading path.

The social structure in Lunteren has benefited tremendously from the legacy of notary Van der Ham, who died in 1912. During his lifetime he acquired the land on which he established a woodland area that he named 'Lunteren Woods' (Luntersche Buurtbosch). His last will requested that a foundation takes care of these woods for the wellbeing of the inhabitants of Lunteren. Later, a society was established to unite the friends of Lunteren Woods; all the inhabitants of Lunteren are members. In practice this means that the Woods are communally owned, much to the benefit of Lunteren society. The inhabitants feel deeply indebted to Van der Ham because his legacy has brought with it tourism, clean air and prosperity (Crebolder 2012).

This example shows the synergetic interrelationship between social capital, local history and cultural heritage, a relationship that is now acknowledged by scholars who research heritage at community level (Skinner 2012). Restoring and rebuilding the granary fits into and reaffirms the local identity construction of Lunteren's 'do-it-yourself' inhabitants. Although now on a public site, the old granary is owned and cherished by the villagers as their heritage. The inhabitants call it the Mulder Shed, named after the family who lived in the barn at its original location. Because it is connected to their history, heritage and present-day culture, there were no disputes about originality and authenticity. The monument in this situation appears to be living heritage.

The ticket offices of ADO fans

Our second case of convivial heritage-making concerns football. Football supporters' interest in history and heritage should not be underestimated. Many stadiums contain a great deal of history, which supporters are aware of when plans for renewal or a bigger stadium are being made (Mulder 2007). For example, when

[6] Telephone interview with Gerrit van Dijk on 25 July 2014.

[7] Quote from the interview.

Figure 3.3: Putting the ticket offices in place (© Supportervereniging ADO).

investors and project developers planned to build a new Feyenoord stadium at another location, they completely underestimated the feeling for history among the huge group of committed supporters. Fans exerted so much pressure with their 'Save the Kuip'[8] campaign that plans were abandoned despite the involvement of major investors such as the Royal BAM Group and close cooperation with the public authorities of Rotterdam.[9]

The ADO football stadium in The Hague has been rebuilt at another location, with the help of the foreign investor Kyosera. The old stadium, which was recently torn down, had been located in the Zuiderpark, designed by the famous architect Berlage. ADO supporters wished to keep alive some of the memories of that stadium, with its more than 85 years of history. A group of supporters tried to obtain monumental status for the ticket offices, which were earmarked for demolition. They took their request to the local authorities, but were turned down. The ticket offices had not been designed by Berlage, but by municipal architect D.G. de Zwart, head of the Rotterdam Building Office, who adopted Berlage's style to match the style of the park. 'Whoever wants them can take them,' said a council officer.

Back home, the supporters group started to make plans. They asked a building contractor to quote the price of transporting the ticket offices by lorry and placing them at the entrance to the new stadium. His estimate was EUR 60,000, so they started a crowdfunding campaign in which people could adopt a brick for EUR 7.50. By the time the campaign ended, they had collected EUR 22,000. Another building contractor, who was a major sponsor of the ADO club, was willing to do the job for EUR 30,000. A conversation with the director of Kyosera Netherlands yielded the missing EUR 8,000, so the endeavour could begin. The supporters still had to arrange a permit from the council, but this went very smoothly. The initiator said: 'it was clear from the start that we would get the permit; apparently someone high up in the hierarchy gave instructions to look into all the legal possibilities and, if necessary, exploit any loopholes'. A permit was granted for placing an "object" in a public space, similar to a permit for a bus shelter.

The business of hoisting the ticket offices onto a huge lorry and driving them to the new stadium attracted considerable media attention, with the event being broadcast on national primetime television news. One of the ticket offices weighs 27 tonnes and the other 28! The publicity was part of the deal with the building contractor and subcontractors. The supporters group included entrepreneurs willing to contribute their goods or labour free of charge. This meant the roofs could be renovated, the window panes painted and the brickwork restored for free. When the new stadium opened, the ticket offices were ready and were presented to the public. The next step is to work out what the supporters can do with them. A small foundation has already been established to come up with ideas, such as selling club souvenirs and accessories or tickets for events in The Hague and surrounding area.

This heritage-making was carried out by the supporters themselves. The ADO club donated a mere EUR 75 and was not very keen about relocating these old elements to the new stadium. The ticket offices were therefore placed on municipal grounds, at some distance from the stadium, with the council promising to maintain the location. ADO's Chinese investor was very enthusiastic, however, and wants to help with ideas for their further use.[10]

8 'De Kuip' is a popular nickname for the original stadium.

9 See the articles in the Algemeen Dagblad newspaper 17-10-2012, p.3; 16-2-2013, p.16, 6-3-2013, p.5 and many others.

10 This case study involved a further telephone interview on 23 July 2014 with the initiator, who wished to remain anonymous.

The medieval monastery of Yesse[11]

Just south of the city of Groningen are the remains of the former monastery of Yesse. This Cistercian monastery was occupied from 1215 to 1580, and its remains are on private land owned by inhabitants of the small village of Essen. The monastery's exact location was not known until recently, when a local resident became interested in its history and started researching it. As a local guide, he organised many excursions in which he shared his knowledge and assumptions about the site's history. Over time, ground works brought many objects to light that were then taken to him as the local history specialist. He later passed them on to another enthusiastic local, Annemiek Bos, who made plans to develop a visitor centre. She has lived in Essen for over fifty years and is trusted by all the local inhabitants. They maintain a positive social structure that they describe in terms of 'everyone knows everyone else'.

The monastery became an important part of local history and the inhabitants regularly approached the provincial archaeologist with requests for excavations that could ascertain an idea of its value. There were many unanswered questions, such as the exact location of the monastery and a myth about the apparition of Mary. The archaeologist explained that if substantial remains were found, severe restrictions on land use could be expected because of a new law. This was not a problem, however, as the archaeologist had just been involved in a new policy initiative on participatory archaeology, aimed at mobilising local communities to take a greater interest in their local history. He acknowledged the relevance of this case. He believed the people of Essen had far greater local knowledge about the monastery and its remains than any archaeologist, and he invited them to collaborate. They were asked to pinpoint the locations for digging exploratory trenches. He also arranged with the local authority to develop a management plan for the site in consultation with the inhabitants. This collaboration with the locals was a huge success, in terms of both archaeological results and a positive social attitude in the community (Groenendijk & Woldring 2012). The contours of the monastery have been mapped in great detail and have been related to the local topography for the first time. The research also showed that the land had been cultivated before the monastery was built, thus reaffirming the idea of an exchange between land and salvation.[12]

As an unplanned spin-off, but addressing this initiative, a local historian began researching field names and looked for the monastery on ancient maps. He managed to track it down on a military map of Groningen that he found in a collection of plans of fortified cities by Pierre le Poivre,[13] placed online by the Royal Library of Belgium (Link 7). He published his findings on his blog (Link 8), and many people responded with corroborating evidence and observations. As a result, the archaeological findings are embedded in historical knowledge that is more or less crowdsourced. The villagers have since opened their visitor centre and are happy with the results. Four years after the start of this participatory project, the local authority is still working on the management plan. This is disappointing because the momentum has now been lost. The provincial archaeologist explained local interest in the monastery in two ways: a sincere interest in local history and heritage, as well as a strategic interest in keeping their living environment open and free from the urban sprawl of the ever-expanding city of Groningen.[14]

In this example of the monastery, the inhabitants of Essen have proven truly committed and ready to engage in historical and archaeological research. The visitor centre reflects their local pride in this heritage and the new archaeological status will help them keep the urban sprawl at a distance. Participation has been a success, even evolving into co-creation once local historians became involved in the project with their discussions and findings. We can view this project as an example of advanced practice that meets the needs of citizens in a local context of conviviality.

Below we will explore ways in which heritage specialists could have contributed to these instances of self-organisation, by assisting, empowering and becoming positively involved in the creation of bottom-up heritage.

Heritage and democracy: different models of participation

Our case studies have been deliberately chosen from areas beyond or on the periphery of a heritage specialist's work as they reflect the making of heritage in a convivial society. Discussing the possible roles of heritage specialists within the context of such projects can raise some interesting questions. The basic one is of course how to proceed in the case of a private initiative, where attempts are made to involve a specialist in order to boost the initiative's status. Should the heritage worker confine his or her activities to government work or can they comply with such requests?

The cases of ADO, Lunteren and the monastery in Essen highlight ordinary heritage-making in response to modernisation. Cultural heritage specialists working in the context of the national canon may find it difficult to take such initiatives seriously. But they matter to communities and we can observe how social capital and cultural heritage-making mutually reinforce one another. The case of Lunteren shows us the relevance and benefits of already built-up social capital. There is also a remarkably strong involvement by private funders and by local companies seeking to enhance their reputation by participating in the making of bottom-up heritage. This is possible because of a spin-off of crowdfunding: it creates a platform for high

[11] Link 6

[12] Telephone interview with Prof. Henny Groenendijk on 12 August 2014.

[13] Recueil de plans de villes et de châteaux, de fortifications et de batailles, de cartes topographiques et géographiques, se rapportant aux règnes de Charles-Quint, de Philippe II et d'Albert et Isabelle, 1585–1622

[14] Telephone interview with Prof. Henny Groenendijk on 12 August 2014.

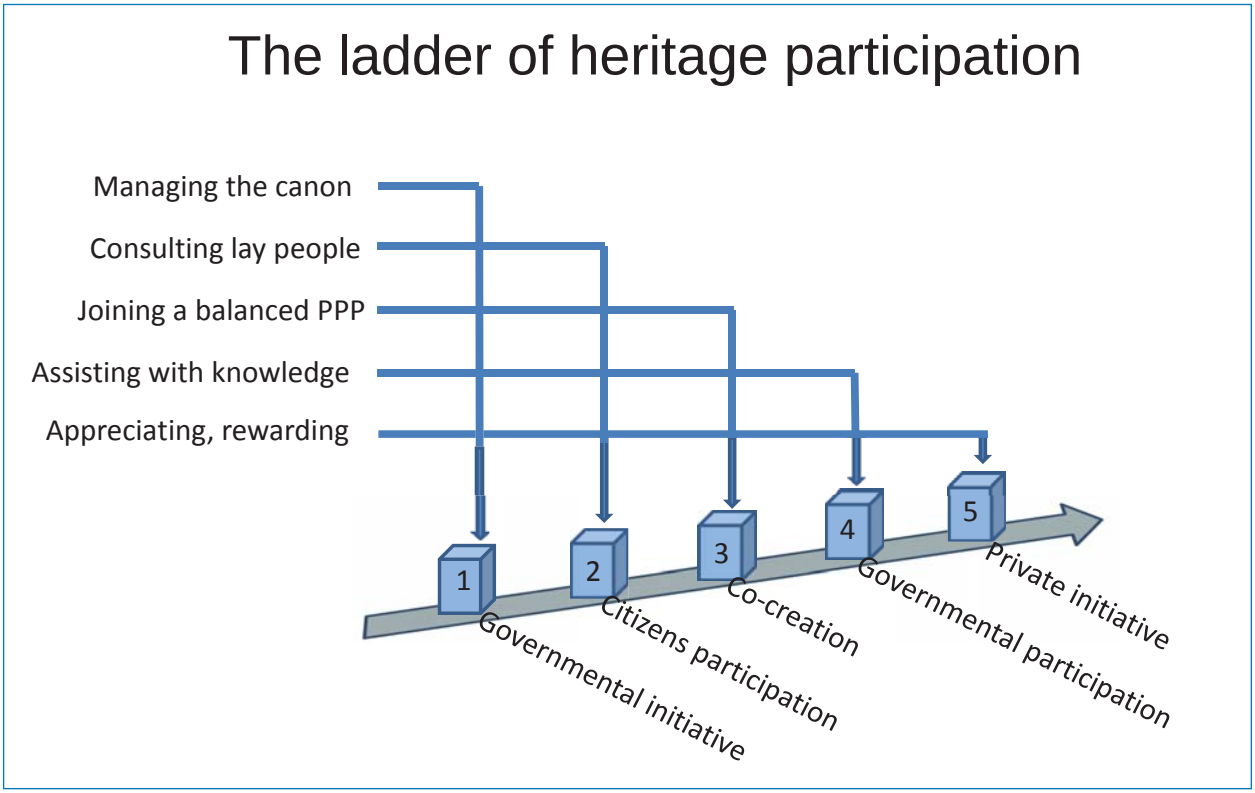


Figure 3.4: The Ladder of Heritage Participation, indicating changes in the work of heritage specialists as they climb the ladder.

exposure. In the case of the ticket offices, this platform was organised though social media channels uniting the ADO fans, and in case of Lunteren the local media played a key role. In times of declining government budgets, this phenomenon should interest the cultural heritage specialist.

The cases of ADO and Lunteren did not feature strong involvement by cultural heritage specialists. In both instances the Cultural Heritage Agency of the Netherlands had been consulted, but the initiators chose to proceed on their own. If we regard these cases as being at the front line of self-organisation, successful because of a high pre-existing social capital, we should conclude that learning from these lessons would be an essential precondition for making this common practice. The case of the monastery in Essen can be described as co-creation, based on mutual interests and an equal relationship between archaeologist and inhabitants.

For different modalities of interaction between public and private actors, we can make a distinction between citizen participation, co-creation and government participation (Salverda, Pleijte et al. 2014). If heritage specialists are open to co-creation and advanced models of participation, they may climb the ladder of heritage participation (see below) (Figure 3.4).

Specialists on the lowest rung work for government and apply legal and financial instruments. On the next rung they try to involve citizens in order to boost the legitimacy of the project and give feedback to the government about citizens' interests and perceptions in what are essentially top-down planning procedures. One step up the ladder, they engage in co-creation, in a balanced public private partnership (PPP). Interaction here is based on equality and mutual trust. If the initiative comes from a private actor who is in control of planning and resources, and if government actors collaborate, we can speak in terms of government participation. Here the heritage specialists empower through good advice – they share their knowledge, provide incentives through small grants and help to capitalise on the lessons learnt. They may also help to establish a contact network or crowdfunding platform that enables the actors to involve cooperative enterprises and possible sponsors. On the highest rung, a community's private initiative is autonomous (such as the paleo movement) – they do not really need or will not accept any help. Social capital is created and the heritage specialist may study how this works in order to draw up the lessons learnt and transfer them to other contexts. Moreover, if bottom-up heritage is created and taken care of, and if social capital is created, such an initiative may be publicly rewarded as an incentive to others.

If we apply this ladder of heritage participation to our case studies, we see that the Groningen case belongs to the category of co-creation and the ADO and Lunteren cases to governmental participation, or perhaps even autonomous private initiatives. A lot of potential work may emerge in these fields if participation in the convivial society progresses and acquires a higher profile. We can see here how experiments in self-organisation can be the necessary step towards new forms of institutionalisation. We observe this with crowdfunding, for example. Although only recently developed and still at an experimental stage, it is becoming a specific field, with its own specialists, rules

and institutional provisions. Climbing the ladder will not be easy because it breaks with established working traditions. Archaeologists actively engaging in the paleo food community may accumulate an inspiring body of knowledge on social movements and heritage, but at the risk of their professional reputation.

New perspectives and challenges for heritage professionals

As stated above, the making of cultural heritage in a convivial society is primarily a matter of diversification. In the case of bottom-up heritage-making, ownership will certainly be claimed by the local community. This accords with the spirit of the Faro Convention. Regularly or perhaps even deliberately, the bottom-up heritage objects will not meet the criteria and definitions of officially recognised cultural heritage. Processes of social decision-making will involve emotional arguments and the outcomes may be deeply contested from the perspective of rational and formalised heritage-defining. The case studies have also shown this element of social capital and cultural expression, which nurtures the capacity for self-organisation and resilience in a rapidly changing society. The relationship between cultural heritage and a convivial society is evident, but needs much more reflection. We can only agree with the European Commission's view that cultural heritage's contribution to economic growth and social cohesion is undervalued (European Commission 2014). However, economics and social cohesion are often local and therefore out of sight of political decision-making.

The question of whether cultural heritage specialists should become involved is therefore not straightforward. The social changes discussed above provide some reasons why heritage specialists should move up the ladder of participation. There is no need to join the paleo movement, but experimenting with participation and co-creation seems necessary for heritage institutions to retain their legitimacy.

Climbing the ladder implies a different way of working. A shift in focus from material heritage to the community and its struggle with modernisation and construction of social capital would be required. It would make sense to adopt the following steps:

- Identify and address local heritage initiatives and listen to needs
- Share knowledge, networks, ideas and – if possible – resources
- Support local heritage initiatives with regard to regulations, the involvement of private funders and communication with the community
- Help to embed the initiative by creating networks of similar actions, draw up lessons and disseminate them to other bottom-up initiatives

It is the heritage advisors who can capitalise on these lessons if they are open to heritage from below. They can incorporate these lessons into their practices and achieve greater success with new participatory approaches to cultural heritage.

This does not mean that top-down heritage should be neglected – both top-down and bottom-up have to be dealt with. Top-down politics and bottom-up heritage practices can display contradictory tendencies towards maintaining identity boundaries on the one hand and new inclusive alliances on the other (Karner & Parker 2011). This can lead to temporary social structures in the convivial society, in which different identities are constructed by means of culture and cultural heritage (During 2011). Heritage specialists should increasingly acknowledge the political dimension of their work when it comes to the opening and closing of identities. They will become the mediators between the canon and the vernacular.

Literature

Ashworth, G. J. & Graham, B. 2007: *Pluralising pasts. Heritage, Identity and Place in Multicultural Societies*. Pluto Press, London.

Crebolder, G. 2012: *'De grote, groene erfenis'. Een eeuw Luntersche Buurtbosch (1912–2012)*. Stichting Het Luntersche Buurtbosch, Lunteren.

Duineveld, M., During, R., Dam R. van & Zande, A. van der 2010: *The importance of being nimby. Een essay over erfgoed en burgerverzet*. Wageningen UR, Burgers en landschap; deel 4, Wageningen.

During, R. 2011: European Heritage Discourses, a matter of Identity Construction?, in R. During (ed.): *Cultural Heritage and Identity Politics*, Wageningen Academic Publishers, Wageningen.

During, R. 2014: *Nature as a do-it-yourself lifestyle*. Nature Assisted Health Foundation, NAH, Tilburg, 22–39.

European Commission 2014: *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Towards an integrated approach to cultural heritage for Europe*. European Commission, COM (2014) 477, Brussels.

Franke, W. 2014: Cosmopolitan conviviality and negative theology: Europe's vocation to universalism. *Journal of European Studies* 44 (1), 30–49.

Groenendijk, H. A. & Woldring, H. 2012: Yesse's voorganger. Oud akkerland onder kloosterterrein in Essen (Haren, Gr.). *Paleo-aktueel* 23, 65–72.

Hajer, M. A. 1995: *The politics of environmental discourse: ecological modernization and the policy process*. Clarendon, Oxford.

Häkli, J. and Minca, C. 2009: Introduction, in J. Häkli & C. Minca (eds), *Social Capital and Urban Networks of Trust*, Ashgate, Farnham, 1–10.

Illich, I. 1975: *Tools for Conviviality*, Fontana.

Karner, C. and Parker, D. 2011: Conviviality and Conflict: Pluralism, Resilience and Hope in Inner-City Birmingham. *Journal of Ethnic and Migration Studies* 37 (3), 355–372.

Karnooh, C. 2001: Europe: common heritage and differences, in Council of Europe, Cultural Heritage Division (ed.): *Forward Planning: The function of*

cultural heritage in a changing Europe, Strasbourg: 29–51.

Mulder, F. 2007: *Let me entertain you. De transformatie van het Nederlandse stadion*. Master's thesis, VU.

Muskiet, F. A. J. & Carrera-Bastos, P. 2013: Beyond the Paleolithic prescription: commentary. *Nutrition Review* 72 (4), 285–286.

Netwerk Erfgoed en Ruimte 2014: *Karakterschetsen, Nationale Onderzoeksagenda Erfgoed en Ruimte, Deel 1 Kennisagenda*. Rijksdienst voor het Cultureel Erfgoed, Amersfoort.

Piscitelli, M. 2013: Using Social Networks to Fundraise. Crowdfunding for the Archaeologist. *The SAA Archaeological Record* 13 (4), 36–39.

Pulford, L. & Addarrii, F. 2011: *This is European Social Innovation, European Commission Enterprise and Industry*.

Robertson, I. J. M. 2012: *Heritage from below*. Heritage, Culture and Identity Series, Ashgate, Burlington.

Robertson, M. 2009: Aite Dachaidh: Re-connecting People with Place – Island Landscapes and Intangible Heritage. *International Journal of Heritage Studies* 15(2–3), 153–162.

Rutherford, W. 1978: *The Druids and their Heritage*. Gordon & Cremonesi, London.

Salverda, I., Pleijte, M. & Dam, R. van 2014: *Meervoudige democratie. Meer ruimte voor burgerinitiatieven in het natuurdomein*. Alterra, Wageningen, 35.

Salverda, I. E., Jagt, P.D. van der & During, R. 2012: *Sociaal cultureel ondernemerschap, in de groene leefomgeving. Zo doen wij dat hier! #1*. Alterra, Wageningen.

Scott, M. 2011: Reflections on 'The Big Society'. *Community Development Journal* 46(1), 132–137.

Sinn, D. & Syn, S.Y. 2014: Personal documentation on a social network site: Facebook, a collection of moments from your life. *Archival Science* 14(2), 95–124.

Skinner, E. 2012: Intimate knowledge: Defining Heritage from the Inside, in I.J.M. Robertson (ed.): *Heritage from Below*. Heritage, Culture and Identity Series, Ashgate, England, Farnham, 109–124.

Smith, M. J. 2010: From Big Government to Big Society: Changing the State-Society Balance. *Parliamentary Affairs* 63(4), 818–833.

Sørensen, E. & Triantafillou, P. 2009: *The politics of self-governance*. Ashgate Publishing Company.

Spies, C. 2013: Reluctant and Excluded Citizens, Differentiated and Multilevel Citizenship: Where the Indian and the European Discourse on Citizenship Meet, in S.K. Mitra (ed.), *Citizenship as Cultural Flow: Structure, Agency and Power*, Springer, Berlin, Heidelberg, 45–64.

Tonkens, E. & Duyvendak, J.W. 2006: *Wat burgers bezielt. Een studie naar het gedrag van kleinschalige burgerinitiatieven*. NICIS, Den Haag.

Van Dam, R., Salverda, I. & During, R. 2011: *Effecten van burgerinitiatieven en de rol van de rijksoverheid*. WUR/Alterra, Burgers en landschap; deel 5, Wageningen.

Van Dam, R., Duineveld, M. and During, R. 2014: Delineating Active Citizenship: The Subjectivation of Citizens' Initiatives. *Journal of Environmental Policy & Planning* 16, 1–17.

Van Dam, R. I., During, R. & Salverda, I.E. 2014: Strategies of citizens' initiatives in the Netherlands: connecting people and institutions. *Critical Policy Studies*, 1–17.

Van Dam, R. I., Salverda, I.E. & During, R., 2014: Formal and informal strategies of citizens' initiatives: A powerful bonding and mobilizing force, in B.T. Knudsen, D.R. Christensen & P. Blenker (eds): *Enterprising Initiatives in the Experience Economy: Transforming Social Worlds*, Routledge, 19–37.

Verhoeven, I. 2009: *Burgers tegen beleid. Een analyse van dynamiek inpolitieke betrokkenheid*. Aksant, Amsterdam.

Weber, R. 2001: Role of heritage in a changing Europe, in Council of Europe, Cultural Heritage Division (ed.): *Forward Planning: The function of cultural heritage in a changing Europe*, Strasbourg, 5–7.

White, M., Patoli, Z. & Pascu, T. 2014: Knowledge Networking through Social Media for a Digital Heritage Resource. *International Journal of Information Management* 34(5), 660–671.

Yerkes, M. & Veen, R. van der 2011: Crisis and Welfare State Change in the Netherlands. *Social Policy & Administration* 45(4), 430–444.

Zapatero, G. R. 1996: Celts and Iberians: ideological manipulations in Spanish archaeology, in P. Graves-Brown, S. Jones & C. Gamble (eds): *Cultural Identity and Archaeology: The construction of European Communities*, Routledge, London, New York, 179–192.

Websites

Link 1: http://berliner-schloss.de/spendenkatalog

Link 2: http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2104-reflective-6-2015.html

Link 3: http://www.wageningenur.nl/nl/Onderzoek-Resultaten/Projecten-EZ/Expertisegebieden/Kennisbasis-onderzoek/Transitie-Innovatie.htm

Link 4: http://grist.org/food/millions-alive-today-would-have-to-die-before-the-paleo-diet-could-take-over/?utm_source=twitter&utm_medium=tweet&utm_campaign=socialflow

Link 5: https://www.youtube.com/watch?v=QJcNwgQHPEQ

Link 6: www.kloosteryesse.nl

Link 7: http://lucia.kbr.be/multi/1867882Viewer/imageViewer.html

Link 8: http://groninganus.wordpress.com/2012/05/03/het-klooster-te-essen-vlak-voor-zijn-sluiting/

Dare to choose

Making choices in archaeology involves a wide range of visions and approaches.
Adopting sampling and investigation strategies is one such approach.
Here iron slags and other handcraft remains are sampled at an Iron Age site.
© *Hauke Jöns*

4 | Dare to choose: make research the product

Dries Tys

Abstract: In the early 1990s the Valletta Convention was greeted with great enthusiasm in many countries. Since then many regions have incorporated archaeology as part of the spatial planning process. Today fieldwork has become a mechanical process and the archaeological product that developers pay for is a clearing (preferably short and cheap) of the terrain of all kinds of 'heritage'. The other archaeological product – knowledge about our material past – is often absent entirely and this at a time when society has never paid more for archaeology and the quantity of data preserved ex situ is increasing every day. In order to solve this catch 22 for archaeology, we need to change direction and re-implement research questions in the archaeological management process.

Keywords: Valletta Convention, research, integration, heritage management, Flanders

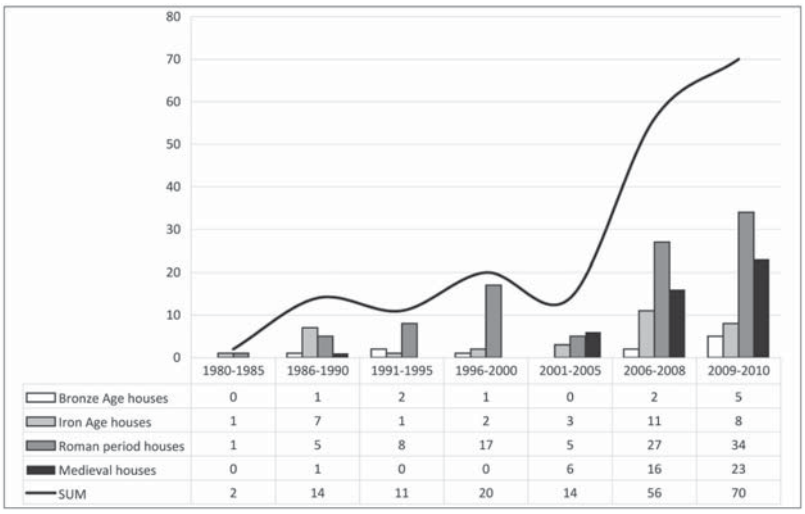
Introduction

The paper I am presenting has a more essayistic approach and is not based on a systematic statistical analysis. What I have to say is the result of many discussions with numerous colleagues, both academic – Martin Carver, Frans Verhaeghe and many others – and non-academic, such as archaeologists working for private companies and archaeological curators at heritage agencies. These discussions have highlighted the great concern about where we are heading with archaeology, and I therefore congratulate the conference organisers on the much-needed opportunity to reflect on where to go after 20 years of 'Malta'.

To say that the Valletta Convention on the Protection of the Archaeological Heritage (Council of Europe, 1992) has drastically changed the setting of European archaeology is to state the obvious. Since the Convention was signed almost 20 years ago, we have seen the rise of a kind of archaeology in which the emphasis has shifted from research-driven to preventive archaeology, whether or not in a commercial environment. The preservation of archaeological sites has become the main purpose of national and regional institutions, and sites that are not threatened by spatial developments are to be preserved in situ. The treaty has produced many positive results, notably the fact that an impressive quantity of archaeological data has been gathered in what is known as 'Malta' archaeology, with its own legislative logic and institutions (Figure 4.1; De Clercq et al. 2012).

However, there were – and continue to be – many problems and difficulties as well. This has given rise to a new Malta concept, namely that of the 'Malta boomerang'. The main problem is that in much Malta legislation, the budget and time for post-excavation research remains limited or even non-existent. At the same time, non-academic archaeological research has been reduced to various forms of 'evaluation'.

In the almost 20 years since the rise and implementation of Malta archaeology, it seems that the notion of scientific, research-driven archaeology has become



	1980-1985	1986-1990	1991-1995	1996-2000	2001-2005	2006-2008	2009-2010
Bronze Age houses	0	1	2	1	0	2	5
Iron Age houses	1	7	1	2	3	11	8
Roman period houses	1	5	8	17	5	27	34
Medieval houses	0	1	0	0	6	16	23
SUM	2	14	11	20	14	56	70

Figure 4.1: Numbers of Bronze Age, Iron Age, Roman period and medieval houses discovered in rural areas in East Flanders since 1980. The sharp increase since 2006 shows the positive effect of preventive archaeology in Flanders (De Clercq et al. 2012, 51, Figure 4.16).

divorced from preventive archaeology. Research-driven archaeology is the terrain of universities and academies and is seen as different from the archaeology that is part of the spatial planning process. Research-driven excavations on non-threatened sites have become a rarity and the data generated in the Malta process is seldom incorporated in studies that go beyond a basic descriptive report. As a result, artefacts are not usually processed into information and knowledge. This undermines the production of information, information that we need to assess meaning, which we in turn need to derive in order to understand 'heritage'.

This kind of 'archaeography' will undoubtedly undermine archaeology's position, since people and institutions will eventually ask how all this investment in retrieving 'old junk' has benefited us. No-one will be able to provide an answer. It also suggests that archaeology will return to a kind of empirical stage, where knowledge is based solely on single field experience and not on research questions.

As a result, developers and the public are beginning to wonder why they should pay for archaeological evaluation and preservation. Today, in 2014, archaeological research is seen as disconnected from the real world and the profession is underrated by the general public. Archaeology is regarded as an expensive nuisance and its contribution remains unclear.

Archaeological management in Flanders: survival of the fittest?

In Flanders today, preventive archaeological fieldwork is organised along commercial lines. When private developers are obliged to carry out archaeological prospection or a preventive excavation, they write to various private companies to find out who can offer what 'value'. What matters to developers is first and foremost cost efficiency. Their chief concern – and this is perfectly understandable – is to have a positive balance sheet at the end of the project and not some archaeological product that they might not be able to use. If this means doing less archaeology, they will try to cut archaeological costs wherever possible. While you could say that archaeology adds value to the spatial project, in reality, practice shows that this value is only superficial and entirely subordinate to commercial values. It doesn't take much imagination to see that time and money play a vital part in assessing what archaeological companies offer. When research, quality and budget are brought into the equation, the latter will prevail.

Archaeological companies are today competing with each other as to how big an area they can cover in a certain time. Company A, which tries to maintain scientific standards, offers 20 days of fieldwork per hectare, everything included, because they want to put the necessary time into on-site sampling and scientific applications.

Company B, which needs to do better in order to secure the project (to keep the business afloat and pay staff wages), responds by offering 10 days of fieldwork per hectare. Clearly, Company B won't be able to do as much as Company A. There will be less scientific sampling, features will be drawn in a less scientific way, there will be shortcuts in the necessary excavation techniques, etc. In one case, a company actually made an official complaint to heritage management when the heritage agency ordered them to spend at least one full day of excavation time per individual burial in a Merovingian cemetery; this would be too costly for the company.

There is often a lack of time and resources to satisfy methodological requirements. Because knowledge is not the product, basic needs are not met, such as first assessing a site's preservation conditions and hence scientific potential in order to decide on the quality of the archaeological data or the degradation of sites as a source for information. Nor is there time to develop proper excavation strategies or study the finds to assess their significance. What most archaeologists do in the context of heritage management is preserve sites ex situ in archaeological archives.

The well-known British field archaeologist Philip Barker once wrote: 'The site should dictate the speed of the excavation. To try to go two or three times as fast without serious loss is like asking a surgeon to carry out a heart operation in half an hour with a knife and fork' (Barker 1993, 71). In Flanders today, the basic principle of removing loose earth from sections or context units before photographing them is under threat because of lack of time.

Since field archaeologists are all trained in an academic setting where they have learned to appreciate the value of archaeology as the science of 'reading the past from material remains', this modus operandi leads to frustration. Many private archaeology contractors subscribe to Martin Carvers' statement that being a field archaeologist in a commercial company can be very frustrating because of uncertain job prospects, low pay and the tensions between archaeology and society (Carver 2011, 73).

A matter of values

As we have stated, the value that today's project developers take as their starting point when dealing with heritage is firstly money and time. For them, high-value archaeology is an excavation involving fast, efficient fieldwork. The mayor of Leuven created a furore in the press when an archaeological company needed an additional 10 days to finish an urban excavation. He blamed the archaeologists for creating their own market since they were likely to find nothing more than 'our grandmother's lost handbag'.[1] The fact that the dig did deliver important information on matters such as the town's origins or the fish consumption habits of the late medieval inhabitants of the town centre was

[1] See for instance Het Nieuwsblad 27.10.2010: *Tobback verklaart archeologen de oorlog* (Link 1); De Standaard 09.07.2012: *Louis Tobback blijft boos om 28.000 scherven* (Link 2); De Morgen 10.07.2012, p. 9: *Archeologie is geen kinderspel.*

Figure 4.2: Excavation results of the preventive dig in Pulle, where only small parts of the settlement and its houses were excavated and the larger parts of the same houses were left in situ because of a strict interpretation of the Valletta Convention (Eggermont et al. 2008, 13, Figures 10 and 11).

dismissed as costly nonsense and hobbyism, 'because we already knew from written sources that they ate fish'. Here the mayor is rephrasing the well-known saying by the historian Sawyer, that 'archaeology is a very expensive way of telling what we already know' (Sawyer 1983).

This is an example of a local politician complaining about costs and resources and not appreciating the results of archaeological efforts. This is because clearing the terrain was the beginning and end of the exercise; it is in the post-excavation analysis where data starts being transformed into knowledge and narratives. But that is not what developers pay for, which means commercial archaeological companies hardly ever reach the stage of dealing with the excavation results from their projects, as was the case in the late medieval quarter of Leuven.

But it is too easy to blame the developers, whether private or public. As we will see, there are other values and issues at stake from their point of view. We also need to look at ourselves. The fundamental principles of the Valletta Convention – in situ preservation where possible and ex situ preservation when necessary – have often been applied blindly, even zealously. Archaeological companies are only obliged to do what is required (which is usually not very much) since this is determined by the amount of money the client/developer is willing to pay. This often leads to excavation results with limited added value other than dots on a map.

One example involves early-medieval house platforms in the village of Pulle, which are only partially excavated because they were only partly 'threatened' by development (Figure 4.2). In the early-medieval period long houses were open halls with a delicate spatial structure that cannot be understood if we only have partial house platforms and floors at our disposal, as Milek and Roberts demonstrate very convincingly (Milek & Roberts 2013). These houses need to be either excavated entirely or left alone. From a scientific point of view, partial excavation and leaving the rest 'protected' in situ is a waste of effort.

By practising this kind of 'Malta' archaeology, the main issue has become the act of digging. Archaeology is reduced to a very brief field analysis, avoiding broader research questions than the strict determination of the site. After all, there is only an obligation to save the data; the question of who bears responsibility for the process of information gathering and knowledge development usually goes unanswered. Most of the time, excavations lead to nothing but a basic descriptive report, a catalogue of sherds and stratigraphical units. These reports contain almost no proper study of the archaeological materials. Given the time and money constraints, the most that reports can aspire to is a chronological description of the ceramics.

Much of the data from preventive excavations, as published in these reports, tends to be useless for scientific purposes. In her PhD on glass consumption in the southern Low Countries during the later Middle Ages, my student Natasja Reyns was obliged to conclude

that she could only work with contexts excavated before 2002 (Reyns 2014). In part, this was because the reports did not indicate the extent to which the contexts could be regarded as closed primary or mixed secondary contexts. At the very least, this shows that there has been a major problem with post-excavation analysis and data processing. This situation is not entirely new; in the early years too, we often had to wait many years before we could study assemblages from sites. The problem today is that studying material is no longer part of any process. No-one does it because there is neither time nor money, and specialists in ceramics and other artefact categories are not being succeeded by new young talent because artefact study is not included in the way we implement the Valletta Convention.

Many of the archaeological reports are indeed mere exercises in copying and pasting handbooks and well-known syntheses. There is no critical reflection to provide a framework for interpreting the results. Common knowledge is rediscovered because not enough time is spent in libraries.

I excavate, therefore I conduct research?

It appears that many excavations carried out in the context of preservation and management are simply not interesting or good enough to deliver scientific results that matter. Research-driven excavations and archaeological projects have become scarce and in many countries they are seen as the exclusive terrain of universities and academies and not of the archaeologists involved in the spatial planning process. This is a problem because fieldwork is intrinsically the process of turning material features into data (Roskams 2001, 35). As Steve Roskams states: 'data are produced in excavation, not lying around dormant on the ground waiting to be discovered' (ibid.). It is only through post-excavation analysis that data is turned into evidence of social processes (ibid.). In other words, post-excavation is an essential step in making excavations significant and valuable.

In contrast, the archaeology resulting from the Valletta Convention is often descriptive and limited to the registration of features. This is a bit like historians being satisfied with their work if they succeed in transcribing a text from the archive without further comment, instead of using the text to study the past.

This is symptomatic of today's archaeological resource management, in which scientific questions and approaches are becoming marginalised in the general process. It reverses the whole process of knowledge formation in order to derive some meaning out of the remains. The consequence will be that there won't be any new information to tell, because the sole outcome will be a mindless set of 'dumb artefacts'.

As Matthew Johnson states: 'What makes us archaeologists as opposed to mindless collectors of old junk is *the set of rules we use to translate those facts into meaningful accounts of the past*, accounts that 'make sense' to us archaeologist and (it is hoped) to those who read or engage with our work' (author's emphasis) (Johnson 2009, 7). Archaeology is still a highly complex behavioural science, which requires time and resources to make that translation.

If we are not careful, we might end up with a preventive archaeology that is at best merely an empirical 'science', where knowledge is based solely on single field experience and not on research questions – a kind of 'inventorial archaeography'.

This approach towards archaeology is bound to undermine the very reason why we need preventive archaeology, because without any knowledge return it will become increasingly difficult to provide sound arguments for preserving heritage. Archaeology is intrinsically a scientific process, in which data and results need to be evaluated constantly. This enables us to discover more and to share our findings with a wide audience. Only then do we have something to offer our most important shareholder, the public (Carver 2012).

A change in direction?

In order to solve this catch 22 for archaeology we need to change direction and review how we implement the Valletta Convention.

The first issue is to remove the opposition between heritage preservation and heritage policy on the one hand and scientific research into the material past on the other. More than a century ago, Flinders Petrie said that 'a man does not find anything he does not look for' (Petrie 1904, 49). This implies amongst other things that sites mean different things to different archaeologists. In other words, there is no such thing as an objective excavation, it is almost impossible to archive archaeological information without making a selection, and perspectives and questions are intrinsically present at any archaeological excavation.

Somewhat later, in 2001, Steve Roskams stated: 'the past does not speak directly for itself through its material remains', and 'data are not gathered passively but produced by active intervention of the archaeologist', based on research questions and decisions and evaluations about the value and necessity of sites and data (Roskams 2001, 30). Excavations are therefore necessarily selective and indeed dependent on scientific questions and research issues. If we accept both statements, then we also have to accept that research perspectives are unavoidable and that each archaeological excavation should be conducted from a scientific point of view in which we can impose perspectives.

Whether the required sets of records are obtained in preventive archaeological digs or by commercial contractors is not relevant. Or put another way: preventive archaeology also has to be question-led and critical (Roskams 2001, 31–35). This is not because of 'ivory tower' projects, but to assess the quality of information: to question data and to know what to preserve and protect. In order to do this we have to question the factors that affect the creation and preservation of sites – in other words, we must have

a good understanding of the formation of sites. This means that preventive archaeology, or archaeological curatorship, is necessarily investigative in nature.

I do agree that we have to accept that archaeology cannot demand unlimited time and resources, but we must dare to choose sites whose research potential is important to the research agenda. This also includes assessing the formation processes for sites where we wish to carry out fieldwork.

We need to abandon the urge to 'safeguard' or 'archive' everything that is threatened, especially the huge pile of quick, partial excavations. We should only excavate in cases where an assessment of the scientific potential has shown that the site has potential for our understanding of the formation and transformation of other archaeological sites, where the area of the project is large enough to obtain information on spatial structure, or where it allows us to carry out seriations and quantifications, etc. Sites need to have a scientific value, a story and/or the potential to contribute to scientific debate. This significance can be local, but the scientific aspect must prevail. Only then does the deployment of resources pay off, only then can we explain to heritage managers and project developers why archaeology is necessary. This implies that we must dare to choose – to choose sites which are rare, which are significant and which have exceptional potential. This is not an absolute premise and surprises are an inherent part of any archaeological fieldwork. This is certainly true on sites with a complex stratigraphy such as urban sites or when fieldwork reaches the oldest stages of a site. 'Dare to choose' cannot mean that we will only go for the cherries on the cake; instead we have to consider going for the cake itself.

We will have to develop criteria for choosing sites, criteria that are both socially and scientifically embedded. If sites are heavily disturbed, if the contexts mainly comprise secondary deposits or if only off-site phenomena are threatened, we must be able to choose not to excavate and concentrate our, and society's, energy where it is needed, after evaluation.

Extraordinary sites alter the agenda and provide a framework of reference for the ordinary ones. Remarkably, the sites that have so far proved to be of significance to Flemish archaeology in its larger setting are those involving long-term excavations from a research-led perspective. One such site is Ename, which began as a fortress engaged in trade and artisan activity during the 10th and 11th centuries, before evolving into an abbey from the mid-11th century. The extraordinary conditions of the excavation included the detailed excavation of many interesting deposits with clear chronological limits, which allowed Koen De Groote to develop his study of the consumption, distribution and chronology of medieval ceramics in central Flanders (De Groote 2008). This work has become the standard work used by commercial archaeologists to date the ceramics from their projects. The Hopmarkt site in the town of Aalst shows that very interesting results can emerge from negotiation between scientific archaeologists, private developers and a government institution with artefact specialists who have the time to develop basic research on bulk material from these and similar sites (De Groote et al. 2011). However, very few of the preventive excavations in commercial settings have delivered data with the potential to develop new chronological frameworks for ceramics and other materials because of the lack of time to study materials afterwards and the limited conditions under which many preventive digs take place.

In Flanders, we also see that both local governments and private developers can be won over by the prospect of a return in terms of content and/or scientific communication with a wider audience. Examples include the long-term excavation of the shifting village of Maalte at the Ikea site in Ghent (Link 3) or the excavations of the old cathedral graveyard in the medieval town of Mechelen, where local inhabitants were able to adopt the skeletons of their ancestors (Link 4). In these exceptional examples, extra efforts were made, in close collaboration with the developers, to progress to post-excavation analysis and synthesis. Notwithstanding the fact that these cases are rare, this kind of goodwill will only survive if we can tell people why it is interesting and worthwhile to practise archaeology. Today, a growing number of building contractors faced with preventive archaeology are demanding that knowledge be the outcome of their investment.

This will also benefit the public, who are the third party involved. They are the ones who value the non-material significance and the memories associated with the material elements. If we continue to separate content, knowledge and significance on the one hand and management on the other, we are neglecting our civil society. Let us also not forget the importance of the soft economy of cultural tourism, and the aging society in which large numbers of older people have huge amounts of free time. The real militants when it comes to our heritage and patrimony are the people; let us not forget this.

This essay is not directed against commercial archaeology as such – that is not the essence of my argument. What matters is that commercial firms should be able to do the work they have to do properly, and that the conditions are in place that allow them to develop their full potential and their tools so they can provide society with valuable information, give value for money.

After the evaluation process we must dare to select sites, based on perspectives in relation to 1) the quality of the preservation conditions and formation processes and 2) regional and academic research agendas.

This would mean an important stage of assessing the data from the evaluation stage, and thus a stage involving a scientific bureaucracy, including a research-oriented heritage agency. It would also mean that when a site is selected for its potential to add value from certain perspectives, the archaeologists who will carry out the fieldwork must propose a research design, including excavation strategies and interdisciplinary post-excavation analysis. It means assessing field archaeologists on their ability to design proper research and awarding contracts and permits based on design

merit, not on the lowest tendered price and/or the fastest work schedule (Carver 2011, 154–164). This will not work if we want to do everything, if we adopt the arrogant position that every dig is equally important. Archaeology is not in a position to demand too much from society.

As Martin Carver proposes, introducing design competition will increase the costs of archaeology for the selected sites and projects, and this must be compensated (ibid.). Ceasing to carry out excavations of smaller, less significant, disturbed sites containing mainly off-site phenomena can do this. At the same time solidarity mechanisms should be introduced, so that those who have the good fortune of developing an important site will not have to bear all the costs alone. Another consequence is that we will have to place the emphasis on scientific reflexivity, on controlling peer-group quality – but who would oppose that? This can only be done if there is someone willing to monitor and assess the quality of the data. In a general preventive system, this goes far beyond the capabilities of archaeological departments at universities. What we need is a system where public archaeological services are given a new role as institutions that safeguard quality, that provide regional scientific assessments, that are familiar with research agendas and that conduct artefact studies and post-excavation analysis. Some people might regard this as a step back in time, but the Valletta Convention never stated that preventive archaeology should occur along the present commercial lines. Bringing the public institutes back to life would be a good way to organise solidarity in terms of time and effort.

Universities, the state, archaeological companies, consultants and volunteers are all engaged in the same business and mission: finding out about the past.

If we want an archaeology that convinces people that we are worth paying for, we must make research the product: research to find out more and understand more about the past. This is what we do and what we are good at.

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References

Barker, P. 1993: *Techniques of Archaeological Excavation*. Routledge, London.

Carver, M. 2011: *Making Archaeology happen. Design versus dogma*. Leftcoast Press, Walnut Creek.

Carver, M. 2012: L'investissment en archéologie au Royaume-Uni: expériences et perspectives en champs de la recherche archéologique. *Archéopages, Numéros Hors-Séries*, 3, 34–40.

Council of Europe 1992: *European Convention on the Protection of Archaeological Heritage (Revised)* (Valletta Convention), European Treaty Series 143, http://conventions.coe.int/Treaty/en/Treaties/Html/143.htm.

De Clercq, W., Bats, M., Bourgeois, J., Crombé, P., Mulder, G., De Reu, J., Herremans, D., Laloo, P., Lombaert, L., Plets, G., Sergant, J. & Stichelbaut, B. 2012: Developer-led archaeology in Flanders. An overview of practices and results in the period 1990–2010, in R. Bradley, C. Haselgrove, M. Vander Linden & L. Webley (eds): *Development-led archaeology in northwest Europe*. Oxbow books, Oxford, 29–55.

De Groote, K. 2008; *Middeleeuws aardewerk in Vlaanderen*. VIOE, Brussel.

Eggermont, N., Annaert, R., Bastiaens, J., Derese, C., Vandenberhe, D., Van den haute, P., Haneca, K. & Van Strydonck, M. 2008: *Nederzettingssporen uit de ijzertijd en de vroege middeleeuwen onder een stuifduin langs de Keulsebaan te Pulle (gem. Zandhoven, prov. Antwerpen)*. Intern Rapport Vlaams Instituut voor Onroerend Erfgoed.

Johnson, M. 2009: *Archaeological Theory: An Introduction, 2nd Edition*. Wiley-Blackwell, London.

Milek, K.B. & Roberts, H.M. 2013: Integrated geoarchaeological methods for the determination of site activity areas: a study of a Viking Age house in Reykjavik, Iceland. *Journal of Archaeological Science* 40, 1845–1865.

Petrie, F. 1904: *Methods and Aims in Archaeology*. Methuen, London.

Reyns, N. 2014: *Consumptie van laatmiddeleeuws en vroeg modern glas in de Scheldevallei en de Maasvallei*. Unpublished PhD dissertation. Brussels (VUB).

Roskams, S. 2001: *Excavation*. Cambridge University Press, Cambridge.

Sawyer, P. 1983: English Archaeology before the Conquest: A Historian's View, in D. Hinton (ed.): *Twenty-Five Years of Medieval Archaeology*. The Department of Archaeology and the Society for Medieval Archaeology, Sheffield, 44–47.

Websites

Link 1: http://www.nieuwsblad.be/cnt/gkq31dtpb?start=

Link 2: http://www.standaard.be/cnt/dmf20120709_081

Link 3: http://www.archeotheloop.be/index.html

Link 4: http://www.mechelen.be/press/143/opgraving-sint-romboutskerkhof-word-peter-of-meter-van-een-skelet.html

5 | An interpretation of Valletta from the Críoch Fuinidh (the remote or end country)

Margaret Keane

Abstract: As Europeans and as archaeologists we have diverse views on how Valletta should be applied. Varying approaches have developed on foot of different historical, political, societal and legislative contexts of our nations. This contribution focuses on a discussion of protection measures dealing with the application of the planning system to privately and publicly funded development works. It tracks changes in policy from the late 1980s to the present in Ireland, with reference to legal judgements and public controversies. It discusses the role of programmes such as INSTAR in seeking to bridge the academic/commercial gap forming a collaborative research response to the generation of archaeological data. It poses the challenge of how a European-wide agenda can respect diversity of approach. I hope to demonstrate how Ireland's excavation policy has been largely effective in expanding our knowledge of the archaeological resource, in answering the requirements of Valletta and as an appropriate response to the value which civil Irish society places on our past.

Keywords: value, civil society, tradition, controversy, resource

Early legislators, retired revolutionaries

The cultural context to the emergence of an independent Ireland was the development during the 19th and early 20th century of the Gaelic revival, a reawakening of interest in the Gaelic language and culture in terms of folklore, sports, music and the arts. At the same time a vigorous movement usually referred to as the Irish Literary Revival saw the realisation of a stream of publications of poetry, literature and plays in English with themes relating to Irish mythology, folklore and history. The foremost amongst authors of the Irish Literary Revival was W.B. Yeats. In common with other parts of Europe the burgeoning cultural revival of indigenous culture led to the growth of nationalism and the development of emerging nation states. Ireland gained political independence from the United Kingdom in 1922 further to an uprising in 1916 led by poets, writers and rebels and to a subsequent guerrilla-style War of Independence from 1919 to 1921.

The initial legislative provision of the new Irish Free State in relation to the protection of archaeology was enacted in 1930 under the title The National Monuments Act 1930. Ireland's early legislators were 'retired' revolutionaries many of whom had fought in the

Figure 5.1: Aerial photograph of Tara, County Meath (© National Monuments Service, Department of Arts, Heritage and the Gaeltacht).

various engagements and had been imprisoned prior to their entry into *Dáil Eireann* (the Irish Parliament). For them, the title of the Act was important. While retaining the essence of many of the provisions of its predecessor, the Ancient Monuments Protection Act 1882, the role of the new act in laying claim on behalf of the new nation to the protection of monuments was highlighted;

'It stresses the point that the provisions of a measure of this kind should concern not merely the limited though happily daily increasing number of people interested in antiquarian learning and research but the nation as a whole.' (Bourke 1929)

It was felt that the Irish material was of particular importance for Western European history as it lay 'beyond the levelling influence of the Roman Empire' (Bourke 1929). The role of the physical remains of our past in bringing together disaffected groups by reminding them of a shared common past after a particularly bitter civil war which had followed the War of Independence was acknowledged. Ireland's National Monuments – monuments of national importance by virtue of their archaeological, historical, traditional or artistic quality – were eulogised as a "sacred heritage" of value to the Irish at home and to wider Irish communities living abroad – the diaspora. The iconic earthworks of Tara and the hallowed grounds of early monastic centres were identified 'as great monuments that stood for Irish liberty' (Sheehy 1929).

Folklore and the Schools Manuscript Collection

During the late 1930s the 1937 Schools Scheme (Schools Manuscript Collection), a joint initiative between the Irish Folklore Commission, the Department of Education and the Irish National Teacher's Organisation (INTO) took place on a nationwide scale. In this, fifth and sixth class students (aged between 11 and 14 years of age) collected and transcribed local folklore traditions. In sourcing the material the children were asked to consult with their parents, grandparents and older neighbours about traditions relating to local history and monuments, folktales and legends, riddles and proverbs, songs, customs and beliefs, games and pastimes, traditional crafts etc. A wealth of folklore was documented in this exercise. These records show that some archaeological monuments, in particular ringforts or early medieval farmsteads, the most numerous and widely spread monument classification in the country with a national total of approximately 40,000, were associated directly with fairies. It was widely held to be very unlucky to disturb these monuments as they were believed to be the homes of the fairies or *sí* folk. These traditional beliefs have persisted, it has been considered very unlucky to interfere with or to damage monuments into recent decades. In recent times traditional belief systems are weakening. As ownership of land changes, new owners seeking to reconfigure recently acquired property can be less reticent about damaging monuments through land restructuring than the previous owners with strong familial and emotional links to that place.

Art and poetry

The relationship between people and monuments, place and home in Ireland has been described by our artists. In Belderg, Seamus Heaney, one of our finest poets, describes conversations with retired school principal Patrick Caulfield and his archaeologist son Emeritus Professor Seamus Caulfield relating to their discovery and excavation of an intact sub-peat Neolithic landscape. The poem explores themes of philology, connectedness, links between ancient and modern landscapes, monuments and the continuity of communities through time.

'…To lift the lid of the peat
And find this pupil dreaming
Of neolithic wheat!
When he stripped off blanket bog
The soft-piles centuries

Fell open like a glib:
There were the first plough-marks,
The stone age fields, the tomb
Corbelled, turfed and chambered,
Floored with dry turf-coomb.

A landscape fossilized,
Its stone wall patterings
Repeated before our eyes
In the stone walls of Mayo
Before I turn to go

He talked about persistence…'

Belderg, Seamus Heaney 1975.

Figure 5.2: Pre-bog field wall at Céide Fields, County Mayo (© Margaret Keane).

Figure 5.3: Habitation III, plaster and pigment, 1969 by Maria Simonds-Gooding (© Maria Simonds-Gooding).

In her work the artist Maria Simonds Gooding examines subsistence and survival, shape and space, the landscape and man's mark on it in painting/drawing and 3-dimensional plaster pieces with titles such as 'Enclosed Ringfort' and Habitation III. This artist's work gives expression to the rootedness of the Irish people in the land and their reverence for ancient places and it describes the archaic forms of land enclosure.

Controversy and legal cases

The Derrynaflan Judgement

The law is not static but changes to reflect societal requirements, so the provisions of the National Monuments Acts (as amended) have evolved reflective of some important legal cases and judgements. *Webb vs Ireland* [1988] IR 353 concerns an appeal by the State to the Supreme Court against an Order of the High Court relating to the Derrynaflan Hoard. Mr Webb and his son had identified the hoard using a metal detector at Lurgoe, County Tipperary within the area of a preservation order at an Early Medieval church site. They had given it for safe-keeping to the Director of the National Museum of Ireland on the advice of their solicitor, pending a decision on the ownership of the finds. The High Court order required the State to return the late 8–9th century hoard of ecclesiastical metalwork including a sumptuously decorated chalice, paten, paten stand, strainer and bowl – to Michael T. Webb and his son or to retain the items and pay the finders a large reward. The defendants won the case, the State was allowed to retain the Hoard, although it was ordered to pay a reasonable sum to the finder. Supreme Court Justice Finlay articulated his decision making process and argued that as a modern state with a Constitution, with particular reference to Article 5 of the Constitution of Ireland which declares that Ireland is a sovereign, independent, democratic state, the State should be the rightful owner of antiquities of importance which are discovered and which have no known owner – this being a necessary ingredient of the sovereignty of a modern state in terms of the common good. 'It would, I think, now be universally accepted, certainly by the People of Ireland, and by the people of most modern states, that one of the most important national assets belonging to the people is their heritage and knowledge of its true origins and the buildings and objects which constitute keys to their ancient history.' (*Webb v Ireland* [1988] IR 353). The tenor of this judgement was codified in Section 2 of the 1994 National Monuments Amendment Act vesting ownership of all archaeological objects with no known owner in the State.

Clashmelcon, Ballyduff, County Kerry

Another reported court judgement has more recently presented some statements from the presiding judge on the balance of the rights of the individual versus the common good. In this example the State successfully prosecuted a landowner who had failed to give notice of his intention to do works at monuments included in the Record of Monuments and Places. The landowner had levelled the earthen banks of a ringfort and had damaged a souterrain (underground passage) in land restructuring at Clashmelcon, County Kerry. The farmer was fined €25,000 on foot of the prosecution and in his summarising remarks Justice Carroll Moran reflected: 'Ownership of property was a right, but this right was 'not unfettered' and it was qualified by the fact property was held in trust for the culture of the country' (Lucey 2012). Here, the concept of archaeological objects and monuments being national assets held in trust for the community of individuals that makes up the Irish people is expressed.

Wood Quay

From the late 1950s to 1968 Dublin Corporation (now known as Dublin City Council) gradually acquired a large city centre site encompassing 1.8 hectares for its central administrative headquarters or Civic Offices at Wood Quay. While the site was owned by the Corporation, the State, represented by the National Museum of Ireland (NMI) carried out the excavations at the site.

The work was initially funded by the State with the Corporation co-funding the latter stages. Excavation work commenced in 1969 but the development of the site was dogged by public protest, legal action and controversy. The probable significance of the site in terms of the important buildings documented to lie within its precinct, St Olaf's Church, Fyan's Castle etc., had been flagged in advance of construction in a letter to the press by P.Ó hÉailidhe (Haworth 1984, 22). Excavation works showed that the site contained extensive urban deposits from the 10th to the 14th century, including streets, house plots, city defences, wooden riverine revetments and a port. Although the NMI had initially carried out excavations on a portion of the site, they removed themselves from the site in 1973 to allow the construction contractors commence reducing site levels by machine. During the previous season of excavation the public had been facilitated in visiting the site. Thousands of Dubliners had done so. Now aware that metres of urban archaeology were being removed without archaeological supervision and cognisant of the fine quality of that resource the public, professional archaeological organisations and the academic community expressed their vehement discontent. At one point in 1974 the relevant Minister advocated that the site should be preserved as an urban park, a position he later rescinded.

A fine minuet ensued, lasting through to 1981, with phases of archaeological excavation of areas, followed by contractor destruction, to be followed again by some archaeological excavation under a raft of various time extensions. The municipal public dump proved to be a reliable source of Viking and Medieval material, retrieved from where the Corporation trucks had unloaded the machine-excavated deposits. In terms of public perception senior NMI management became associated with the city authorities as the complicit in destruction of archaeological material without full archaeological excavation. The official line was that every facility the NMI had sought, had been answered (Haworth 1984, 28). In effect the site was undergoing partial excavation.

The crisis developed and by late 1977 the Friends of Medieval Dublin (an association with the aim of fostering the appreciation of the medieval heritage) applied to the High Court for an injunction to prevent the Corporation removing by bulldozers a Viking earthen rampart within the site. The injunction was upheld, the plaintiffs vindicated with the site being declared a National Monument notwithstanding testament to the contrary by a leading academic from University College Cork (UCC) and the senior management of the NMI. This was the first time since the foundation of the State that the court adjudicated on the status of a monument in a legal process. (Martin 1984, 41)

The news that the Corporation was intent in seeking Ministerial Consent for the removal of the National Monument in order to continue construction works resulted in a public outcry embodied in a protest march on September 23, 1978. Along with the author (a school girl at the time), there were almost 20,000 protesters marching to prevent the construction of the Civic Offices on the site, seeking to preserve the archaeological material *in situ* and proposing that an alternative site be found for the development.

However, construction work continued with a Ministerial Consent issued jointly by Dublin Corporation and the Commissioners of Public Works (OPW). Another interlocutory injunction followed with the Corporation appealing that High Court decision to the Supreme Court. The Corporation and the Commissioners were successful, with damages and legal costs awarded against Professor FX Martin, Chairman of the Friends of Medieval Dublin, an Augustinian friar and Professor of Medieval History in University College Dublin (UCD). Other legal activity followed. At one point in 1979 the site was occupied by a small group representing varying aspects of Dublin life, government representatives, city councillors, teachers, academics, trade union officials, members of the clergy, poets, architects and artists. A complete change of policy on the part of newly elected city councillors, many of whom were elected on a pro-Wood Quay platform, ensued. However, in practical terms this meant very little, the Corporation persisted in the building programme. After a decade of legal wrangling, public debate and dispute, the excavation of much of the site continued under scientific archaeological methods with some portions machine-excavated by the developer's machines. Notwithstanding the tide of public opinion, preservation *in situ* of the archaeology on the site was not achieved. The archaeological results have been enormously important most particularly for information on the Viking and Anglo-Norman urban grain of the city with information accruing in relation to the individual house, house plot differentiated by plot boundaries and street layouts of plot groups. The archive is immense representing some 35,000 separate contexts, over 200,000 finds and 3,500 ecofacts. To date, 12 volumes describing the work have been published with 9 more in progress. However the financial and human resource costs to the State in being directly responsible for such large scale urban excavation was recognised as very challenging for the State to administer or finance.

Figure 5.4: Start of Wood Quay protest march at Kildare Street, September 1978 (© Terry Barry, from Medieval History Research Centre – The Barry Archaeological Archive, Digital Image Collection).

Carrickmines Castle and a game of cat and mouse in the courts

More recently controversy arose in relation to the construction of a portion of Dublin's outer ring-road, the M50 across portions of Carrickmines Castle. The castle, built at the site of an earlier Hiberno-Norse settlement was an important element in the defensive amour of the Anglo-Norman lordship. The dispute focused on the discovery of important elements of the castle ramparts during excavation works and proposals by the 'Carrickminders' for their preservation *in situ*.

In 2002 the excavation site was occupied by protesters seeking the ending of excavations underway on foot of approved road-works. In 2003 Dominic Dunne and George Lucas applied for an injunction against the Local Authority to prevent further removal of the castle as approved by a grant of planning permission claiming that the necessary Ministerial Consent for the removal of elements of a National Monument were not in place (Dunne and anor v Dun Laoghaire-Rathdown County Council [2003]). A successful injunction against the State was issued by the Supreme Court.

Subsequently the Local Authority, Dun Laoghaire Rathdown County Council sought the necessary Ministerial Consent for the works and this was granted by the Department of Environment, Heritage and Local Government. Another party sought to appeal this decision to the Supreme Court in an action which proved successful.

Then the State proceeded to introduce a revised National Monuments Amendment Act 2004 on July 18 2004. This Act resolved some issues in relation to transfers of functions which had arisen in some of the legal proceedings. It also provided for a suite of considerations which the Minister for Environment, Heritage and Local Government may have regard to in making a decision in relation to providing for Ministerial Consent. These included any environmental, cultural, social, recreational or economic benefit that would accrue to the State or the area in which the national monument is situated as a result of the carrying out of works, not just the protection of the monument. The Act also provided for a specific approval system relating to excavation works on an Approved Road including the excavation of a newly identified National Monument.

Excavations recommenced on August 16 2004. On the 18th of August 2004 proceedings were issued against the State and the Local Authority (Dun Laoghaire Rathdown County Council) questioning whether the 2004 National Monuments Amendment Act was constitutional and whether the directions issued in relation to the removal of the National Monument required Environmental Impact Assessment (EIA). In addition an injunction was sought to prevent further excavation. The plaintiffs lost this action which was subsequently appealed to the Supreme Court. Noting that Section 8 of the National Monuments (Amendment) Act 'removed a bundle of protections from national monuments' the five judge court of the Supreme Court found that the democratically elected legislature the Oireachtas is not prohibited under the Constitution of Ireland from enacting such laws. For some active conservationists the law and state officials were seen to facilitate damage to monuments: 'the cultural heritage of this island – prehistoric and historic, rural and urban, so diverse and rich is now under threat of officially sanctioned destruction or impairment as never before' (Clarke 2004).

That concerned citizens should consider the removal and excavation of National Monuments so detrimental as to pursue the State Authorities through the Irish Court system illustrates how strongly some consider that preservation *in situ* is the preferred state for monuments of national importance. It can be argued that there is no general public appetite for the removal of such monuments, notwithstanding that this removal is carried out under the scientific conditions of excavation. Politically it is generally considered to be in the national interest to proceed with approved development notwithstanding objections to the contrary. Interestingly on the 3rd of March 2011, the European Court of Justice (ECJ) found against Ireland for specifically excluding demolition works, as works for which EIA was required, from the scope of the Irish legislation which transposed the EIA directive. The State responded quickly, progressing the European Union (Environmental Impact Assessment of Proposed Demolition of National Monuments) Regulations 2012 (S.I. No. 249 of 2012) which allows for the requirement of EIA where demolition of a National Monument is to be provided for.

Although Ireland is not one of the 16 countries which have ratified the Framework Convention on the Value of Cultural Heritage to Society (Faro Convention) it is interesting to consider how Article 7 - Cultural Heritage and Dialogue may promote resolution processes 'to deal equitably with situations where contradictory values are placed on the same cultural heritage by different communities' and provide for equitable solution to varying views. It can be argued that the planning process whereby the range of considerations and conflicting interests are reviewed with provision for several levels of public participation is just such a process. Considering the wealth of archaeological material identified on foot of the planning process, some consider that the decisions of that process should be upheld.

The planning process and archaeology in Ireland

The planning system in Ireland is a tiered system with initial planning decisions made by Local Authorities which can be appealed to a higher planning authority An Bord Pleanála (ABP). Anyone, the planning applicant themselves, any objector, or the National Monuments Service (NMS) acting on behalf of the relevant Minister can challenge a decision made by a Local Authority and appeal the case to ABP. In some instances the ABP will decide to hold a public hearing into the particular case whereby the applicant, the objector, the Local Authority, the NMS and the public can listen to the views of all parties in relation to a development proposal. ABP seeks to provide impartial, balanced, nation-wide planning decisions which balance the need for sustainable development including infrastructure with the protection of the environment. It is the sole

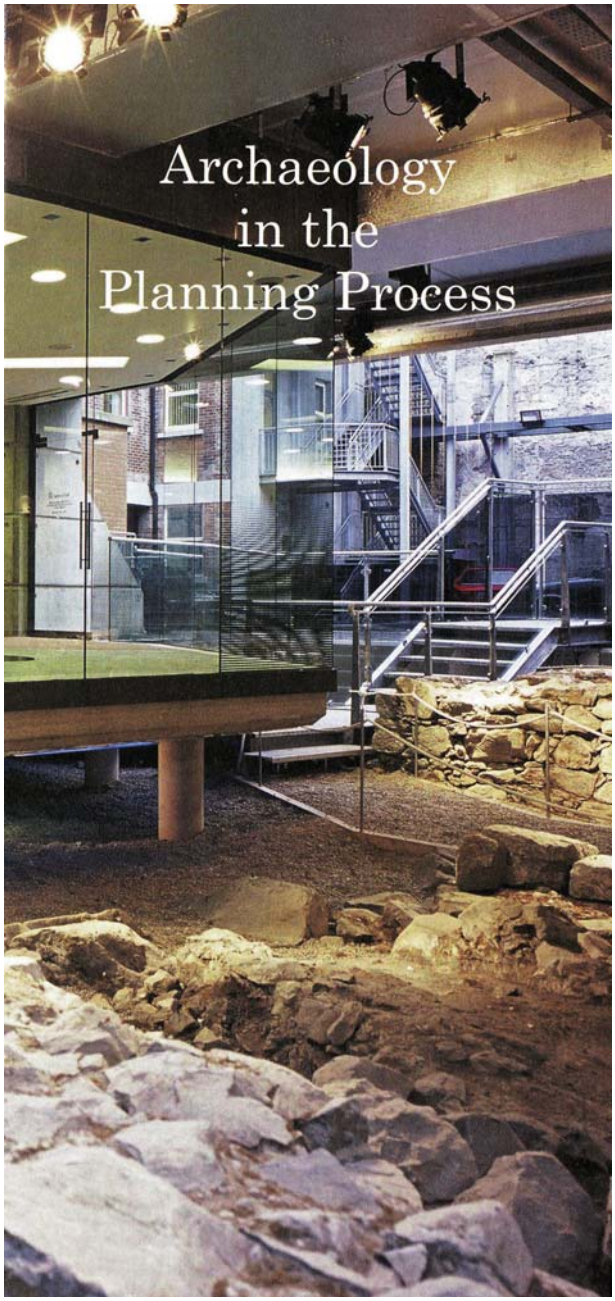

Figure 5.5: Archaeology in the Planning Process Guidance Leaflet (© Department of the Environment, Heritage and Local Government).

planning authority in relation to Local Authority projects and projects of Strategic Infrastructure Development (SID). The NMS is involved in the planning system in a comprehensive manner, yet it retains its independence as a statutory consultee on behalf of the Minister of Arts, Heritage, and the Gaeltacht.

The Department has a strong participatory role in the planning system and as a statutory consultee is involved at several different stages within the planning process, so most Ministerial Consents in relation to National Monuments or areas covered by Preservation Orders conform with approvals for planning permission as granted. However, the power to protect National Monuments rests ultimately with the Minister of the Department of Arts, Heritage and the Gaeltacht as can be seen by the restrictions placed on the Consent for works at 14–17 Moore Street (Department of Arts, Heritage and the Gaeltacht 2013). In this, works including the provision of basement development and extensive demolitions within the area of the Preservation Order, which had been approved under the planning acts, were subsequently excluded from the consent as issued. In this the Department conformed to its own objectives as set out in its statement of strategy:

'To promote and protect Ireland's heritage and culture, to develop cultural tourism, to advance the use of the Irish language, and to support the sustainable development of the islands.' (Government of Ireland 2011).

Referral criteria

The NMS (the State Authority in relation to the provisions of the National Monuments Acts) has responded to referrals from Local Planning Authorities in relation to archaeological concerns since the late 1980s, but this procedure was set first within a statutory planning process on foot of the 1994 planning regulations. In those regulations planning authorities were obliged to refer third party planning applications where it appeared that the development 'would be unduly close to any cave, site, feature or other object of archaeological, geological, scientific or historical interest, or would detract from the appearance of any building of artistic, architectural or historical interest, or, in either case, would obstruct any scheme for improvement of the surroundings of or any means of access to any place, object or structure' (Government of Ireland 1994) to the relevant authorities and to non-governmental organisations such as The Arts Council, An Bord Fáilte (the national tourism body), the National Monuments Advisory Council and An Taisce (the Irish equivalent of the National Trust in England, Wales and Northern Ireland).

Criteria for referral of applications have been drawn up by the Department seeking referrals from Local Authorities in relation to a broader suite of characteristics aside from proximity to monuments alone. Local Authorities are recommended to refer applications to the Department which may affect World Heritage Sites and those on the tentative list, in addition to which may affect National Monuments and Monuments in the Record of Monuments and Places (RMP) including any which may affect the amenity and setting of such monuments. They are asked to refer applications in wetlands, proximal to rivers and lakes and in the intertidal zone and development which can be judged large in scale, such as linear developments in excess of 1 km, quarry extensions and new quarries and all developments in relation to which an EIS has been commissioned (Government of Ireland 2008).

Figure 5.6: Excavations at Barronstrand Street, Waterford in advance of redevelopment of Penny's shop. Licence held by Dave Pollock (© Margaret Keane).

Participating on behalf of the Minister

The NMS (on behalf of its various Ministers) is an active participant in the planning process: including meeting with Local Authorities in advance of commencement of the Development Plan Review process, fully participating in the Strategic Environmental Assessment (SEA) process and providing recommendations to Planning Authorities in relation to their own development proposals and third party applications (Government of Ireland 2006).

State archaeologists annually review approximately 6000 such planning referrals (down from a peak of 13,500 in 2006), making recommendations in terms of how the impacts of the proposed development can be assessed and provided for either by redesign or avoidance, preservation *in situ* or advance excavation.

The Underwater Archaeological Unit of the National Monuments Service, comprising officers with specialized underwater expertise, also reviews all planning referrals. A number of Local Authorities (Cork City Council, Cork County Council, Dublin City Council, Kerry County Council, Limerick City and County Council, and Mayo County Council) have their own in-house archaeological staff. For those counties the State Authority provides a reduced level of response making comment where the State may have serious reservations about the proposal, where a case may set a precedent level of protection for the archaeological heritage or where the proposal may impact directly or in terms of amenity on a National Monument. The tenor of all recommendations is nuanced by an examination of the locational characteristics of the proposed development, the nature of the proposal, the density and nature of the known archaeological material in the general vicinity, the topography of the context and the likely range of previously unidentified archaeological material in the vicinity. Additional assessment of the possible impacts may be required usually as further information within the planning process or as a result of the pre-planning process; and these can include provisions for different levels of archaeological investigation in the form of building survey, field survey, topographical survey, geophysical analysis, metal detection and test excavation. The information accruing from these investigations informs the final recommendations of the state archaeologists including, where the impacts of the

Figure 5.7: Braced portion of the upstanding town wall in advance of conservation works at Barronstrand Street, Waterford in advance of redevelopment of Penny's shop (© Margaret Keane).

proposed development are deemed unacceptable, recommendations for refusal of planning permission. These are rare, accounting for less than 1% of referrals. Where material of archaeological significance has been identified which will be impacted upon by a proposed development, recommendations for its preservation *in situ* (where feasible and achievable) can be made or recommendations for the excavation of archaeological material under licence as provided for in the National Monuments Acts. Apart from broad-band grading between National Monuments and non-National Monuments there is no grading of monuments in Ireland.

The National Monuments Acts and the Planning Acts

The National Monuments Acts (as amended) and the Planning and Development Acts are separate legislative provisions which sometimes interleave. On foot of provisions in the Planning and Development Acts Local Authorities are obliged to include objectives within their development plans for the conservation and protection of the archaeological heritage. (Government of Ireland 2000). At times the provisions of development plans can leap-frog the protective provisions of the National Monuments Acts in providing for the protection of monuments not yet included in the Record of Monument and Places. Planning applications approved under the Planning Acts may have conditions relating to the proper planning and sustainable development, including provisions relating to archaeological excavation mitigating the impacts of the approved development works on archaeological deposits identified within the development area (Government of Ireland 2007).

Closer to Boston than Berlin

Archaeological requirements in relation to development either as a planning condition or a requirement of the National Monuments Acts in Ireland are assigned to either a developer or a site owner. Private sector archaeologists carry out archaeological work, including assessments and excavations on behalf of their clients as consultants and contractors. This form of economic liberalization applied to archaeology has led to the development of a flexible workforce which more adroitly responded to supply and demand than the state sector could. However the corollary is that for the average archaeological employee working in the private sector there has been little security of tenure once the demand for their services ceases. Excavation is carried out under licence/consent or directions as required by the National Monuments Acts and the sole trader archaeologist, or an archaeological consultant, or an archaeologist working for that consultant, is the approved licencee.

What developers want

There are some very basic requirements for a developer in relation to their investing money (their own, borrowed or leveraged) in building work. Developers need to finish their development work, in order to be able to sell the assets they have built, to gain a return on their investment. Initially they need clear pre-planning advice letting them know what potential there is for the identification of material of archaeological significance within their development site. They need information on the nature and extent of that archaeology and the range of issues which it may provoke, especially in relation to re-design and avoidance requirements. The critical advice at this stage is whether there is archaeology or archaeological impacts which may prove impossible to overcome and which would result in a refusal of planning permission. As part of this process, in Ireland developers seek a speedy response by the State Authorities to commissioned assessments. Generally developers seek to proceed at a reasonable pace through the planning system, preferably without being brought through the appeal system to ABP as there are consequential delays in the initiation of construction on foot of appeal. Providing that agreement in principle to development has been clarified and the necessary approvals sought, most developers in Ireland are very reasonable in their approach to archaeology. They identify archaeology as a potential risk, but providing that the risk is properly assessed and minimized, they proceed notwithstanding the complexity of issues which may arise. Critical to the reduction of risk is confidence in the costs of excavations and timescales based on accurate preliminary test excavations, good tendering processes and most importantly good communication with their archaeological consultants and with the State Authorities. With proper levels of assessment as early as possible the dreaded scenario of surprises late in the day can be reduced or avoided.

The Celtic Tiger economy

Ireland's economy experienced a period of rapid real economic growth from 1995 to 2000 fuelled by foreign direct investment which came about due to a combination of factors, including a low tax regime, the availability of a highly skilled English speaking workforce and membership of the EU. This surge in economic activity resulted in development activity which increased, even after the actual period of economic growth had ceased. In addition to economic growth there was increased state investment as part of the National Development Plan in providing infrastructure (primarily on road and rail networks) on a national scale from 2000 to 2010. In contrast to many of our European counterparts where road construction of high-speed motorways had commenced much earlier in the 20th century, Ireland in the early 1990s had an infrastructural deficit. In Germany, the Autobahn between Cologne and Bonn, Germany's first modern motorway, started construction in 1929. In Britain construction on the M1 started in 1959. Due to the increase in planning referrals to a high in 2006 of approximately 13,500 there was a clear proportional increase in archaeological activity in Ireland as demonstrated in Figure 5.8 which graphs the numbers of permissions for excavation (under licence/consent or direction) issued by the NMS from 1988 to 2013. As can be seen from the graph, the numbers

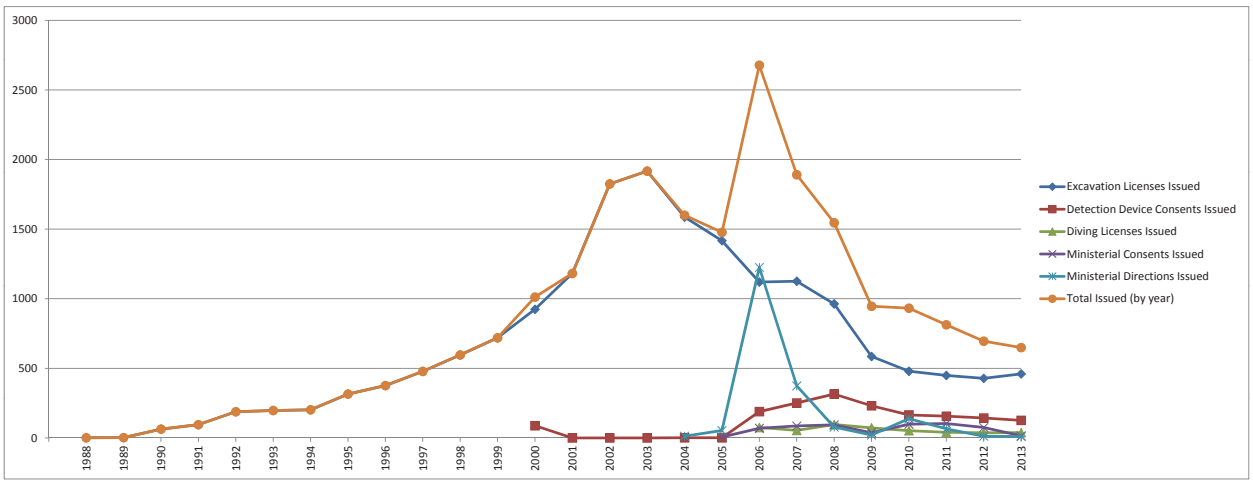

Figure 5.8: Graph of Numbers of Licences/Consents and Directions relating to archaeological excavation from 1988 to 2013 (© National Monuments Service, Department of Arts, Heritage and the Gaeltacht).

of excavations prior to the 1980s were relatively low, many were research excavation or excavations in advance of conservation works at National Monuments. Of course research excavations and excavations in advance of conservation works still continue, but the balance of this work in relation to development-led work has shifted.

Although the NMS of the Department of Arts, Heritage and the Gaeltacht regulates archaeological licensing it does not involve itself in financial issues between archaeological consultants and their clients or between individual archaeologists and archaeological consultancies. In recent decades there have been disagreements between archaeologists (including specialists) and the archaeological consultants employing them, usually in relation to post-excavation work and payment for same, or in relation to access to archive material in order to enable an archaeologist to fulfill the conditions of their excavation licence. Some of these disagreements have ended in court proceedings. However, the collapse of the Celtic Tiger economy has led to an array of legacy issues relating to reporting of excavation results, where site archives are controlled by archaeological companies who have ceased to trade and in relation to archaeologists who have emigrated in their response to lack of work in Ireland since 2008.

Codes of Practice

On foot of the huge increase in archaeological activity and the ability of the resources of the NMS to address the needs of the sector, the Department negotiated Codes of Practice with several of the main infrastructure providers from 2000 onwards. The initial precursor of this sort of arrangement was an agreement between the Department of Arts, Heritage, the Gaeltacht and the Islands, The Department of Public Enterprise, and Bord Na Móna, the public company charged with development of Ireland's peatlands agreed in 1998 as a response to the archaeological implications of peat extraction in Bord Na Móna lands. This agreement was titled 'Agreed Principles for the Protection of Wetland Archaeology in Bord Na Móna Bogs' (Department of Arts, Heritage Gaeltacht and the Islands 1998). The Codes of Practice have been seminal in establishing good working relationships between archaeology

Figure 5.9: Excavation of a water infrastructure pipeline at Rathmoylan, County Meath (© Margaret Keane).

Figure 5.10: Some Codes of Practice (© National Monuments Service, Department of Arts, Heritage and the Gaeltacht).

and infrastructural providers. Reflecting state policy they span the sometimes conflicting demands of provision for infrastructure on a national scale with the requirements of Valletta. They have provided for the employment of in-house or project archaeologists who manage archaeological work for their respective authority whether that is the state body charged with providing a road or rail network, or electricity supply, or quarry federation spanning both development within the planning system and other types of work which are exempt in terms of planning requirements. To date there are 8 Codes of Practice between the Department of Arts, Heritage and the Gaeltacht and the National Roads Authority, the Rail Procurement Agency, Eirgrid, ESB, the Irish Concrete Federation, Coillte, Bord Gais and Bord Na Móna. The benefits are manifold particularly in the case of those where the project archaeologists are embedded within the infrastructure provider's organization. In-house archaeological expertise allows for earlier consultations. Avoidance of previously known monuments becomes the norm with investigations targeting previously unknown monuments. Project archaeologists act as both the on-site supervising authority and the client, so payments can be staged allowing for higher levels of reporting recorded and for a wider, more strategic dissemination of the results of the work. Continued liaison with state archaeologists provides for a consistency in approach between this sector and other development sectors.

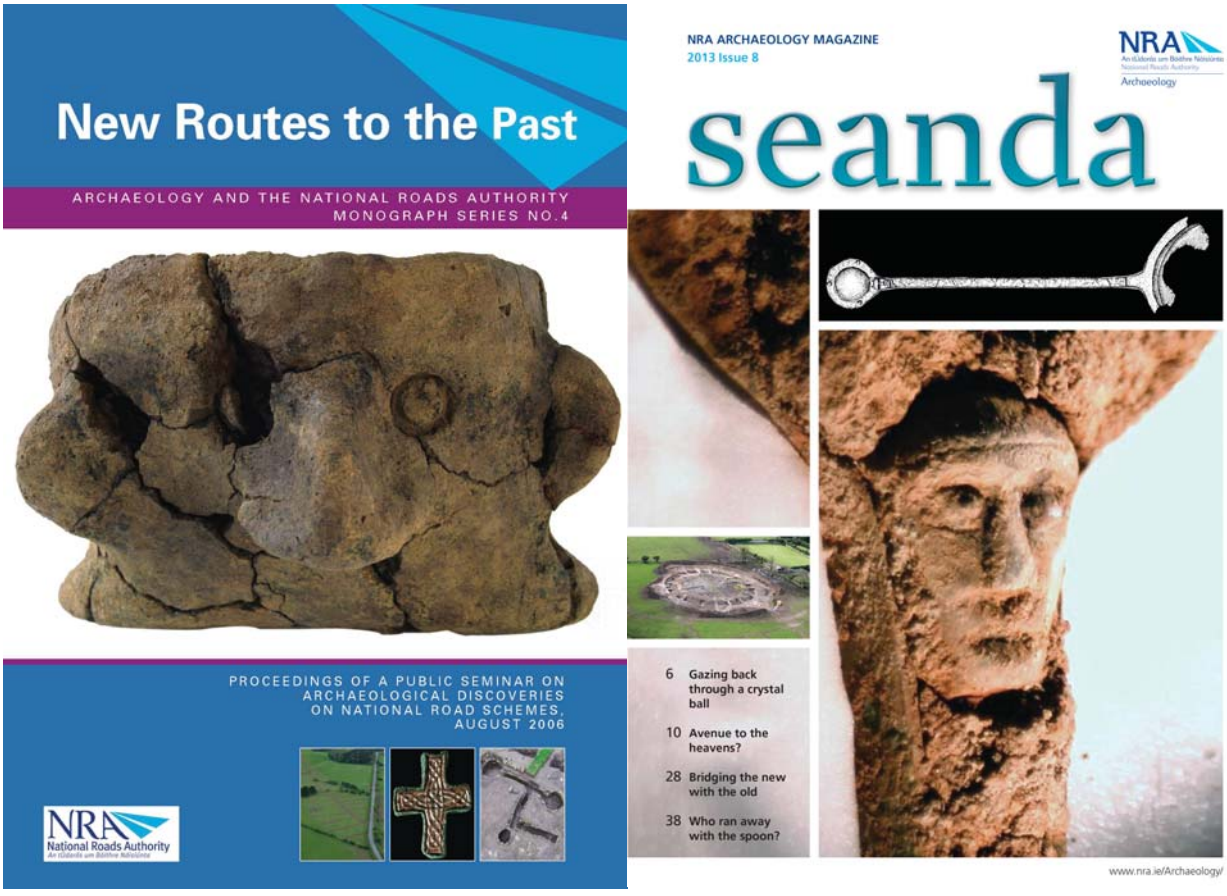

Figure 5.11: NRA Publications (© NRA).

Summary of national archaeological policy

As provided for in the transposition of Valletta to national policy in Framework and Principles for the Archaeological Heritage and Policy and Guidelines for Excavation the basic provisions of Irish archaeological policy include:

- Early assessment integral to the design process
- Minimization of impact using avoidance and redesign
- Preservation *in situ* where feasible and achievable
- Excavation of deposits to be impacted where preservation *in situ* is not possible
- Piling within limits and agreed scale acceptable alternative to excavation, except for sites with human remains
- Excavation to take place prior to construction works preferably rather than in the middle of construction contracts

Excavation Policy

As the numbers of excavations increased towards the end of the 1980s it was considered by the State Authorities in Ireland that 100% of the archaeological deposits due to be destroyed by approved development was achievable and enforceable. *Webb vs Ireland* had determined the ownership of all archaeological objects with no known owner was the NMI, confirmed by Section 2 of the 1994 National Monuments (Amendment) Act. De-accession is at the discretion of the NMI. All archaeological objects are thus retrieved from excavated deposits, save where the NMI has made other arrangements with the excavator in advance. The types of sites needing to be excavated on foot of approved development works provides a particular sample of the archaeological resource. This sample is selected not for purposes of archaeological research but by dint of where and how development is to proceed. In the late 1980s, when the increase in excavation work commenced, the character of Irish archaeology was certainly not fully understood. For instance in relation to the most ubiquitous of Irish archaeological monuments, the ringfort, some excavation work had taken place at less than 100 of the 40,000 monuments, hardly a good representative sample. Particular periods such as the Iron Age were very poorly represented in the archaeological record – for instance the settlement record of the Iron Age was vestigial to say the least. Some monument classes which are very commonly encountered now, for instance corn-drying kilns, were very rarely described in the archaeological record. In terms of archaeological reasoning it would not have been feasible for Irish archaeologists with such limited knowledge to make reasoned choices in terms of what to excavate and what to not excavate. Perhaps variations between archaeological excavation policy between Ireland and other European countries where partial excavation of areas to be destroyed by development is the norm, can be described as a question of scale and thus resources, in addition to the particular regional factors described above. 'In an ideal archaeological world all sites would be examined before they were lost or deeply damaged, but the rate of present destruction is far beyond existing resources' (Barker 2005, 100).

The flavour of the Ireland's archaeological resource

In terms of known site densities there are approximately 2 known monuments per square kilometre in Ireland and according to some statistics available from the NRA newly discovered monuments have been identified at a rate of approximately one every 0.6km (Eogan 2013, 233). There is no verified Palaeolithic presence in Ireland, while some Roman material has been identified particularly in coastal areas of the east of the country there was no general colonisation of Ireland by the Romans. Prior to recent synthetic studies (Becker et al. 2012) our Iron Age populations had been referred to by principal researchers as the 'invisible people' (Raftery 1994, 112). Currently there are just 10 Iron Age houses included in the Sites and Monuments Record although the record is more extensive in terms of monuments associated with ritual or burial activity. In terms of the density of artefacts, our Iron Age and Early Medieval periods are virtually aceramic save for the production of hand-made coarse bucket shaped pots found in the north-eastern part of the island. Where densities of artefacts have been found, these excavations tend to be urban in nature or else wetland sites with a high preservation of organic materials. So there may be a question of degree in terms of the resources needed to excavate, conserve and archive material in Ireland and in other jurisdictions where there may be denser archaeological distributions or richer artefact-replete deposits. So many of the prized artefacts in the national assemblage were identified as stray finds rather than in conditions of excavation per se.

Confidence in approach

Thus far, we in Ireland have decided not to make a selection in terms of what to excavate and what not to excavate once archaeology is due to be destroyed by approved development. Of couse selection plays an important role in terms of how we sample excavated material for environmental analysis. What gives us confidence that this is the right approach for us? Is it the unexpected find such as the Late Bronze Age penannular gold bracelet uncovered at Ballymaclode, County Waterford?

During routine monitoring works of a main drainage scheme the gold bracelet was identified at the interface of the base of the topsoil and the upper deposit of a fulacht fia or burnt mound. The burnt mound was located on a cliff above the River Suir in Waterford. The mound was in proximity to a natural spring into which a deep pit had been cut and backfilled to accommodate a wooden trough. The bracelet was deliberately deposited according to the excavator and another incomplete piece of gold jewellery was also uncovered at the upper levels of the mound. Although fulachta fia are simple monuments, generally dating to the Bronze Age, ubiquitous in Ireland, the identification of an exquisite gold ornament deliberately deposited on the burnt mound material was entirely unexpected.

Figure 5.12: Fulacht Fia at Ballymaclode, County Waterford. Excavation licence held by Dave Pollock (© Dave Pollock, Jo Moran and Judith Carroll and Company).

Figure 5.13: Pennanular gold bracelet found on top of the Fulacht Fia at Ballymaclode, County Waterford (© Dave Pollock, Jo Moran and Judith Carroll and Company).

Or are we satisfied that our approach is justified by the unanticipated monument type such as that found at Tullahedy? Here an enclosed Neolithic settlement and ritual complex measuring approximately 110m by 125m in scale with extensive deposition of artefacts and complex construction sequences at a scale unprecedented in the archaeological record was located at the end of an esker to be uncovered during excavations for a borrow pit related to road construction (Cleary & Kelleher 2011). With complex, multi-phase sites can partial excavation ever hope to uncover the full phasing and history of the site? Or as a colleague from the NRA commented to the author, is the risk posed by such uncertainty cost effective?

'From a contractors perspective the issue with less than 100% resolution is what if something significant turns up in the unresolved percentage during the construction programme? This can result in significant regulatory involvement and has the potential to result in heightened public and/or political concerns. This generally translates into disruption to programme and extra cost.' (Eogan 2014)

Our confidence increases notwithstanding unexpected results from the analysis of apparently mundane, simple site excavations. At the Hermitage in County Limerick, monitoring associated with water infrastructure uncovered a series of cremation pits. In one pit selected cremated human remains were carefully placed around the base of a post within a pit accompanied by a polished stone axe and some chert and flint artefacts. In another other token cremated human remains were deposited in a much larger pit. However it was the dates for this material which proved important. The cremated remains in the pit with the post are the earliest formal burials yet uncovered in Ireland dating from 7530 to 7320 BC (Collins & Coyne 2003).

Figure 5.14: Aerial photograph of excavations at Bennetsbridge, County Kilkenny (© NRA photography by Airshots).

Through a series of extensive excavations carried out on an Iron Age togher at Corlea, County Longford, the excavator (the late Emeritus Professor of Archaeology at University College Dublin) was able to postulate that the extensive wooden roadway was never completed or had been deliberately dismantled and damaged (Raftery 1994, 103). Without such comprehensive excavation it would not have been possible to tell the full story of this remarkable monument notwithstanding the conundrum the evidence poses. Thus it can be argued that complete excavation allows for a more comprehensive understanding of the complexities of the archaeological record.

With complete recording of archaeological material re-interpretation is feasible. In the absence of an accurate and complete record of excavations, how will it be possible for researchers of the future to interrogate and re-interpret our findings? How can we be sure that partial excavation of a portion of a site is a microcosm of the whole, particularly in relation to multi-phase constructions such as that at Bennetsbridge, County Kilkenny where a double pennanular ring-ditch is cut through by a large medieval rectangular enclosure? Considering the strong sense of place and links to the land demonstrated in Ireland, even simple monuments or newly discovered monuments are considered important to the local community in that area or townland and are regularly reported in the regional press.

In selecting portions of sites or site types to be excavated how do you escape bias? The results of some recent analysis has in fact lauded Ireland's 100% excavation policy as beneficial to the research process. 'Development–led excavations generated enormous quantities of new data, including C14 dates from a broad range of landforms and environments across the island. The archaeologically untargeted nature of this work means that this C14 dataset is unbiased by the interests and preoccupations of archaeologists to a degree that is unique globally.' (Becker et al. 2013).

Other voices

Commentators have said that the result of development work in Ireland has produced a surfeit of data and data collection and a deficit of knowledge. 'There is a disconnection between the level of data generated and the creation of knowledge through publication and dissemination. The pressure of development and the regulatory structures have led to a focus on excavation, recording methodologies and data retrieval. Hence, there appears to be a disconnection between development-led excavations and research issues and strategies' (Cooney 2006).

More recent synthetic analyses have sought to turn the tide on oceans of data recovered from two decades of intensive and extensive excavations into knowledge. Several comprehensive publications drawing together the results of large scale unpublished excavations (Hurley et al. 2014) have been completed. Yet other serial publications such as the Medieval Dublin series edited by Séan Duffy have doggedly kept pace in terms of publication of development-led excavations in Dublin city. Since 2008 the Department of Arts, Heritage and the Gaeltacht has dedicated a portion of its annual budget to fund a research programme called INSTAR which is administered by the Heritage Council. All project applications *must* be collaborative across academic, commercial and state organisations, fostering a spirit of cooperation and collaborative endeavor amongst researchers. To date 37 projects have been initiated from research on the Palaeolithic period through to the Medieval Period. The programme was reviewed in 2010 with the following comment:

'INSTAR is a transformative programme which, if maintained and development will put Irish archaeology at the cutting edge of the discipline in a world context. For a comparatively small financial investment the output in terms of new knowledge, new methodologies and the reputation of the discipline in Ireland have been massive.' (Cunliffe 2010)

Figure 5.15: Excavations of a Late Bronze Age togher at Kilmalkil, County Tippeary (© Margaret Keane).

Unfortunately in the wake of the demise of the Celtic Tiger economy and severe cuts to the state resources, the budget for INSTAR has been decimated and the programme is simply being maintained in the hope that fortunes will change for the better.

No pot of gold at the end of the rainbow

Lest the author be accused of presenting an unbalanced presentation it is important to note that the topic under discussion in this paper is development-led archaeology for which planning permissions or consent procedures of legislative provisions have been provided. There is another cohort of work (specifically peat extraction) which in planning terms is considered exempted development. The archaeological implications of this work are governed by a Code of Practice published in 2010 whereby excavations of archaeological monuments are partial, accounting for 100% of some monuments but which is considerably less for others. For the most part these are particular monument classifications, primarily toghers and platforms and post rows – wooden structures used to access and traverse the vast raised bogs of Ireland's midlands. There are thousands of such monuments located in the vast expanses of Bord Na Móna bogs. Such is the scale and extent of peatland extraction in Ireland, with continuous milling over approximately 80,000 hectares incrementally reducing the height of the peats, that agreement between BNM, the State Authority charged with the development of peatlands and the NMS/NMI to excavate 100% of monuments thus affected has never been achieved. (Department of Arts, Heritage and the Gaeltacht 1998). In its place a rolling series of partial excavations have been carried out over the last 25 years which in aggregation has added enormously to the state record of archaeology albeit without the fully comprehensive level of excavations achieved with other development sectors.

What pertains in Ireland is the result of particular circumstances, legal, historical, archaeological, societal and cultural and the approach to development-led archaeology in Ireland is one which suits (for the most part) our public and political context. In a spirit of respect for other jurisdictions and their particular contexts we do not seek to promote our approach as one which is necessarily applicable elsewhere.

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References

Barker, P. 2005: *Techniques of Archaeological Excavation*. Third Edition (e-book). B.T. Batford Ltd, London, https://books.google.com/books?isbn=0713471697.

Becker, K., Armit, I., Eogan, J., Swindles, G. 2012: Later prehistoric radiocarbon dates from Ireland: An audit. *Journal of Irish Archaeology* 19, 19–25.

Bourke, S. 1929: *Dáil Eireann Debate Volume 32 No. 2. National Monuments Bill Thursday October 24th*, https://oireachtasdebates.oireachtas.ie.

Broderick, L. 2005: *Road Block – National Monuments and Infrastructural Projects*. Law and the Environment Conference 2005, University College Cork, Faculty of Law 14 April, http://www.ucc.ie/law/events/environo5papers/environo5papersshtml.

Clarke, H. 2004: Carrickmines, The Lessons of Wood Quay. *Sunday Tribune,* Sunday 17 October 2004, http://fmd.ie/carrickmines/041017-lessons-of-wood-quay.html.

Cleary, R. M. & Kelleher, H. 2011: *Archaeological Excavations at Tullahedy, County Tipperary, Neolithic Settlement in North Munster*. Collins Press, Cork.

Collins, T. & Coyne, F. 2003: Fire and water: Early Mesolithic cremations at Castleconnell, Co. Limerick. *Archaeology Ireland*, Vol. 17, No. 2, 24–7.

Cooney, G. 2006: *Archaeology in Ireland: A vision for the future*. Royal Irish Academy, Dublin.

Cunliffe, B. 2010: *The Irish Strategic Research Programme A review of the first two years of its operation and development into the future*. The Heritage Council, Kilkenny, http://www.heritagecouncil.ie/fileadmin/user_upload/Publications/Archaeology/INSTAR_2_Yr_Review.pdf.

Department of Arts, Heritage, Gaeltacht and the Islands 1998: Agreed Principles for the Protection of Wetland Archaeology in Bord Na Móna Bogs, unpublished, Dublin.

Department of Arts, Heritage, Gaeltacht and the Islands 1999a: *Framework and Principles for the Protection of the Archaeological Heritage*. Stationary Office, Dublin.

Department of Arts, Heritage, Gaeltacht and the Islands 1999b: *Policy and Guidelines on Archaeological Excavation*. Stationary Office, Dublin.

Department of Arts, Heritage, Gaeltacht and the Islands 2000: *Code of practice between the National Roads Authority and the Minister for Arts, Heritage,*

Gaeltacht and the Islands. Stationary Office, Dublin, http://www.nra.ie/archaeology/code-of-practice/code-of-practice.PDF.

Department of Arts Heritage and the Gaeltacht 2013: *Press Release 16/07/2013 – Ministerial Consent under National Monuments Acts (Moore Street),* http://www.ahg.gov.ie/en/PressReleases/2013/July2013PressReleases/.

The Department of Environment, Heritage and Local Government 2007 *Archaeology in the Planning Process*. Stationary Office, Dublin.

Duffy, S. (ed.) 2000–2013: *Medieval Dublin I–XIII*. Four Courts Press Ltd, Dublin.

Dunne and anor v Dun Laoghaire Rathdown County Council [2003] IESC 15

Dunne v Minister for the Environment, Heritage and Local Government, The AG and Dun Laoghaire-Rathdown County Council [2007] IESC 60

Eogan, J. 2014: Email to Margaret Keane, 27 February 2014.

Government of Ireland 1994: *S.I. No. 86/1994 – Local Government (Planning and Development) Regulations,* Stationary Office, Dublin.

Government of Ireland 2000: *Planning and Development Act*. Stationary Office, Dublin.
Government of Ireland 2007: *Development Management Guidelines for Planning Authorities June 2007.* The Department of Environment, Heritage and Local Government, Dublin.

Government of Ireland 2008: *Guidelines for the referral of planning applications to the Department of Environment, Heritage and Local Government*. The Department of Environment, Heritage and Local Government, Dublin.

Government of Ireland 2011: *Statement of Strategy 2011–2014*. The Department of Arts, Heritage and the Gaeltacht, Dublin. http://www.ahg.gov.ie/en/AboutUs/StatementofStrategy/FINAl.pdf.

Government of Ireland 2012: *S.I. No. 249/2012 – European Union (Environmental Impact Assessment of Proposed Demolition of National Monuments) Regulations*. Stationary Office, Dublin.

Haworth, R. 1984: The Modern Annals of Wood Quay, in J. Bradley (ed.*)*: *Viking Dublin Exposed The Wood Quay Saga*. The O' Brien Press, Dublin, 16–37.

Heaney, S. 1975: *North*. Faber and Faber limited, London.

Hurley, M.F. & Brett, C. (eds) 2014: *Archaeological Excavations at South Main St. Cork*: Cork City Council, Cork.

Lucey, A. 2012: Farmer fines €25,000 for destruction of ringfort, *Irish Examiner,* Saturday 3 March 2012, http://www.irishexaminer.com/ireland/icrime/farmer-fined-25000-for-destruction-of-ring-fort-185865.html.

Martin, F.X. 1984: The Modern Annals of Wood Quay, in J. Bradley (ed.*)*: *Viking Dublin Exposed The Wood Quay Saga*, 1984 The O' Brien Press, Dublin 38–67.

Mulcreevy v Minister of the Environment, Heritage and Local Government and Dun Laoghaire Rathdown County Council [2004] IESC 5

Raftery, B. 1994: *Pagan Celtic Ireland: the Enigma of the Irish Iron Age*. Thames and Hudson, London.

Sheehy, T. 1929: *Thursday October 24th, Dáil Eireann Debate Volume 32 No. 2. National Monuments Bill Thursday October 24th,* https://oireachtasdebates.oireachtas.ie.

Webb v Ireland [1988] IR 353

6 | Valletta Harvest: value for money. Dutch initiatives to make 'Malta' excavation results relevant to heritage management, science and society

Bert Groenewoudt

Abstract: Unless Malta excavations are high-quality and relevant, they are a pointless waste of money. Malta archaeology, like 'academic' archaeology must be driven by explicit, scientific research questions. Synthesis – the critical final phase in the process of creating scientific knowledge (and formulating new questions) – must be well-organized. This short paper focusses on the initiatives that have been launched in the Netherlands to systematically encourage synthesising research, based specifically on the results of Malta archaeology. Academic archaeology which is under pressure across Europe, could highlight its role and relevance by seeking closer ties with Malta research. One is challenged to look at the bright side of Malta, and to make the most of the opportunities Malta archaeology offers.

Keywords: Malta archaeology, development-led archaeology, scientific synthesis, Valletta Harvest project, archaeological research agenda

Introduction

Many European countries in recent decades have witnessed a strong growth in development-led archaeology (Webley et al. 2011), a trend accelerated by the application of the Valletta ('Malta') convention. This is certainly also the case in the Netherlands (Bazelmans 2011). The result is vast quantities of new archaeological data, stored – or rather hidden away – in growing piles of excavation reports (Figure 6.1). Opportunities for synthesising research – analysing all that data to produce new, meaningful knowledge about the past – were limited. Universities could do little to help because the surge in 'Malta' archaeology was matched by just as big a contraction in academic archaeology (e.g. Van Dockum, Lauwerier & Zoetbrood 2006; Rijksdienst voor het Cultureel Erfgoed 2009; Willems 2014). In any case, academic archaeology sets its own research priorities. These report 'graveyards' and their associated risks, including to public support for archaeology, led to growing concern in some quarters. Why continue to excavate, at another's expense (see below), if nothing happens with the results? Might we still be searching for answers to archaeological questions that could have been answered long ago?

The lack of opportunities for synthesis – the critical final phase in the process of creating scientific knowledge – is without doubt contrary to both the letter and spirit of the Malta Convention, which aimed both to improve archaeological heritage management and to use archaeological research to boost the generation of knowledge about the past. Various initiatives have therefore been launched in the Netherlands to systematically encourage synthesising research, based specifically on the results of Malta archaeology. Various levels of government, archaeological heritage management and the academic archaeological sector are all participating. The results of this synthesising research then serve as input for better choices and a balancing of interests within archaeological heritage management, for better archaeological research in the future and for public-oriented activities. We will briefly discuss this approach in this contribution, and raise some reservations.

Figure 6.1: Growing piles of excavation reports (© Mirjam Lobbes).

Malta excavations as research

In 1992 the Dutch government became a signatory to the Valletta Treaty, formally the European Convention on the Protection of the Archaeological Heritage (Revised). Also known as the Malta Convention, it is a multilateral treaty of the Council of Europe that aims to protect European archaeological heritage 'as a source of European collective memory and as an instrument for historical and scientific study' (Art.1). Although the spirit of the Convention was already being applied some ten years earlier, Malta was not enshrined in Dutch legislation until 2007, when the Archaeological Heritage Management Act (Wamz) came into force. This Act will probably be followed by a broader Heritage Act in 2016.

A key principle of the Valletta Treaty, which is also safeguarded in Dutch legislation, is that of 'developer pays'. In other words, project initiators whose disturbance of the soil may have a potentially adverse effect should pay the costs of carrying out and documenting the excavations, at least when preservation *in situ* is not feasible. Documenting therefore also falls under this obligation. Under Dutch law, documenting means more than simply recording; it also covers analysing and reporting. In addition, both excavations and reporting must be driven by explicit, scientific research questions. This implies making explicit choices as that is the only way to maximise contributions to the creation of knowledge about the past. One of Malta's aims, after all, is to promote 'historical and scientific study' (see above). It is a fantasy to believe that field archaeologists can simply document 'everything' – all the information sources contained within a threatened site and its context – and that 'great scholars' could ever be able to extract all that information. All scientific research, including fieldwork, is question-driven – at least it should be – because that is the only way to conduct research, and also to optimally exploit any threatened archaeological heritage. In this respect there should be no difference between 'academic' and development-led Malta excavations, and therefore no difference between academic archaeology and archaeological heritage management. In fact, making explicit choices is also important when it comes to public support for archaeology. There is no justification for the view that everything should be excavated, everywhere and at all times, and at any price.

The research questions underpinning Malta excavations in the Netherlands have their foundation in the National Archaeological Research Agenda (NOaA), which was compiled with a view to implementing Malta from 2001 to 2008. The Research Agenda was a joint initiative by all parties working in the archaeological sector in the Netherlands (Fokkens, Groenewoudt & Jungerius 2001; Bazelmans 2006; Link 1).

Almost all archaeological reports concerned with Malta research and the accompanying excavation documentation are digitally available via DANS-EASY, the e-depot for Dutch archaeology (Link 2). The e-depot currently holds over 21,500 archaeological datasets (18,500 publications and 3,000 larger datasets including photographs, GIS, data tables, etc.). New datasets are being added daily, many of them relating to exploratory studies. More than 800 excavation reports appeared in the period 2007–2013 (Bazelmans 2011) (Figure 6.2). This shows the major ramifications of the reporting obligation – an enormous quantity of data. But data is not the same as information. Data constitutes the building blocks, not the building; it is only useful once building begins.

Initiatives aimed at scientific synthesis

Many people are excited and captivated by 'archaeology' and by archaeological excavations. But in scientific terms, archaeological excavations only serve a purpose if they ultimately contribute to the creation of knowledge about the past, if they help to answer fundamental questions, to test ideas and to point out new research perspectives. This means that the results of excavations (the data) have to be converted into knowledge, knowledge which also helps us make informed choices about future research. And of course, exciting news about the past also enhances the experiential value of archaeology and the level of public support. For both these reasons, there have been various initiatives in the Netherlands in recent years to arrive systematically and selectively at scientific syntheses based on output from development-led Malta archaeology. The contractors in Malta excavations are primarily commercial archaeological companies. Almost all archaeological field evaluation in the Netherlands now occurs within the context of Malta. Dutch universities have been completely marginalised when it comes to excavations, and the role played by museums is now a thing of the past.

The first scientific synthesis initiative was the Valletta Harvest funding programme (Oogst van Malta, 2003–2009). Financial support took the form of a grant from the Netherlands Organisation for Scientific Research (NWO) and the Dutch Ministry of Education, Culture and Science. Valletta Harvest projects tended to be broad and thematic, and in most cases focused on archaeological issues rather than specific archaeological sites. Proposals for synthesising research projects were selected in open competition by an NWO-appointed committee. The main selection criterion was the scientific quality of the application and in most instances universities were the contractors.

The Odyssee Programme (2008–2014) focused on accessing and analysing unpublished archaeological research from the years before the Valletta Treaty, in other words roughly the period 1900–2000. Of the 7500 to 8000 excavations from that time, an estimated 4000 were not fully analysed for various reasons. To do so was an impossible task. The available resources were therefore deployed in a concentrated fashion, with an emphasis on excavations that were expected to add substantially to archaeological knowledge. An earlier inventory showed that this applied to between 400 and 1200 excavations (Hessing & Mietes 2003). The

excavation data in question was entered into a digital project database to make it accessible (Kleijne 2010).

Odyssee was a collaboration between NWO, Dutch Heritage (Erfgoed Nederland) and the Ministry of Education, Culture and Science. NWO was responsible for scientific review and selection, allocating funding and financial management, while Dutch Heritage (discontinued in 2012) looked after communication with the general public. All archaeological periods were considered, as well as a wide range of archaeological sites, spread across the entire country. Thirty-two projects have since been completed or are close to completion (Erfgoed Nederland 2010). The number of analysed excavations is higher because some projects encompassed several excavations. The 'On second thoughts' symposium in 2014, which looked at the knowledge gains of the Odyssee Programme, marked the interim culmination of the programme. The applicants and contractors were universities, archaeological firms, municipal archaeological services and the Cultural Heritage Agency and their staff. This broad-based participation signified a break with the past, when it was only universities that engaged in scientific synthesis. This shift is an understandable one since all Dutch archaeologists have enjoyed the same academic training and there are now more archaeologists with PhDs working outside the academic world than inside it.

Figure 6.2: Distribution of Malta excavations in the Netherlands 1997–2013.

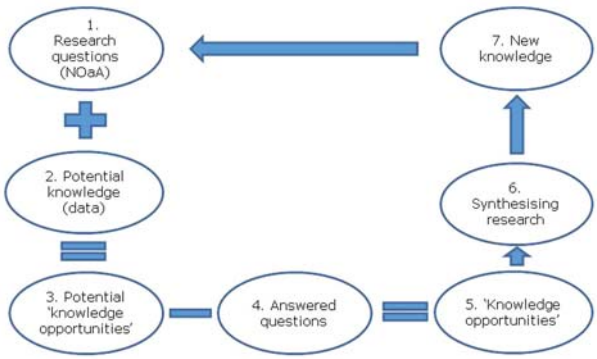
Valletta Harvest 2

Following an evaluation of how the archaeological legislation – and especially Malta archaeology – operates (RIGO 2011), the Minister of Education, Culture and Science tasked the Cultural Heritage Agency in 2012 with ensuring a better infrastructure for balancing different interests, and decision making within archaeological heritage management. A budget was also made available for this purpose. Once again, it was noted that the 'archaeological heritage management cycle' (Deeben et al. 1999.) was stagnating in the area of 'interpretation and synthesis'. This was viewed as a serious problem, hence the call for more scientific syntheses. In response, a plan was drawn up to intensify synthesising research. The primary objective was to generate new knowledge and better questions in order to boost the quality of returns, as well as the audience reach of future Malta research. The result was the Valletta Harvest 2 project (Oogst voor Malta, 2012–2016), which was designed to answer the following questions: What are the current major archaeological 'knowledge opportunities'? What important questions about our past can be answered using this vast stockpile of Malta reports? (RCE 2013). This involves knowing three things:

1. Which areas, subjects and archaeological periods has the most and best Malta data been gathered about?
2. Which important questions in the National Archaeological Research Agenda (NOaA) are likely to be fully or partially answered by these clusters of new data?
3. Which NOaA questions have already been fully or partially answered by means of synthesising research (dissertations and academic articles)?

These steps are being worked through systematically, based on the results of a recent analysis of the scope (period, themes, geographical range) of excavation reports that have appeared since the end of 2006 (Figure 6.3). The outcomes of this exercise were used to award the first six contracts for synthesising research in 2013 (Figure 6.4). More are set to follow in 2014–2015. The contractors are archaeological firms, universities and municipal archaeological services, and the commissioning body is the Cultural Heritage Agency. The output of these studies will take the form of scientific reports, which the Cultural Heritage Agency will make accessible online as searchable PDF files (Link 3).

Figure 6.3: A schematic diagram of the synthesising research selection proces in the context of Valletta Harvest 2.



Each contract involves the analysis of dozens of Malta reports in conjunction. Some 'knowledge opportunities' relate to parts of the Netherlands about which little is known archaeologically (geographical 'knowledge opportunities'), and others to periods (chronological 'knowledge opportunities') or subjects (thematic 'knowledge opportunities') about which little is known. Priority is given to pressing synthesis projects – in other words, projects that are urgently needed to produce information that enables clear and informed choices within the context of archaeological heritage management. This is because areas for which we lack even the most basic understanding of settlement history, for example, also lack a frame of reference for making choices. Doing everything is not a realistic option.

The output of the Valletta Harvest syntheses will also serve as input to update and improve the National Archaeological Research Agenda. The result will be a completely new web-based information system, the NOaA 2.0, which is scheduled for completion in 2016. Similarly, the general outlines of Dutch archaeology will be made more readily accessible to a wide audience online. For this enterprise too, Valletta Harvest output will be used as input.

Best value

Although Valletta Harvest and the Odyssee Programme have yielded some marvellous results, they have not been an unqualified success. With regard to the Odyssee Programme, this was made abundantly clear in an analysis presented by Jos Bazelmans (head of the Cultural Heritage Agency's research department) at the 2014 conference 'On Second Thoughts' held in the Dutch National Museum of Antiquities (Rijksmuseum van Oudheden) in Leiden. By no means all targets were achieved within the set timeframes and what has been completed varies enormously in both quality and accessibility. In some cases the delivered product has borne little relationship to what was promised. Projects were characterised by a lack of direction, with too many non-binding targets. Attempts have been made to remedy this in the setting up of Valletta Harvest 2. It operates on a project basis and is therefore more systematic, business-like and transparent.

This project-based approach is reflected inter alia in the selection of subjects for synthesising research and suitable contractors. As the commissioning body, the Cultural Heritage Agency defines subjects and associated research questions on the basis of a systematic analysis (see above). These are then converted into synthesis projects, which are put out to tender in line with market practice. Archaeological parties are able to submit a bid. Contractors are selected in a transparent process and on the basis of selection criteria that are announced in advance. Contracts are awarded to the best bidder, with quality weighing much

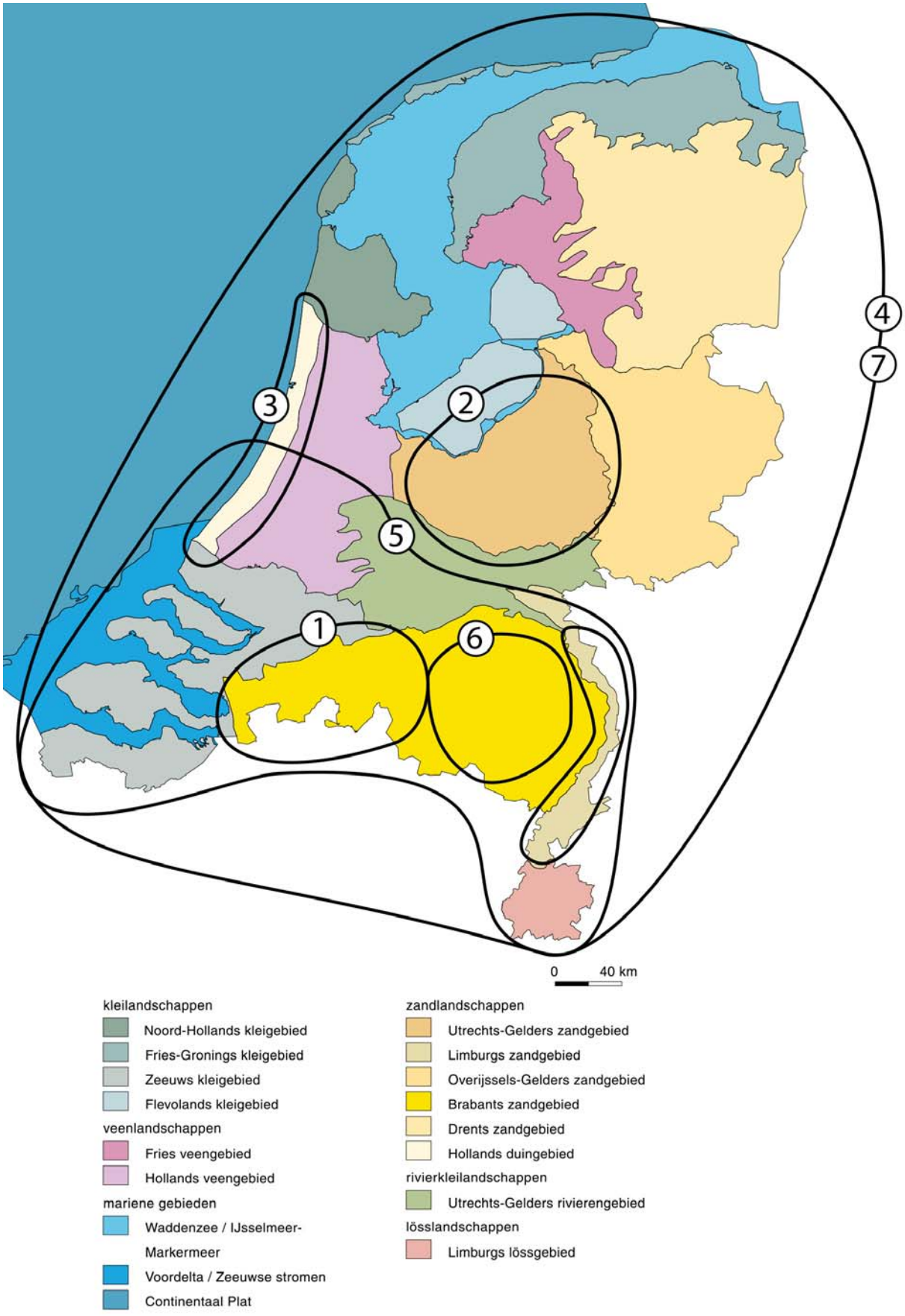


Figure 6.4: Valletta Harvest 2. Knowledge opportunities for synthesising research (2013) relevant to archaeology and archaeological heritage management, projected onto Dutch archaeological regions (Groenewoudt 1994, 51).
The seven projects are: 1. Settlement history Western North-Brabant; 2. Settlement history Gelderse Vallei; 3. Settlement history coastal dune area; 4. Late Neolithic - Middle Bronze Age; 5. Transition Late Roman Period - Early Middle Ages; 6. Eastern North-Brabant: Late prehistoric to medieval settlement dynamics; 7. 'Invisible farms' (AD 1250–1600).

more heavily than cost. Contracts are entered into with contractors (universities, archaeological companies and municipal archaeological services). The process is supervised and the result reviewed in accordance with a predetermined procedure, which is also laid down by contract. There are clear guidelines about the form and content of the end product. Payments are made in instalments, provided delivery is consistent with what was agreed upon. This business-like approach represents a break with the past but it is certain to bring a greater return on investments, including in a scientific sense. It is inappropriate to talk in terms of a 'straitjacket' since only the broad outlines are fixed. Once contractors have entered into a contract, they are given every opportunity to work out the details and to put their own ideas and expertise to optimum use. Following an exhaustive inventory of all relevant excavation reports, they then develop the research question into a detailed plan of action that forms the basis for the research.

New harvest

The Odyssee Programme is coming to an end and Valletta Harvest 2 will finish in 2016. How do we proceed from here? Based on experiences so far, plans are being developed to press ahead with these initiatives in a modified form. In any event, the successful project-based approach adopted for Valletta Harvest 2 will be continued. In terms of content, the idea is to combine the scientific synthesis of both 'old' and 'new' (i.e. Malta) excavations. While this could have obvious benefits in terms of content, it could also give rise to practical problems, especially regarding feasibility and planning. Bringing together both types of archaeological research into a single scientific synthesis could therefore prove difficult. Although there are ready-to-use, standardised reports available for Malta research, this does not apply to 'old' excavations, where the nature, completeness and quality of the documentation vary enormously and in ways we cannot predict. This was a problem for some of the projects in the Odyssee Programme. It can be resolved to some extent by adopting a phased approach, starting with a quick scan of all available data and its potential. The differences between the two types of datasets can then be taken into account, both in terms of possibilities and the time needed to bring 'old' excavations up to the same analytical level as Malta research. Only then will it be possible to embark on a balanced synthesis.

Does Malta archaeology serve scholarship?

The reporting requirement, together with its scientific aim and design, means that Dutch Malta excavation reports, can in principle serve as standalone input for further scientific analysis and synthesis, and for theory building. There is no need to go back to the source, to the excavation documentation and the finds. Clearly, this does not mean that all Malta research is ideally suited for answering *every* archaeological research question. For example, there may be constraints due to incomplete data, sometimes because excavations are linked to spatial interventions and their boundaries. Moreover, all question-driven research is by definition selective, thereby creating limitations as well as opportunities. On the positive side, the huge volume of new Malta data and its broad geographical spread provide ample research opportunities as it constitutes a much larger, and therefore more representative sample from the 'soil archive' than what was previously available. This allows us to reach more reliable conclusions, to undertake solid evidence-based testing and to adjust our theoretical models. And isn't that what scholarship is all about? There is no doubt that academic archaeology, which is under pressure across Europe, could highlight its role and relevance by seeking closer ties with Malta research. People may need to abandon their entrenched positions. But what would that matter if there is a whole new world to be gained elsewhere? What lies behind the suspicion, condescension even, towards development-led archaeology that is sometimes found in academic circles? Does it reflect doubts about quality, or is it perhaps little more than a stubborn clinging to personal research preferences in the guise of academic freedom? At all events we must avoid sterile segregation, with unverified or even unverifiable archaeological theory operating in parallel with plodding routine. Two worlds existing alongside one another – that would be unwise, unnecessary, and risky.

Sufficient quality?

The results of Malta excavations do give some cause for concern, however. Quality of output was one of the aspects investigated in the 2011 evaluation of Malta archaeology legislation mentioned before. On average, Malta reports just scraped a pass in this respect. Is that good enough? And is there an upward or a downward trend? In the light of the above, these are critical questions. Without high-quality data, scientific synthesis is both meaningless and irresponsible. This raises the question of whether the costs of all the Malta studies are indeed offset by the benefits. The 2011 evaluation measured the quality of reports against the legally enshrined criteria in the Dutch Archaeology Quality Standard, and also examined whether work was conducted at a sufficiently specialist level. This latter aspect – deploying experienced researchers and specialists – has proven to be a weak point; it also has direct implications for the usefulness and reliability of research results. Reliability is something that is difficult to determine from the reports; after all, we were not there. However, the fact that archaeological companies are increasingly cutting back on specialists and specialist studies in order to remain competitive is a real cause for concern. At the same time, it raises the question of whether the quality safeguards built into the current system are sufficiently robust, especially in difficult economic times. To reiterate the point once again: quite apart from the issue of employment and the pleasure that people derive from visiting an excavation, unless Malta excavations are high-quality and relevant, they are a pointless waste of money.

Let us conclude with a distinctly positive trend. The subtitle of this contribution refers to relevance to society. The way in which Malta has evolved in the

Figure 6.5: Valletta Harvest! The excavation of one of several cult places and cemeteries from the Late Iron Age and Roman period which are part of complex 'sacrificial landscapes' along the banks of the river Meuse (southern Netherlands). This is exciting news, and it is entirely due to recent Malta research question-driven excavations (© ADC ArcheoProjecten).

Netherlands (Bazelmans 2011) has meant that the traditional hunting grounds of universities have been abandoned and archaeological research has spread across the entire country (Figure 6.5). This in turn has led to far greater local involvement in archaeology, which brings nothing but benefits all round. Decentralisation has also meant that decision-making about Malta archaeology is vested at the local level, in municipalities. If politically feasible, would the scientific return perhaps benefit from more central coordination? This answer is probably yes. And heritage management? Possibly yes. However, the growing local involvement, which should be seen as an important part of the social return, would then suffer as a result. This fact must not be ignored in the discussion about value for money.

References

Bazelmans, J.G.A. 2006: To What End? For What Purpose? The National Archaeological Research Agenda (NOaA) and Quality Management in Dutch Archaeology. *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek* 46, 53–66.

Bazelmans, J.G.A. 2011: Serving two masters, in L. Webley et al. (eds): *Development-led Archaeology in Europe. Proceedings of a round table at the University of Leicester 19–21 November 2009*, Oxbow Books, Oxford, 9–21.

Deeben, J.H.C., Groenewoudt, B.J., Hallewas, D.P. & Willems, W.J.H. 1999: Proposals for a practical system of significance evaluation in archaeological heritage management. *European Journal of Archaeology* 2, 177–199.

Dockum, S.G. van, Lauwerier, R.C.G.M. & Zoetbrood, P.A.M. 2006: Archeologiebalans (Archaeology report). The National Review and Outlook. *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek* 46, 41–51.

Erfgoed Nederland 2010: *Programma Odyssee: 32 archeologische projecten behouden thuis. Wetenschappelijke en maatschappelijke meerwaarde van vergeten opgravingen*. Amsterdam.

Fokkens, H., Groenewoudt, B. & Jungerius, E. 2001: Naar een onderzoeksagenda voor de Nederlandse archeologie. *Archeobrief* 18, 12–13.

Groenewoudt, B.J. 1994: *Prospectie, waardering en selectie van archeologische vindplaatsen: een beleidsgerichte verkenning van middelen en mogelijkheden*. PhD Thesis Amsterdam University, Amersfoort.

Hessing, W.A.M. & Mietes, E.K. 2003: *Project Odyssee: een zoektocht naar de achterstand in uitwerking van archeologisch onderzoek in Nederland*. Vestigia Rapport V75, Amersfoort.

Kleijne, J. 2010: *Verslag van het NWO Odyssee programma, kortlopend onderzoek: Odyssee, een oplossing in de breedte: de 1000 onuitgewerkte sites, die tot een substantiële kennisvermeerdering kunnen leiden*.

Report E-depot Nederlandse Archeologie EDNA ODYK–09–13.

RIGO (G. Keers, H. van der Reijden & H. van Rossum) 2011: *Ruimte voor archeologie: evaluatie Wamz*.

Rijksdienst voor het Cultureel Erfgoed 2009: *Erfgoedbalans 2009. Archeologie, monumenten en cultuurlandschap in Nederland* (English summary: Heritage Under Review, 285–298). Amersfoort.

Rijksdienst voor het Cultureel Erfgoed 2013: *'Kenniskansen' voor AMZ-relevant onderzoek op basis van Malta-rapportages*. Amersfoort.

Webley, L., Linden, M. van der, Haselgrove, C. & Bradley, R. (eds) 2011: *Development-led Archaeology in Northwest Europe. Proceedings of a round table at the University of Leicester 19–21 November 2009*. Oxbow Books, Oxford/Oakville.

Willems, W.J.H. 2014: *Malta and its consequences: a mixed blessing*, in V.M. van der Haas & P.A.C. Schut (eds) The Valletta Convention: twenty years after – benefits, problems, challenges. EAC Occasional Paper 9, EAC, Brussels, 151–156.

Websites

Link 1: http://archaeologieinnederland.nl/noaa-hoofdstukken

Link 2: http://www.dans.knaw.nl/en/content/categorieen/projecten/edna-e-depot-dutch-archaeology

Link 3: http://archeologieinnederland.nl/

7 | Dare to choose samples, not excavations. Reflections on sampling and investigation strategies in archaeological research on settlements

Hauke Jöns

Abstract: Despite many decades of close cooperation between archaeologists and scientists from a wide range of fields to clarify questions about cultural history, there are still major differences in the methodological approaches between the various disciplines. These concern not only the significance and representativeness of random samples but also the strategies employed when recovering and analysing find material. Against this background, a plea is made for these disciplines to get together – both when excavations are planned and their results evaluated – to discuss what components to include in the archives so that future generations of researchers will also be able to study the recorded, sampled and stored material. When evaluating the results of excavations, greater attention should be paid to whether an analysis of samples could also lead to sound scientific conclusions on certain cultural history questions.

Keywords: bulk finds, large-scale archaeological projects, methodology, evaluation strategy, Valletta Treaty

Introduction

The eventful history of Central European settlement has left many physical remains and other traces that are the only sources of information, for prehistoric periods at least, that allow us to reconstruct life in the past. They are therefore of particular importance for research into the history of humankind. Consequently, their long-term conservation and preservation in situ, in as unchanged a state as possible, is one of the main aims of the protection of our archaeological heritage. The degree of consensus on this matter can be seen in the acceptance of the European Convention on the Protection of the Archaeological Heritage (Valletta Treaty), which has now been signed and ratified by almost all the states of Europe (Link 1).

Archaeological rescue excavations under the Valletta Treaty

Over the past few decades, as a consequence of the increasing implementation of the Valletta Treaty, the perpetrator or initiator-pays principle (in this case the cost-by-cause principle) has gradually become the main principle behind the funding of excavations in many parts of Europe (see summary in Willems & Van den Dries 2007). In view of the present financial problems facing many European countries, we can expect this principle to also become enshrined in the coming years in the heritage-protection laws of countries where state funding of archaeological investigations has been customary until now. Ultimately, this is the way to ensure reliable planning and legal conditions for developers and heritage managers. How long this political process will take cannot be judged at present.

In practice, despite the many fears expressed beforehand, the cost of archaeological excavations to be borne by planners and developers in accordance with the cost-by-cause principle has only in a few cases led to stoppage or delays in construction projects or to the blocking of investment funds. Instead, the funds needed for archaeological investigations are generally included as ancillary construction costs in the financial planning right from the start of the project.

With all the subsequent activity, economic pressure on the substance of archaeological sites and monuments has remained consistently high for many years, especially as the demand for previously undeveloped areas for settlement and transportation purposes can scarcely be reduced. An example is the situation in Germany. According to data published by the Federal Office of Statistics (Statistisches Bundesamt 2013, 22 ff.), the area used for settlement and transportation increased by 1087 square km between 2009 and 2012, which represents a daily increase of 74 hectares or approximately the size of 106 football fields. This is slightly less than in the previous period (2008–2011), when the increase amounted to 81 hectares per day. However, no clear-cut new trend can be identified.

At the same time, we can assume that there are at present about 1.2 million archaeological sites known and registered in Germany, a country of approximately 360,000 km^2 (Jöns 2013). These figures suggest that around 1000 sites are affected by construction projects each year and should therefore be fully or partially investigated by archaeologists. It is almost impossible to calculate the number of sites that are still unknown. In the past, however, especially in the case of pipeline

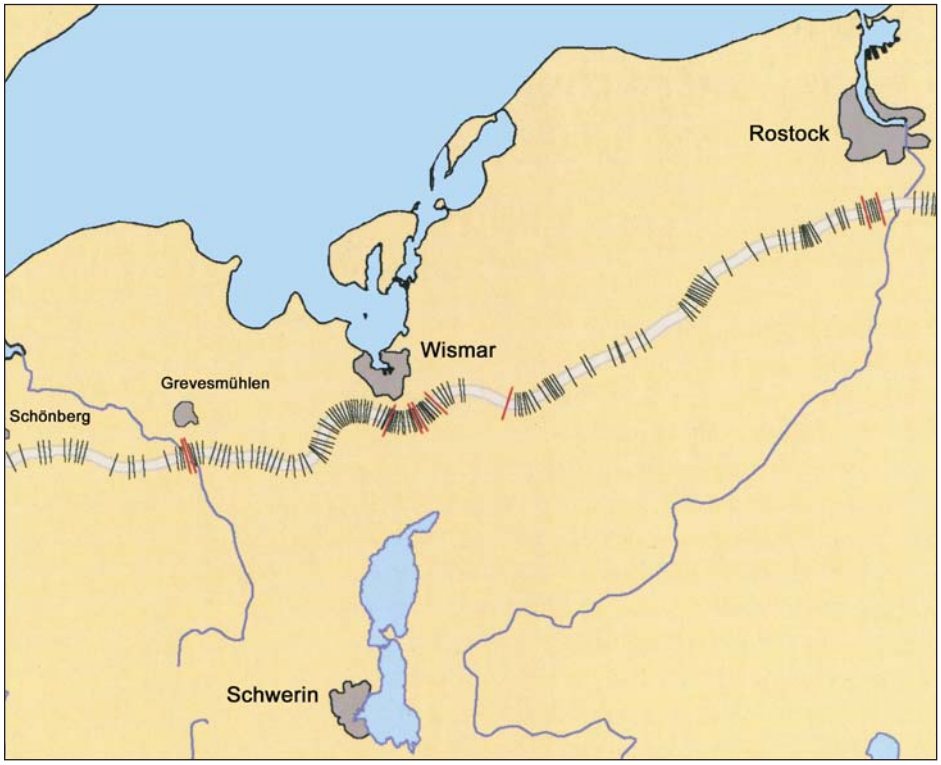


Figure 7.1: The map shows archaeological sites excavated before the construction of the A20 motorway near Wismar. Prior to these excavations only 9 sites were known (marked in red). During the project another 151 sites were discovered and partly excavated (newly discovered sites are marked in black) (after Lüth & Schmidt 2005).

and motorway construction or other 'linear' projects, the number of archaeological sites known prior to these projects has proven to be a poor indicator of the number of sites actually in the ground, the latter often being ten to fifteen times higher (Figure 7.1). In fact, sites that are not visible on the surface, and are therefore unknown, are often particularly well preserved and thus of special significance from a cultural history point of view (e.g. Lüth & Schmidt 2005; Assendorp, Haßmann & Wulf 2012; Ludowici & Haßmann 2013).

These general trends can undoubtedly be found anywhere in Central Europe where economic development in recent years has proceeded without major disruption. The organisation or execution of extensive archaeological excavations before or during construction projects is therefore one of the most important duties of archaeological heritage offices throughout Europe.

It is therefore not surprising that the general public is very aware of archaeological excavations, especially when they reveal exciting new details about the life of our ancestors or, even more so, when materially valuable treasures are found and recovered. By contrast, the actual purpose of the Valletta Treaty – the usually unspectacular protection of the archaeological substance and the long-term conservation of sites in as unchanged a condition as possible – is often much more difficult to convey to both politicians and the general public.

On paper, the increasing implementation of the cost-by-cause principle has undoubtedly led to an improvement in the basic conditions and professionalism of archaeological excavations. The legal obligations for all developers mean, at least theoretically, that sufficient funds are now increasingly available to finance the use of modern excavation and recording techniques and to employ highly qualified and properly paid personnel (Aitchison 2010; Krausse & Nübold 2010). This is basically valid for much of Europe, even if organisation of developer-funded excavations varies widely in different countries (Willems 2008). The type of organisation ranges from commercial systems that rely entirely on market forces as in, for example, Belgium, the Netherlands (Bazelmans 2006; Bloemers et al. 2010) and England (Hunter & Ralston 2006) to state-controlled systems that are established to varying degrees in, for example, Denmark (Ethelberg & Madsen 2010) and France (Demoule 2007; Giraud 2010).

Irrespective of the system in place, it is generally possible to minimise the time pressure typical of 'rescue excavations' through proper planning and foresight in the agreements between archaeological heritage offices, developers, contractors and archaeologists. At the same time, a wealth of new knowledge can be obtained and qualified archaeological jobs created or secured (Figure 7.2).

In recent years, this positive provisional appraisal is increasingly being challenged by academics and researchers. The main point of criticism is that the prime purpose of excavations triggered by construction projects and funded by the developer is the 'disposal' of the archaeological substance in order to clear the way for construction, rather than an investigation of the site in accordance with previously formulated research targets. The danger is particularly great when archaeological heritage offices participate in these projects in a purely advisory capacity. Excavations are then usually carried out by archaeological excavation companies selected by the developer following a tendering process in which the cost factor plays a decisive role.

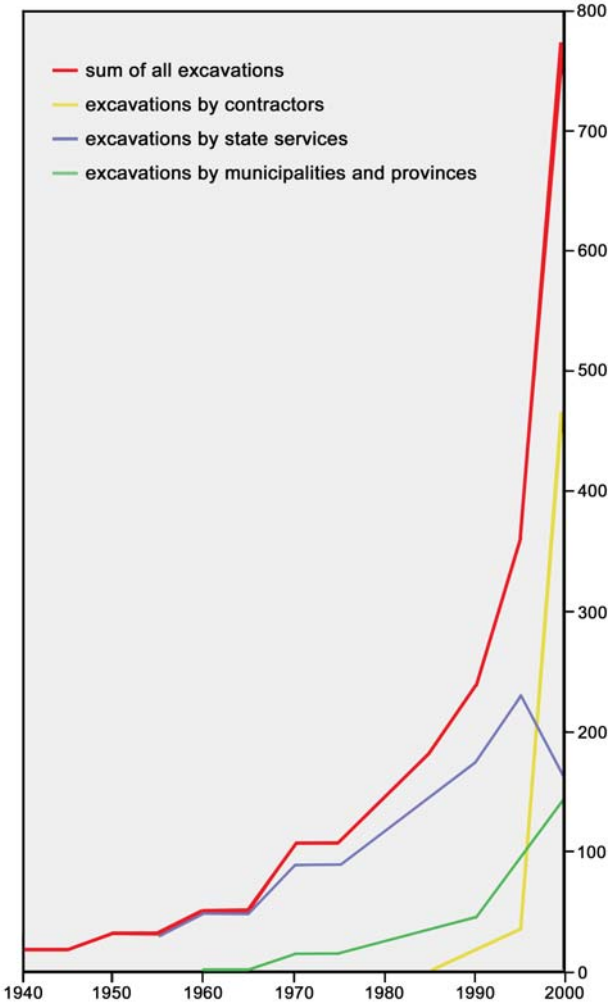


Figure 7.2: Development of archaeological projects in the Netherlands from 1940 to 2000. The implementation of the Valletta Treaty marks an enormous increase in investigations (after Bloemers 2005, fig. 2).

In such circumstances, it is almost impossible to apply new methods or formulate further academic questions. Another criticism is that the highly standardised excavation records make it very difficult to integrate the excavation results with other scientific research. 'Valletta archaeology' should thus be seen as merely a sideline attached to the construction project and having little to do with archaeological research based on specific questions. In view of the present situation in Belgium and the Netherlands in particular, Dries Tys even suggested in his paper at the 2014 EAC Conference in Amersfoort that excavations funded on the developer-pays principle should be abandoned in order to discontinue this form of commercialised archaeology. Indeed, under the heading 'Dare to choose', the present author suggests that excavations should be undertaken less often in future, as was the case before the 'Valletta Treaty', and above all they should be carried out primarily by research institutes, universities and heritage offices on sites of particular significance to ensure that they are always based on the latest research methods. (See Tys in this volume.)

If this suggestion were adopted, it would probably mean the unrecorded destruction by construction projects of all sites that were judged, based on existing records, to be of insufficient academic value to warrant a full-scale scientific excavation. This would mean having to forgo all the interesting finds and features that are only discovered through excavations accompanying construction projects, simply because a preliminary survey had not been conducted for various reasons, making the sites previously unknown. Examples include some of the spectacular discoveries in northern Germany, which only materialised because they were detected and recovered in the course of developer-funded archaeological investigations accompanying construction work. A well-preserved late-Mesolithic coastal settlement near Stralsund was only excavated prior to construction work because local archaeologists were recording the removal of modern levelling layers (Kaute, Schindler & Lübke 2004; Figure 7.3). The discovery of one of the largest Bronze Age gold hoards during the construction of a gas pipeline only occurred because the developer had agreed to fund the excavation of all ancient remains uncovered by the construction work, although nothing

Figure 7.3: Remains of a late Mesolithic dugout canoe and a settlement, encountered during construction work in Stralsund (after Kaute et al. 2004; Photograph: © P. Kaute, Schwerin).

but a few prehistoric sherds had been found on the site prior to the start of the project (Haßmann et al. 2012). No less important from the cultural history point of view was an almost completely preserved fish-trapping system dating to the Roman Iron Age that was only discovered during extension work on a harbour basin in the Hanseatic city of Greifswald because the developer financed archaeological recording during the removal of already disturbed fill in late-medieval and modern layers (Klooß 2005). The list could go on forever: almost every archaeologist could think of examples. It is thus clear that doing without the excavations linked to construction projects would entail the irretrievable loss of many archaeological sources, which can hardly be the intention of archaeological heritage officers or researchers in general.

Instead, the common aim of research, university teaching and archaeological heritage protection should be to improve the supposedly poor scientific quality of archaeological investigations within commercial archaeology and, as far as possible and despite financial pressures, to align them with well-defined academic requirements.

Processing and publication in times of shrinking resources

The ground rules for funding and implementing large-scale excavations have thus improved considerably over the last two decades. This is not the case, however, for the academic analysis and publication of excavation results: there, the situation has barely changed and has even worsened in many places due to shrinking resources (Müller & Sommer 2005). As a rule, the developer's financial obligation includes recording the finds and producing a proper final excavation report but not the detailed analysis and publication of the results. As a consequence, the publication of developer-funded excavations is often limited to short preliminary reports in a popular-science style, which are often just summaries of the excavator's initial interpretation during the excavation or the first conclusions drawn as soon as the excavation has ended. An absolutely essential, thorough examination of the find material and excavation records is rarely undertaken. Detailed academic analyses of well-excavated and well-recorded sites in large-scale heritage projects thus often remain mere desiderata, which can only take the form of Master's or doctoral theses, or other such qualification exercises, with little or no funding. Especially in the case of excavations involving complex stratigraphy, numerous features and large quantities of finds, where a detailed analysis would be of great cultural-historical interest, an academic analysis is often postponed indefinitely because the definitive processing of the excavation results cannot be funded immediately or seems utopian.

From the research point of view, this situation is less than satisfactory as it may mean that even excavations that are excellently recorded, are partially or fully excluded from academic discussion – at least in the short and medium term. Nor can the interpretation of finds, features or sites be verified because the analyses are not available or are not transparent. At worst, it leads to the dissemination of inaccurate interpretations.

These problems are not new and they have often been publicly discussed. As a rule, the 'material gains' brought about by improved funding of development-led excavations are not accompanied by equivalent 'knowledge gains'. Usually, all that remains is the hope that closer cooperation between archaeological heritage offices and universities will succeed in bridging this gap (Jöns & Siegmund 2005). Again and again, the discussion centres on whether setting up open-access portals, which would give the entire research community direct access to all excavation data, could improve the analysis of results. If it were possible in future to find satisfactory answers to copyright questions arising from the widespread adoption of open-access portals and to agree on the supra-regional standardisation of data formats, this would make it easier to access and use the digital records and would permit comparative analysis. However, this would not replace the labour-intensive academic analysis of find material and the general culture-historical comparisons that need to be investigated.

We should therefore assume that the various economic and methodological conditions imposed on the academic analysis of archaeological excavations and find assemblages on the one hand, and on executing the recovery and recording that accompanies construction work on the other, will mean a continued growth in the number of excavations that are well recorded but not sufficiently academically analysed and published.

The present system that is used to analyse excavations, especially those of a large-scale nature, should therefore be reviewed. The central question is how the imbalance between excavation and analysis can be corrected without sacrificing academic quality.

Representativeness of samples in archaeology and the natural sciences

As a rule, the detailed analysis of archaeological excavations presupposes that reliable results can only be obtained for the sites being investigated if the find material as a whole and all the recorded features and stratigraphies are included in the analysis. However, since it is only in exceptional cases that archaeological sites are fully excavated, archaeologists usually regard partially excavated areas as samples, whose representativeness is often impossible to assess, or only with reservations. Against this background, a full analysis of the material from each excavation seems absolutely essential in order to be able to utilise all the recorded information from the partially excavated area to reconstruct the lives of people who lived there in the past (Sommer 2009, 705).

The insistence by many archaeologists that the material to be analysed should be complete clearly differs from the demands made by natural scientists, with whom archaeologists have cooperated closely, in some cases for many decades. Archaeologists usually accept without question the results from these other disciplines, taking them into consideration in their

historical interpretation. It is generally accepted in these disciplines – the traditional methods of the palaeoethnobotanical analysis of macro plant remains, pollen analysis, radiocarbon analysis, phosphate analysis and the technical analysis of objects made of various materials (metal, leather, textiles, etc.), to name just a few – that examining carefully taken, representative samples is all that is needed to make sound judgements on the environment, vegetation, food production, chronology, or the use of specific techniques. It is assumed that the samples are fully representative of the context from which they are taken, encompassing even the unsampled parts of the feature in question and the site as a whole. Since these methods that are used to answer archaeological questions are anchored in the methodology of the natural sciences and were usually developed solely to investigate material from archaeological excavations, they, too, are based on the generally accepted scientific principles of sample representativeness and reproducibility of tests and test results. In most scientific disciplines, an analysis of all theoretically available samples is in principle only carried out where necessary to avoid possible mistakes due to the 'law of small numbers' and to obtain statistically sound answers to specific questions. If, on the other hand, the materials to be analysed, or samples taken from them, are available in large numbers, a selection (random sample) is usually made for analysis. How many samples are finally analysed and in what resolution depends on the questions to be answered in each case and the methods to be used. The availability of personnel and funds also plays a not inconsiderable role.

As far as palaeoethnobotany is concerned, Stefanie Jacomet and Angela Kreuz (1999) have described sampling, processing and analytical strategies in detail, together with the data-volume statistical considerations on which these are based. They also discuss how large a sample should be to include, as far as possible, all the species present – even rare ones – in order to be able to project their quantitative distribution in the material as a whole (Jacomet & Kreuz 1999, 130). From an archaeological point of view, the empirical and experimental method used in palaeoethnobotany is of particular significance because it can theoretically also be used to investigate other frequently occurring groups of finds. In this method, the sample to be investigated is first homogenised and then divided into sub-samples. The number of sub-samples depends on the size of the original sample but each must always be large enough for the determined frequency of the species under investigation to be statistically reliable. The sub-samples are analysed one after the other and the numbers of the individual species identified are recorded, together with the size of the sample, on a data sheet, and sometimes also plotted on a graph. As further sub-samples are analysed, the number of samples increases, as well as – usually – the number of species identified – at least with the first few samples. If, despite the ever larger number of sub-samples, the number of species no longer increases in the course of the analyses, it can be assumed that all the relevant taxa in the original sample have been identified. It is not necessary to continue analysing further sub-samples as no additional information can be expected. On the basis of the analysed samples, it can then be said what plants used in some way by human beings have been preserved in the soil. If the proportions of the identified species are then determined, it is also possible to say something about the economic importance of the individual plants used by the inhabitants.

Similar strategies are also employed in the archaeozoological examination of animal bones. As a rule, the obvious objective is to determine what animal species were kept for what purpose, and to obtain information about the economic importance of animal husbandry, hunting and fishing in the community under investigation (Benecke 1994, 12 ff.). As with archaeology, for many decades this discipline sought to include in the analysis as much as possible of the excavated animal-bone material (summary in Reichstein 1984, 277 ff.). In recent years, however, when there were large quantities of material, archaeozoologists have also increasingly adopted the principle of examining in detail only a representative selection of the find material (Peres 2010, 30 ff.). Here, the size of the sample varies considerably, depending on the questions to be answered and the correlation between the excavated finds (Reitz & Wing 1999, 106 ff.). Nowadays, an analysis of animal bones without a stratigraphic context is usually dispensed with.

Of great importance in the discussion of sampling and analytical strategies for find material from archaeological excavations is a recent study on fish bones, which Ulrich Schmölcke (2013) carried out in a SINCOS research project on extremely well-preserved fish-bone assemblages from the Timmendorf-Nordmole site near the Baltic island of Poel in the Bay of Wismar (summary in Harff & Lüth 2007).

As with the above-mentioned application of an empirical, experimental method in palaeoethnobotany, significant progress was also made here regarding the amount of information obtained from a thorough investigation of the 21,897 fish bones that were recovered (Figure 7.4). The material was divided into 15 sub-samples of various sizes, which were then analysed one by one and the quantities of each species recorded. Once the first four sub-samples were analysed, with a total of 2,187 bones (i.e. around 10% of the material), it was already possible to answer with certainty the archaeologically relevant question of the economic significance of the most important species of fish. Cod (47%), eel (38%) and flatfish (11%) were the preferred catch, with all the other species together making up less than 4%. These ratios remained unchanged even after a further 20,000 finds had been analysed. If, on the other hand, the question was what could be said about the palaeo-environmental evidence furnished by the fish population caught at the Timmendorf-Nordmole site, the species represented by just a few bones were as significant as the more frequently represented species. In this case, the analysis had to identify as many as possible of the species present in the material and determine their relative proportions. After all the bones had been examined, 25 species of fish had been identified: 22 of these already by the time 7,500 fish bones had been examined. One further species was identified only after 14,390 fish bones had

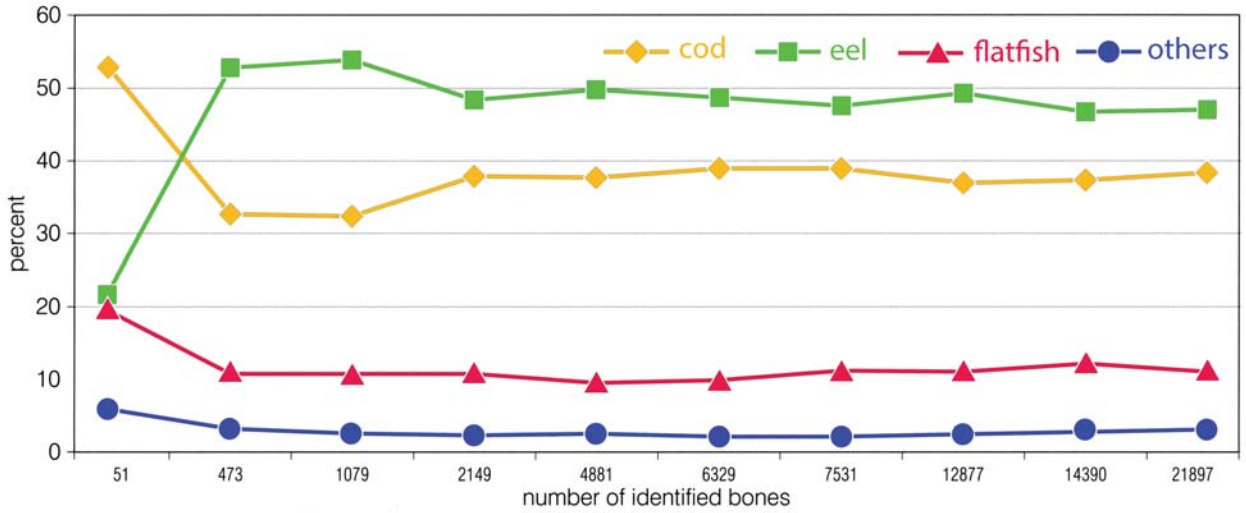


Figure 7.4: The graph shows the knowledge gains made during the analysis of fish bones from the submerged Stone Age site of Timmendorf-Nordmole (after Schmölcke 2013, fig. 2).

been examined; and the last two species in the material were only identified during the analysis of the final sub-sample. This example shows clearly the extent to which investigation and sampling strategies depend on how the question is formulated.

Single finds, hoards, graves, settlements and the representativeness of finds and features

So far, the different ways of looking at a situation and the different standpoints of archaeologists and natural scientists involved in research on archaeological material and questions, as described above, have led to hardly any interdisciplinary discussion of the genesis and taphonomy of the archaeological records or to any ensuing methodological conclusions. This reflects the respect for tradition and the methodological independence of each discipline on the one hand, and the general lack of critical debate about principles and assumptions on the other. However, since both archaeologists and natural scientists often analyse the same objects and samples, or at least ones from the same excavated assemblages, a closer comparison of their respective research methods seems vital. Single finds can be disregarded here as their find context is usually unknown, making them of limited use as a source of information.

Hoards and graves are the result of deliberate actions. In other words, the information in the excavation records – from the topographical location to the positions of the objects they contain – reflects conscious decisions on the part of the people who deposited or buried them. This information must be taken into consideration both when sampling for scientific analyses and in the cultural-historical evaluation – it is the only way to avoid false interpretations. Whether, and to what extent, a representative sample of the excavated assemblage is preferable to a complete analysis must be considered and decided case by case.

By contrast, the remains of settlements are what is left of the economic and social life of past communities. Only in exceptional cases can finds excavated in settlement areas be interpreted as deliberate depositions. The finds are usually objects that were of no further use, or are waste from food preparation, domestic activities or handicrafts. The remains of buildings and the traces of their use accumulated gradually over time: they therefore furnish direct evidence of the activities that took place there and reflect various aspects of life. So long as waste material was not deliberately removed from its place of origin or re-used – to fill a hollow area or open pit or to consolidate or level a path, for example – it ended up near its place of final use, where it is later found. For the former inhabitants of a settlement that would later be archaeologically excavated, it was irrelevant what the waste was made of, whether organic material, animal bone, pottery or even metal; as a rule, nothing was sorted.

If these premises are accepted, it would appear that the various sampling and selection strategies of the archaeologists and natural scientists involved in analysing settlement finds need to be re-examined. If one assumes that the analysed samples of botanical macro remains or animal bones can reliably reflect the composition of all the botanical macro remains or animal bones found in a specific area of a settlement or in a specific feature, then the same principle must apply to the pottery sherds, flint artefacts or craft debris that were found with them. Consequently, it should be possible to answer at least some questions if the detailed analysis includes only a selection of representative samples from groups of finds that are present in large quantities.

Despite close cooperation with scientific disciplines, archaeologists have so far adopted hardly any of the investigative and sampling strategies described above. Publications since the 1970s, especially in the English-speaking world, contain occasional reflections on the increased use of sampling when analysing

archaeological finds (Cherry et al. 1978; Shennan 1988; Orton 2000). In German-speaking areas, this approach has hardly been considered as yet, or it has been explicitly rejected on methodological grounds (Sommer 2009). Even in the analysis of large quantities of specific groups of finds, the fear of erroneous results if only part of the material is included almost always leads to a decision to analyse all the material available (see, for example, Hartz 1999, 49 ff.; Lübke 2000, 29 ff.).

However, particularly when looking at the results of detailed analyses of large quantities of material – and more specifically their graphic presentation on distribution maps or diagrams – one often has the impression that the most important results could have been achieved by analysing just part of the material, especially a selected representative sample. Nevertheless, it is not generally possible to determine precisely how much the sample size should be reduced by because progress during the recording of the material is not documented or interim results are not published.

Of great interest here is a study of the history of linear-pottery (LBK) settlements, the subject of Carsten Mischka's PhD thesis (2014) in Cologne. He took the case of several completely excavated and fully published LBK settlements and investigated whether comparable results could have been obtained if just representative samples had been analysed and how big the samples would have had to be to achieve these results. He concluded that, given the good state of LBK settlement research and the uniformity of the settlements, just 30% of the material would have been enough to reconstruct the chronological development of the settlements. An analysis of 40% of the excavated area would also have sufficed to reach sound conclusions about the structure of the settlements.

Many other frequently asked questions in settlement research could probably also be answered by systematically analysing representative samples taken from the totality of the material to be investigated, with results as good as those achieved if all the available material were analysed. This would be the case, in particular, if the sample size were determined in a flexible manner and if the principles of the empirical, experimental methods described above for palaeoethnobotany and archaeozoology were taken into consideration. The possibilities and limits of this approach can be demonstrated with a few examples.

In the example of investigating the principal economic activities at an Iron Age site where metals were extracted and processed, it would normally be possible, merely by analysing a representative selection of the waste and other debris, to determine what the main metals were and whether ore smelting or metal processing was more important (Figure 7.5). If large quantities of pottery sherds were also found in the vicinity of this site, we can assume that the site's duration could be accurately assessed simply by making a typo-chronological analysis of a selection of this material, and its chronological development could be ascertained from the material's distribution. The precision of the results would be close to that obtained by an analysis of all the material.

Especially in the analysis of excavations with undisturbed stratigraphies and large numbers of finds, as is often the case in urban archaeology or the excavation of tell-type settlements, for example, it is usually possible to make accurate assessments of the site's chronological development or the activities carried out there if the analysis of the find material is based only on assemblages recovered in the vicinity of vertical sections in the centre of the site (Figure 7.6).

If, on the other hand, the questions to be answered go beyond the main economy and chronology and, for example, an attempt is made to reconstruct the cultural contacts of the site's inhabitants, the amount of material to be analysed will probably need to be greatly increased in order to identify the 'foreign goods' that are particularly relevant to such questions. Indeed, it may only be possible to extract the information contained in the finds and required to answer the questions in the necessary detail after a complete examination of all the material.

Conclusion and implications

In future, the close links between archaeology and the many scientific disciplines also investigating archaeological questions should be used not only to reinforce common interpretations of the results but at

Figure 7.5: Excavation and sampling of iron slags and other handcraft remains at the late Roman Iron Age site of Joldelund, North Frisia (Photograph: © Hauke Jöns).

Figure 7.6: Since the beginning of big scale "industrial" excavations of continuous inhabited settlements such as the Terp Feddersen Wierde (Germany) in the 1950s archaeology is confronted with masses of findings (Photograph: © NIhK).

the same time to provide a forum for discussing their respective premises and methods. Especially in the academic analysis of large quantities of finds, it could prove very beneficial to adopt well-established scientific sampling and analysis strategies. When answering many cultural history questions, it may suffice to analyse in detail just a sample of all the available material. It is very important here to record the progress of the analysis, as is the case in the empirical, experimental methods anchored in the natural sciences, since this permits both the production of interim results and successive adjustments to the size of the sample.

The need to excavate and record all the archaeological sites that are endangered by construction work would not be affected if the approach presented here were adopted. This is because, once the site is destroyed, future generations of researchers must always be able to investigate all the questions that interest them. Consequently, a sample-based excavation is not an alternative to a full excavation of the threatened areas. In future, in the interests of closer cooperation between archaeological research and teaching, archaeological heritage protection and related scientific disciplines, even greater numbers of samples should be systematically taken for scientific analysis. Such analyses not only yield important information about economic organisation and the level of technical skill and technology; they can also reveal information that is critical to understanding the genesis of the archaeological record. The representative recovery and examination of botanical macro remains, and the taking of soil samples to analyse grain size and geochemical composition, should be as much a standard procedure in archaeological excavations as the recovery of the animal bones, pottery sherds and metal objects found in the same layers. These layers and their characteristic components are also part of our cultural heritage and they contain large quantities of information. Like traditional archaeological find material, they are covered by the Valletta Treaty and by the heritage-protection laws in almost all European countries. At present, however, they are often neglected during

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References

Aitchison, K. 2010: Discovering the Archaeologists of Europe. *Archäologisches Nachrichtenblatt* 15, 103–110.

Assendorp, J.J., Haßmann, H. & Wulf, W. 2012: Pipeline in die Vergangenheit – Archäologie an der Nordeuropäischen Erdgasleitung NEL. *Berichte zur Denkmalpflege in Niedersachsen* 32 (1), 2–7.

Bazelmans, J.G.A. 2006: To what end? For what purpose? The national archaeological research agenda (NOAA) and quality management in Dutch Archaeology. *Berichten van de Rijksdienst voor het Oudheidkundig* 46, 53–68.

Benecke, N. 1994: *Archäozoologische Studien zur Entwicklung der Haustierhaltung in Mitteleuropa und Südskandinavien von den Anfängen bis zum ausgehenden Mittelalter.* Schriften zur Ur- und Frühgeschichte 46, Berlin 1994.

Bloemers, J.H.F 2005: Die Umsetzung der Konvention von Valetta in den Niederlanden: Anregungen zur Neukonzeptualisierung von Forschung, Denkmalpflege und Lehre. *Archäologisches Nachrichtenblatt* 10, 199–210.

Bloemers, J.H.F., Kars, H., Valk, A. van der & Wijnen, M. (eds) 2010: *The cultural landscape & heritage paradox: protection and development of the Dutch archaeological-historical landscape and its European dimension*. Amsterdam.

Cherry, J.F., Gamble, C., & Shennan, S. (eds) 1978: *Sampling in Contemporary British Archaeology*. BAR, Brit. Ser. 50, Oxford.

Demoule, J-P. 2007: Scientific quality control and the general organisation of French archaeology, in

W. J. H. Willems & M. H. van den Dries (eds): *Quality Management in Archaeology*, Oxbow Books Limited, Oxford, 135–147.

Ethelberg, L. & Madsen, S. 2010: Bodendenkmalpflege in Dänemark. *Archäologisches Nachrichtenblatt* 15, 135–149.

Giraud, J.P., 2010: Organisation et Structure d'Archaeologie Française. *Archäologisches Nachrichtenblatt* 15, 150–162.

Haßmann, H., Heintges, T., Rasink, B., Winghart. S. & Wulf, F.-W. 2012: Der bronzezeitliche Hortfund von Gessel, Stadt Syke, Landkreis Diepholz. *Berichte zur Denkmalpflege in Niedersachsen* 32 (1), 23–28.

Hartz, S. 1999: *Die Steinartefakte des endmesolithischen Fundplatzes Grube-Rosenhof. Studien an Flintinventaren aus der Zeit der Neolithisierung in Schleswig-Holstein und Südskandinavien*. Untersuchungen und Materialien zur Steinzeit in Schleswig-Holstein 2, Neumünster.

Hunter, J. & Ralston, I. 2006: The structure of British archaeology, in J. Hunter & I. Ralston (eds): *Archaeological Resource Management in the UK. An Introduction*, Sutton Publishing, Phoenix Mill, 37–55.

Jacomet, S. & Kreuz, A. 1999: *Archäobotanik: Aufgaben, Methoden und Ergebnisse vegetations- und agrargeschichtlicher Forschung*. Ulmer, Stuttgart.

Jöns, H. & Siegmund, F. 2005: Workshop 3 Archäologisches Wissen und Wissensmanagement. Materialzuwachs = Erkenntniszuwachs? *Archäologisches Nachrichtenblatt* 10, 130–133.

Jöns, H. 2013: Von den Naturwissenschaften lernen? Überlegungen zu Beprobungs· und Untersuchungsstrategien in der archäologischen Siedlungsforschung, in S. Brather & D. L. Krausse (ed): *Fundmassen - Innovative Strategien zur Auswertung frühmittelalterlicher Quellenbestände*. Materialhefte zur Archäologie in Baden-Württemberg 97, Darmstadt, 65–73.

Kaute, P., Schindler, G. & Lübke, H. 2004: Der endmesolithisch/frühneolithische Fundplatz Stralsund-Mischwasserspeicher - Zeugnisse früher Bootsbautechnologie an der Ostseeküste Mecklenburg-Vorpommerns. *Bodendenkmalpflege in Mecklenburg-Vorpommern Jahrbuch* 52, 243–255.

Klooß, S. 2005: Der Fischzaun aus der römischen Kaiserzeit von Greifswald-Museumshafen und vergleichbare Befunde. *Bodendenkmalpflege in Mecklenburg-Vorpommern Jahrbuch* 53, 75–80.

Krausse, D. & Nübold, C. 2010: Die deutsche DISCO-Studie. Daten, Ergebnisse, Folgerungen. *Archäologisches Nachrichtenblatt* 15, 162–180.

Lübke, H. 2000: *Die steinzeitlichen Fundplätze Bebensee LA 26 und LA 76, Kreis Segeberg. Die Steinartefakte. Technologisch-ergologische Studien zum Nordischen Frühneolithikum*. Untersuchungen und Materialien zur Steinzeit in Schleswig-Holstein 3, Neumünster.

Lodowici, B. & Haßmann, H. 2013: *Im goldenen Schnitt. Niedersachsens längste Ausgrabung*. Michael Imhof Verlag, Petersberg.

Lüth, F. & Schmidt, J.-P. 2005: Die Ostseeautobahn A20 - archäologisch betrachtet – Geschichte der Untersuchungen und Vorgehensweise, in U. M. Meier (ed): *Die Autobahn A20 – Norddeutschlands längste Ausgrabung. Archäologie in Mecklenburg-Vorpommern* 4, Schwerin, 17–20.

Mischka, C. 2014: *Der bandkeramische Fundplatz Inden-Altdorf D*, in L. C. K. Heller, M. Ismail-Weber & C. Mischka (eds): *Die Bandkeramik im Altdorfer Tälchen bei Inden*. Rheinische Ausgrabungen 69, Bonn.

Müller, U. & Sommer, S. 2005: Workshop 2: Schrumpfende Ressourcen: Auswirkungen auf Bereiche wie Aufgabenerledigung, Qualitätssicherung oder Perspektiven für den Nachwuchs. *Archäologisches Nachrichtenblatt* 10, 128–129.

Orton, C. 2000: *Sampling in Archaeology*. Cambridge Manuals in Archaeology, Cambridge.

Peres, T.M. 2010: Methodological Issues in Zooarchaeology, in A. M. van Derwarker & T. M. Peres (eds): *Integrating Zooarchaeology and Paleoethnobotany: A Consideration of Issues, Methods and Cases*. Springer, New York, 15–36.

Reichstein, H. 1984: Haustiere, in G. Kossack, K.-E. Behre & P. Schmid (eds): *Archäologische und naturwissenschaftliche Untersuchungen an ländlichen und frühstädtischen Siedlungen im deutschen Küstengebiet vom 5. Jahrhundert v. Chr. bis zum 11. Jahrhundert n. Chr., Band 1: Ländliche Siedlungen*, Acta Humaniora, Weinheim, 277–283.

Reitz, E.J. & Wing, E. 1999: *Zooarchaeology*. Cambridge Manuals in Archaeology, Cambridge.

Schmölcke, U. 2013: Once more: Sample size estimation in archaeozoology. *Offa* 69/70, 239–247.

Shennan, S. 1988: *Quantifying Archaeology*. Edinburgh University Press, Edinburgh.

Sommer, S. 2009: Schwerpunktbildung oder flächendeckender Ansatz in der Bodendenkmalpflege (k)ein Widerspruch?, in J. Biel, J. Heiligmann & D. Krausse (eds): *Landesarchäologie – Festschrift für Dieter Planck zum 65. Geburtstag*, Stuttgart, 695–706.

Statistisches Bundesamt 2011: *Statistisches Bundesamt, Land- und Forstwirtschaft, Fischerei. Bodenfläche nach Art der tatsächlichen Nutzung 2010*. Fachserie 3 Reihe 5.1, Wiesbaden.

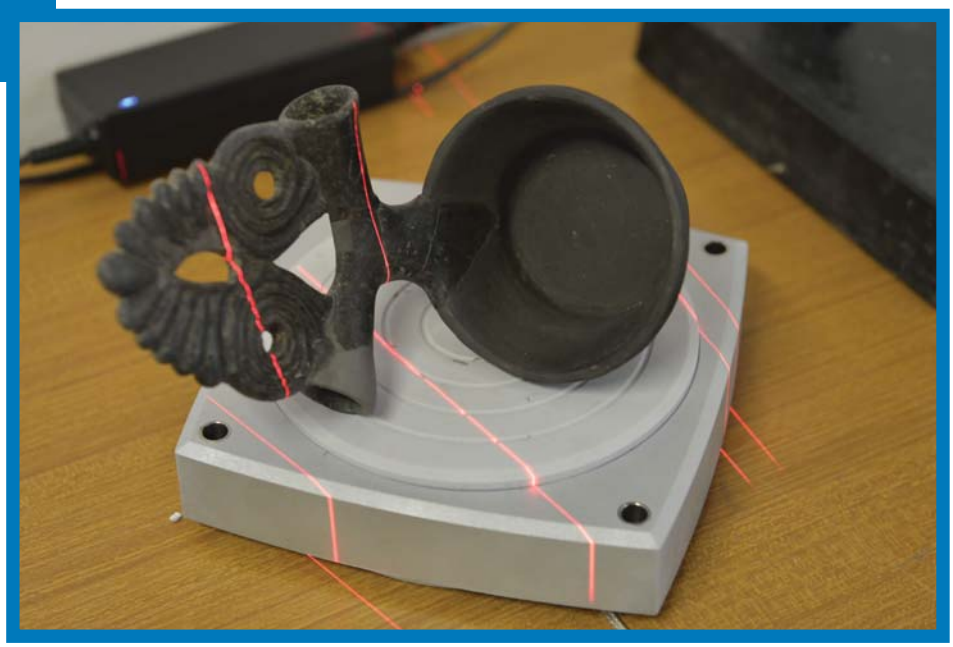
Willems, W.J.H. 2008: Archaeological resource management and preservation, in H. Kars & R.M. van Heeringen (eds): *Preserving archaeological remains in situ: proceedings of the 3rd conference 7–9 December 2006, Amsterdam*, Geoarchaeological and Bioarchaeological Studies 10, Amsterdam, 283–289.

Willems, W.J.H. & Dries, M.H. van den (eds) 2007: *Quality Management in Archaeology*. Oxbow Books Limited, Oxford.

Websites

Link 1: http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=143&CM=1&CL=GER.

Managing the sources of European history



Making a 3D scan of an Etruscan artefact found near Prato, Italy. Emerging digital technologies offer a host of opportunities for the effective management of new and existing data.

8 | Digital archaeological archives of Europe: opportunities and challenges

Franco Niccolucci

Abstract: Computer use in archaeology has produced a large number of datasets containing information about excavations, artefacts and sites. Most were developed independently of each other, with diverse data structures and organised in accordance with the specific needs of data collection. The resulting fragmentation seriously hampers the possibility of re-using data or having an overall view across administrative borders or language barriers. ARIADNE is an EU-funded integrated infrastructure project, aimed at creating a pan-European network of archaeological datasets. Standardisation of data structures, dataset integration and interoperability are the project's primary objectives, as well as developing a toolset to search the knowledge base, discover resources, access data and visualise them effectively. The project's user-centred approach fosters the commitment of the archaeological research community.

Keywords: digital archaeological archives, European Research Infrastructures, Open Access, ARIADNE, DARIAH

Introduction

Research in the humanities and archaeology has traditionally been highly fragmented and individualistic, and this approach is reflected in the way computing was originally introduced into archaeological research. Until fairly recently computers were considered by some archaeologists as the equivalent of 'household appliances' (see e.g. D'Andrea & Niccolucci 2001 for a criticism of this then widespread attitude). Archaeological datasets grew independently of each other, often designed to serve a single research study. At the end of the 20th century, only a minority of the archaeological research community believed that using computer technology to organise archaeological evidence and to manage the resulting information was valuable scientific work. For this group, the annual CAA (Computer Applications in Archaeology) conferences were a venue for discussions with their peers and for feedback on their work, which usually went under-appreciated in the academic world outside. As recently as ten years ago, archaeological computing was still an obstacle to making one's career. According to a British researcher reporting on the situation in the UK in 2004 (Killbride 2006, 159–60), 'anyone caught doing […] applied computing is likely to be side-lined or dismissed in order to enhance an institutional response to RAE' (RAE is the Research Assessment Exercise that evaluated teams and academic institutions in the UK). With some notable exceptions, including the Italian Journal *Archeologia e Calcolatori* founded in the 1990s by a small group of distinguished and far-sighted archaeologists, the situation was no better anywhere else. At best, the use of ICT applications in archaeology mirrors the description of how scientific tools are used (Pollard & Bray 2007) – like a drunkard uses a lamppost, for support rather than illumination. The most frequent response to this situation was a do-it-yourself approach. Geographic Information Systems (GIS) quickly found their way into archaeology because they could rapidly and effectively relate data to space and because the tools used to create them were available off-the-shelf and could be easily customised. Nevertheless, they met with initial opposition, as documented in the debate reported in two books (Lock & Stančič 1995; Lock 2000). Databases were a little more difficult to create, but again, readily available software such as Microsoft Access or Filemaker facilitated this pioneering use on personal computers. Naivety and the lack of a technical background often led to inefficient and at times incorrect data organisation, creating a situation nicely depicted once again in Pollard and Bray's parody of 'the blind leading the blind' (Pollard & Bray 2007, 254). On the other hand, such an uncritical re-use of a technology developed for different purposes sometimes produced distortions (D'Andrea & Niccolucci 2001).

Even in the best cases, despite a growth in computer use, the individualistic (and necessarily self-managed) attitude created a myriad of individual datasets with little standardisation, let alone integration. Standardisation, on the other hand, was imposed from above, with national organisations in charge of heritage protection and management facing the challenge of setting up an overarching documentation system that encompassed large regions and sometimes entire countries. This was the case in Italy, for example, where the national Ministry of Cultural Activities and Assets (MIBAC, recently changed to MIBACT with the addition of tourism) started to experiment in the late 1980s with a national computerised documentation system for archaeology, encompassing artefacts, monuments and sites. This system built on the experience of the Central Cataloguing and Documentation Institute (ICCD), which was set up in 1969, before the Ministry itself was established (1975). Well-documented and scientifically

sound record forms were created with the support of distinguished archaeologists and the competent ICCD team and computer operations were contracted to large, experienced IT companies. The system has been continuously improved and updated in various versions up to the present, with a web version currently in progress, but the system's potential was never fully exploited.

This was due in part to the diffidence of many archaeology researchers, who perceived record standardisation as being imposed from above, unsuited to their research interests and just another example of bureaucratic time wasting. It was also due to the absurd levels of confidentiality that inhibited access to the system beyond any reasonable security concerns, with the ridiculous excuse that 'site location must not be disclosed, even in aggregate form, to avoid favouring illegal excavations', an argument still popular until recently (for a discussion, see e.g. Brienza 2012, 501. Anichini 2013 reports a survey among Italian archaeologists in which 39% of participants stated concerns about data openness, some 40% of whom because it could put heritage at risk). In sum, the reason for the system's inefficiency was the incompetence of many: some archaeologists who did not care and were proudly ignorant about the subject, and some technicians who knew their job but knew nothing about archaeology and its needs, and were 'parachuted' into the task, to use another clever metaphor from Pollard & Bray (2007). Furthermore, the education system's lack of support for a new generation of computer-savvy archaeologists resulted in failure. Imposing standards from above, and at the other end dismissing the role of standardisation as a key to sharing information, or considering it a nuisance, led to so many individual adjustments and 'minor' adaptations that the standard was often completely distorted. It became yet another battleground in the fight for supremacy between academic researchers and heritage managers. This situation is an example of how not to implement standardisation and digitisation: based on a top-down approach, without the necessary community consensus and with implementation left in the hands of technicians.

In the library domain, and in general wherever texts are the subject of investigation, data organisation soon showed its potential for searching and text analysis, both of which rely on digitised texts and a pre-existing, well-ordered approach. This led to the early adoption of computerised methods and to standardisation, paving the way for modern universal digital libraries and the digital analysis of texts based on encoding. Where the object of study was something tangible, however, as in archaeology, scientific methods and techniques were adopted in an ancillary role and often, as already noted, with a do-it-yourself approach. Computers entered archaeology via text descriptions of records, and, of much less importance, in order to manage the outcomes of scientific analyses, generally incorporated in the investigation results only through a concise descriptive report or simply as a dissemination tool based on sparkling pretty pictures. Due to these disparate starting points, even when aggregation and coordination proved indispensable and data sharing became a necessity rather than an option, solutions to needs common to archaeology and humanities started branching off in different directions. As noted in Ore & Eide (2009, 162), the approach of archaeologists to text used as a source differs from the philological one of scholars in digital humanities and from the one adopted in linguistic studies: what archaeologists need depends on content rather than on how this is presented. This led to a bifurcation in documentation standards that still needs to be reconciled.

In some countries (such as the UK), where awareness of the importance of digital documentation was greater than elsewhere, national 'archives' were created in a bottom-up fashion, the most famous and oldest service being the ADS (Archaeological Data Service) at the University of York, led by Prof. Julian Richards since its inception in 1996. With due credit to the quality of the work of Prof. Richards and his team, and their visionary faith in their objective, the enduring success of the ADS is also due to the constant encouragement it has received from the British community in terms of funding and support from both academic researchers and institutional heritage agencies. As Jeremy Huggett noted (Huggett 2006), a similar initiative in the US ended in 2002 for lack of funds and a provision of content insufficient to create a critical mass of data.

It must be underlined that success stories such as the ADS are not isolated cases in the archaeological research framework. There have indeed been many valuable initiatives regarding 'digital archaeology'. Many other UK universities have extensive programmes for digital archaeology in research and, perhaps more importantly, on training in related matters. In Germany, it has been several years since DAI established IT as one of the pillars of its internationally acknowledged work in the archaeological domain. The experience of the already mentioned journal *Archeologia e Calcolatori* stands out on the otherwise conservative Italian landscape, with its international reputation possibly constrained by the misapprehension that it is solely a national publication. In Romania, the spending review that led to the unfortunate closure of CIMEC ended an initiative that had produced results well ahead of many other European countries. In the Netherlands, DANS has developed a large archive of datasets following the example of the ADS, collecting and storing the important outcomes of emergency excavations. This was paralleled by the attention paid to related educational aspects by several Dutch universities, first of all the Faculty of Archaeology at Leiden. These are just a few of the many initiatives that have taken and continue to take place at an increasing pace; for space reasons they cannot be listed exhaustively here. The snapshot of the 2004–2005 situation (Niccolucci, Geser & Varricchio 2006) would indeed need updating.

The European Union has done much to overcome these unfavourable conditions. Support for initiatives such as the EPOCH project (2004–2008) brought together archaeologists and computer scientists to work on themes of common interest. Under the farsighted leadership of computer scientist Prof. David Arnold of the University of Brighton, with three other directors, none of whom were archaeologists, EPOCH

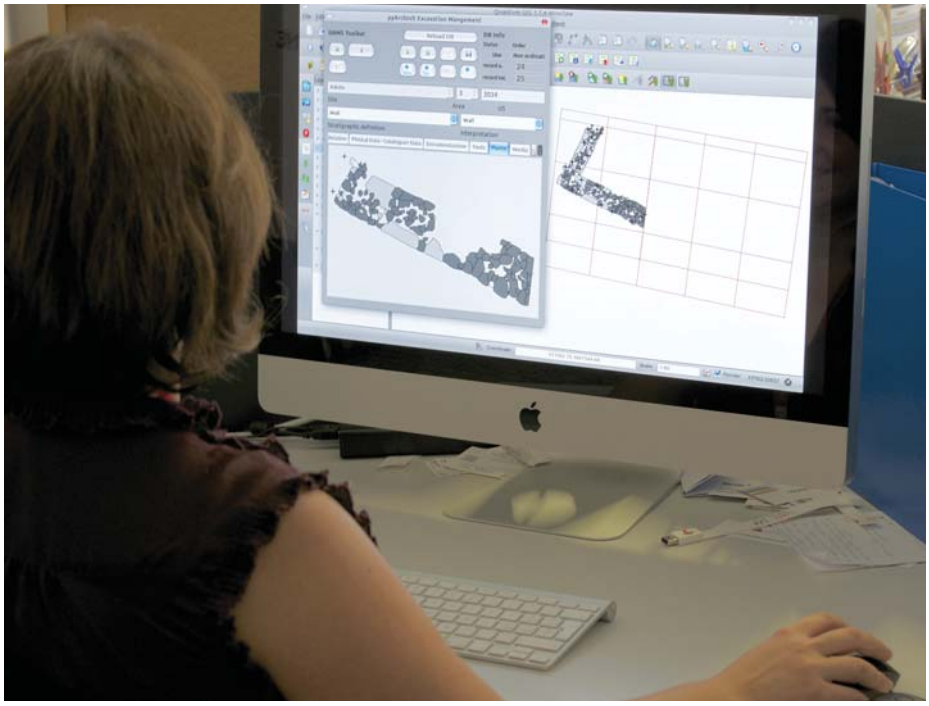


Figure 8.1: Archaeological research is increasingly dependent on computer-based archives, such as the GIS displayed here on the monitor.

brought academic and heritage institutions together in a network of some 100 members. The aim was to overcome both the ancillary view of technology, typical of some archaeological circles, and the utilitarian view of archaeology, common among computer scientists, as just another fertile terrain to exploit for applications. Although focusing on visualisation, EPOCH established some general principles to guarantee that the use of computers in archaeology would respect cultural principles and not just computer efficiency. Among other things, it gave birth to the London Charter for the Computer-based Visualisation of Cultural Heritage in 2006. Above all, EPOCH established a common ground and a common language, and helped to create an interdisciplinary research community of archaeologists and computer scientists.

The current relative abundance of archaeological digital data suggests a need for a debate on their accessibility. This is in line with a move towards open access to scientific data, begun by the 2003 Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities, which followed previous initiatives such as the Budapest Open Access Initiative (BOAI) of 2001. The Berlin Declaration advocates free access to scientific published work, such as original scientific research results, raw data and metadata, sources, digital representations of pictorial and graphic materials, and scholarly multimedia material. It also fosters the deposition of such works in repositories providing access, distribution, interoperability and long-term preservation. As of 1 August 2014, there were 489 signatories, the latest from countries as diverse as Sri Lanka, Nepal and Papua New Guinea – but none from the UK, where the debate on open access is torn between the easier 'Green' open access (involving an embargo period before the publication is released by the publisher) and the frequent REFs (formerly RAEs), for which a timely but expensive 'Gold' open access (with release paid by authors or their institutions and recommended by the Finch report, www.researchinfonet.org/publish/finch) is preferred (see Wickham 2013 for a discussion on this topic). Purely archaeological signatories include DAI and major non-UK universities, which have also committed their archaeological departments. The re-use potential of openly accessible datasets poses a number of problems such as long-term preservation, data quality, ease of access and intellectual property management, which are rather new for the archaeological community and are capturing the interest of its most attentive members.

At present, archaeological datasets are being widely used and created throughout Europe. Although it is still common practice to have individual research datasets, as is logical, there is growing interest in coordinating and integrating these datasets into an overarching eco-system. This approach clearly does not imply the creation of an archaeological 'Big Brother' incorporating all existing digital archives. Instead, it advocates the establishment of common basic principles enabling some degree of interoperability. Standardising data structure is now being viewed as a value, even if no actual integration is planned in the short term. This will eventually create a network of distributed facilities, resources and services configuring what the European strategies call a Research Infrastructure (RI). The term is borrowed from other disciplines, where a research infrastructure (or 'cyberinfrastructure' in the US) consists of laboratories, equipment, people and services linked together to form a whole organism. The digital component is an essential factor. In many domains, such as DNA studies, research *in silico* is becoming increasingly important, sharing the stage with more traditional laboratory environments. *In silico* is a term widely used in computational biology to mean 'performed via computer simulation'. It was coined by analogy with *in situ*, *in vitro,* etc., referring to silicon

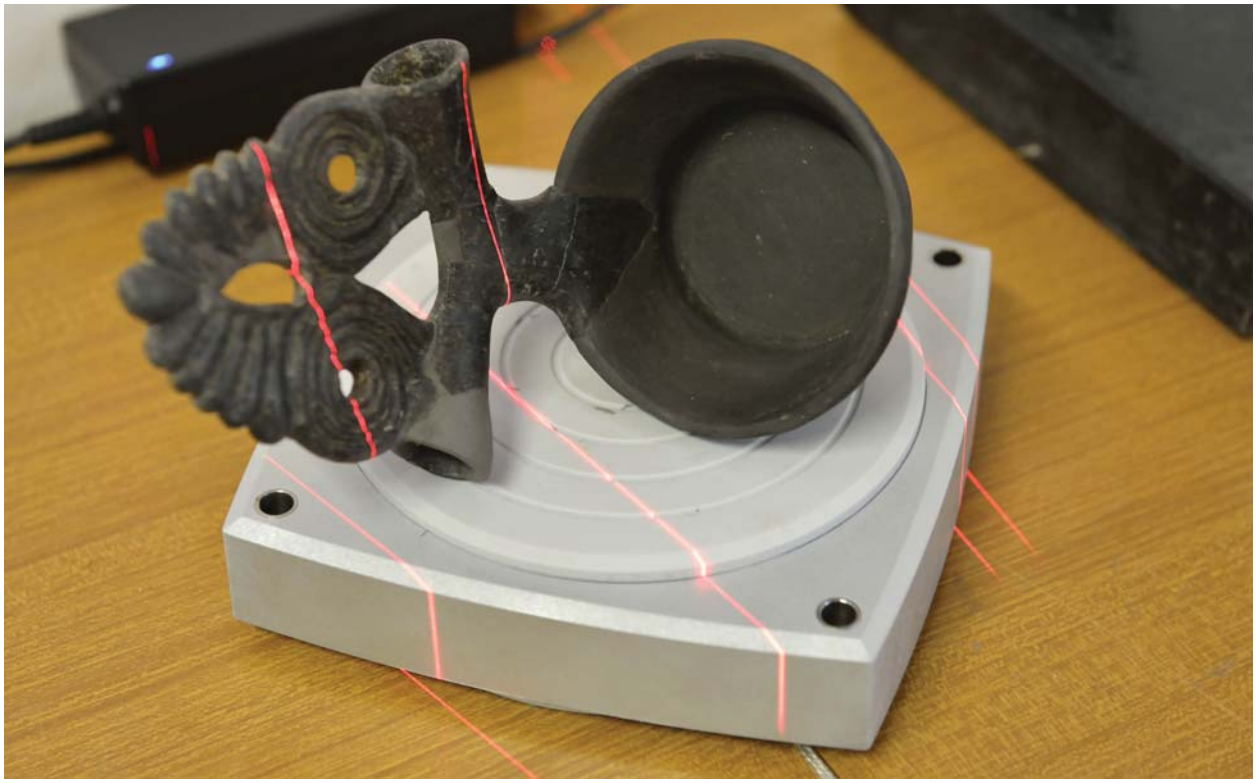


Figure 8.2: Scanning an Etruscan artefact found at the Gonfienti site, near Prato, Italy. 3D scans are quickly expanding the need for archaeological storage.

(Latin *silicium*), the main component of semiconductors used in computers.

As regards archaeology, the full integration of digital methods into traditional methodology will probably take place in two stages. The first is the creation of an integrated system of datasets. This should be followed by the development of a complete virtual research environment, possibly overlapping with similar systems developed for digital humanities (e.g. history) and with systems created for heritage sciences. Indeed, archaeology shares methods, techniques and data with both these disciplinary areas. The second stage is yet to come (although it is probably not too far away), but the ARIADNE project marks the start of the first stage.

ARIADNE: integrating archaeological datasets throughout Europe

The need to bring together and integrate archaeological research datasets was evidenced, somewhat unexpectedly, by the European Commission in 2012 in the last FP7 Research Infrastructures Call. Archaeology made its appearance here for the first time alongside 'hard' science topics. The European Commission thereby acknowledged the importance of archaeological data as a scientific infrastructure and supported the creation of an integrated infrastructure at European level. The call included some 30 research topics, ranging from the marine environment to astrophysics, competing with each other to secure funding. Only a handful of projects were eventually selected across all the topics.

A naïve understanding of the term 'integration' might lead one to question the point of integrating datasets on, say, Iron Age burials in Norway and Phoenician settlements in Spain. This may well be true for this rather extreme example. Integration in fact means aligning data that are 'compatible' i.e. for which comparisons are significant. It also means collecting information about *all* datasets and creating an intelligent directory including information about their content, their metadata and, last but not least, about how to access them. In other words, first-level integration means enabling discovery. Many archaeological datasets span different periods, domains and regions; more are created as a result of the increasing use of computer technology in archaeological research. They are the accumulated outcome of the work of individuals, teams and institutions and are generated by both research and administrative and management activities. However, this wealth of data makes up a vast and fragmented corpus and its potential is limited by difficulty of access and use. In conclusion, the first step in integration means intelligent cataloguing, the comparison and interrelating of metadata, and enabling access under the same conditions and with the same technological 'look and feel'.

ARIADNE's goal is precisely the latter: to turn these fragmented resources into a user-centred, pan-European integrated network, a Research Infrastructure with harmonised access, inspired by the research needs of a large community of users. It is funded for four years as of February 2013 under the EU FP7 Research Infrastructures Programme. The partnership comprises 23 European institutions, including heritage agencies

and organisations, universities and research institutions, and specialist digital archives. It brings together well-known academic and research institutions, such as the University of York, Leiden University, CNR (the Italian National Research Council), CSIC (the Spanish National Research Council) and FORTH (the Greek research centre based in Crete); the archaeological departments of the Academies of Sciences of Austria, Bulgaria, the Czech Republic, the Netherlands and Slovenia; DAI, the German Archaeological Institute; institutions such as INRAP (the French national institute for preventive archaeology) and MIBACT (the Italian Ministry for Cultural Activities, Heritage and Tourism); and other research centres with expertise in archaeology or IT. The project is led by PIN, a research centre established as a separate agency by the University of Florence, which over the years has accumulated substantial expertise in the use of IT for cultural heritage, through involvement – often as the leader – in a number of large European projects. ARIADNE has attracted the interest of other national archaeological institutions, now associated with the project, from Denmark, Israel, Norway, Portugal and Spain.

ARIADNE aims to enable the comparison, re-use and integration into current research of the outcomes of past and ongoing field and laboratory activity. Such data are scattered across diverse collections, datasets, inaccessible and unpublished fieldwork reports ('grey literature') and publications, the latter still being the main source of knowledge sharing. Thus ARIADNE will foster the full exploitation of IT in archaeology and its definitive incorporation into the body of established archaeological research methodology.

According to the preliminary results of a survey conducted among ARIADNE partners, they together own some four million records, organised in databases and other structured datasets, accounting for just over 50% of the total. Collections (hierarchical sets of diverse records such as documents, images, drawings) make up about 10% of the total number of datasets. They are typically arranged by location. For example, all the information concerning a site (i.e. excavation reports, photos and drawings) is stored in a folder; all such folders pertaining to a province are put together in another folder, etc. Geographical Information Systems account for 15% of the total. The remainder are made up of sparse and non-homogenous file assemblages. The above percentages relate to the number of datasets, not their content, which may vary considerably from several hundred records to several hundred thousand.

If this situation is not complicated enough, one should also bear in mind that more than twenty-three different languages are used in this substantial but not exhaustive section of the European archaeological dataset framework. Furthermore, data organisation is highly diverse: ten different international standards are used by the major eight data providers, as well as several proprietary standards.

In an attempt to rationalise this extremely fragmented situation, ARIADNE has undertaken to create a registry to store the information about datasets. This information is organised in accordance with a novel schema based on international standards, called the ARIADNE Catalogue Data Model (ACDM), which is compatible with the way data about datasets are usually organised and adds some detailed information useful for the specific case of archaeological datasets. The ARIADNE Registry has been populated by project partners and is designed to be extended to incorporate, on a voluntary basis, any other archaeological datasets. When completed, it will provide a one-stop shop to access information about what is available and where. Of course, the usefulness of such a registry depends on the mass of information it stores, but the ARIADNE partners alone provide enough information about archaeological datasets to start the cataloguing process with a critical mass.

In addition to the Registry, ARIADNE will create a number of services that operate on datasets as a whole or on the data each one of them contains. Services include search mechanisms to discover in the Registry which resources store data referring to a particular kind of information, and to browse the whole catalogue in accordance with specific search criteria. Data-oriented services relate to the content of a specific dataset and enable operations on that dataset: they include visualisation, annotation, etc. By and large, these services will be created by re-using already available ones. We envisage the project objective as the creation of a portal of archaeological resources where scholars may access the information about datasets registered there, choose the one they are interested in and access it, using tools to facilitate the analysis and synthesis of the data stored there. Particularly important is the availability of 'grey' literature, usually difficult to access, on which Natural Language Processing (NLP) techniques will be experimentally tested. NLP is a set of computer techniques to process texts written by humans in their natural language to index and enable automatic knowledge extraction. For ARIADNE, NLP will involve processing archaeological texts (such as archaeological reports), to index them and enable intelligent searches based on meaning, not just wording, as happens in pure text searches.

Up-to-date information on ARIADNE plans, current activities, events and community participation is published on the project website.

ARIADNE activities

ARIADNE research focuses on a few specific aspects: community building, standardisation, integration, services, methods, and assistance with data maintenance and storage.

Community building is the project starting point. In a user-centred approach, a continuous relationship with archaeological research is a requirement for developing the data and services network. Such activities develop in the usual ways: through the creation of special interest groups, workshops and symposia, and training opportunities in the most relevant and innovative project activities. All these initiatives are open to participation from all interested parties, irrespective of whether they belong to the project consortium.

Requirements for implementing the project tools are based on suggestions from the community.

The approach to standardisation includes identifying reference works, such as thesauri, gazetteers and authority lists; their normalisation, for example with SKOS (Simple Knowledge Organization System); and an attempt to establish multilingual correspondences. So far the project has collected several that are used in different countries, including ones used by ICCD in Italy for archaeological artefacts and remains (monolingual); PACTOLS, the multilingual thesaurus created by FRANTIQ, a unit of the French CNRS (available in French, English, Italian, Spanish, Dutch and Arabic); and the thesauri (in English) managed by English Heritage in the UK. As is well known, time periods and locations are critical concepts in archaeology, and the ARIADNE work on these subjects also involves complex methodological aspects. The most important part of ARIADNE standardisation activities involves defining a common documentation standard. ARIADNE has chosen CIDOC-CRM as its standard, after reviewing issues emerging from earlier attempts to extend CRM's use to excavation activities. The work in this area will eventually lead to CRMarcheo, a version of CRM covering all aspects of archaeological activity. A preliminary version is now under development, with the final version scheduled for the end of year 3, in early 2016. Another aspect of the documentation work concerns legacy archives, which will involve mapping to the project standard. This requires a detailed study of pre-existing standards and identifying concepts and relationships present in the legacy documentation schemas with those in the project standard. This work is already underway and has produced preliminary results with the ICCD archives. It will be progressively extended to all the documentation systems considered by the project and to all related datasets.

As already noted, integration and interoperability are very broad concepts. An objective that can be attained during the project's lifetime is the resource discovery mentioned above, i.e. the possibility of identifying data resources in the project portfolio. This will be enabled through the project portal and will rely on the ARIADNE Registry as the information database. The Registry will be searchable to list the resources corresponding to a given search pattern, or directly browsable. The project does not exclude deeper integration of datasets and a higher level of interoperability beyond the mapping of data schemas, but so far both are seen as mid- to long-term objectives, probably the result of work extending beyond the project's life.

Services operating on project data, still under design, include searching and presenting data simply and in a synthesising manner. The services to be implemented will initially include ones relying on existing software, such as the visualisation of 3D models and a data annotation tool, adapted to the project context.

Research on innovative methodologies includes the Linked Data Framework. This will rely on the thesauri collected and selected by the project and will create the tools to enable ARIADNE data providers to publish their datasets in accordance with this framework, in order to create a Linked Data Cloud of richly interlinked datasets. For example, two datasets containing the name 'Julius Caesar' could be interlinked through reference to a common name list accepted by ARIADNE or created/adapted and maintained by the project. Other technologies to be experimented with include data mining and natural language processing, to explore datasets, such as excavation reports, where information is mainly organised as text documents with perhaps a very simple structured header and stored, for example using Dublin Core (dublincore.org), the widespread but extremely succinct and generic 15-element metadata schema used to briefly describe digital or physical resources.

Finally, the project will consider and establish guidelines for the entire archaeological data lifecycle, from acquisition to storage, management and long-term preservation. Creating a long-term preservation facility is beyond the project remit, but the project will provide guidance for those partners (or other institutions) willing to create such a service. Issues here are data quality and reliability, documenting the processing and the versions of the data to be stored, and how all this is implemented for long-term preservation. Many of these aspects are unfamiliar to archaeologists, but they become indispensable as soon as data are intended to be stored for the purpose of preservation and possible re-use.

One important aspect of the project work programme is what will happen after 2017, when the project reaches the end of its funding period. The project includes an activity to devise plans addressing this sustainability issue, for which there are different possible solutions. At present the most viable seems to be to make the project activity permanent by establishing or participating in a European research consortium. So far ARIADNE is affiliated to DARIAH, the European ERIC (European Research Infrastructure Consortium) on digital humanities. ERICs are permanent institutions under European law, created in accordance with a roadmap prepared by the ESFRI (European Strategy Forum on Research Infrastructures) committee of high-level experts, which defines priorities and relevant fields in which Europe should support a pan-European research infrastructure. The creation phase of each ERIC is funded by the EU, but thereafter financial support is required from member states. DARIAH is currently supported by 15 member states. It brings together tangible and intangible heritage, digital humanities and digital archaeology, combining the approaches to different research issues. It is debatable whether their commonalities outweigh their differences, and whether this approach is the most effective. Specificity must in any case be balanced by viability, and the idea of an ERIC for archaeology is probably premature, also given the lack of interest among the archaeological research community. However, placing archaeological research in the context of, say, heritage sciences might provide a closer focus on research issues typical of the discipline.

One of the tasks ARIADNE has undertaken is to raise the research community's awareness about the issues it is addressing and the scenarios that might evolve.

ARIADNE will publish a research agenda, called the Innovation Plan, which will set the framework for further discussion on the roadmap that the project and any related action should follow, as well as the challenges to be faced. The community response is encouraging in this regard. Some 100 researchers were contacted for an online survey conducted in early 2014; they were asked to fill out a questionnaire about their views on the priorities to be assigned to different issues relating to ARIADNE activities. Only a small percentage were expected to respond, as is customary with surveys. Surprisingly, however, there were almost 1000 responses, ten times the number of people who were contacted. They had clearly circulated the news about the survey to interested colleagues, who then participated voluntarily. This shows that the number of researchers interested and reacting to these issues is much larger than one might expect. This is indeed a positive note, promising a rosy future for digital archaeology.

Acknowledgements

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References

Anichini, F. 2013: MAPPA survey: gli Open Data nell'archeologia italiana, in F. Anichini, N. Dubbini, F. Fabiani, G. Gattiglia, M.L. Gualandi (eds): *Mappa. Vol.2: Metodologie Applicate alla Predittività del Potenziale Archeologico*, Edizioni Nuova Cultura, Roma, 121–132.

Brienza, E. 2013: Archeologia e beni comuni, in Fondazione Lelio & Lisli Basso – Issoco: *Tempo di beni comuni – Studi multidisciplinari*, Ediesse, Roma, 495–530.

D'Andrea, A. & Niccolucci F. 2001: Informatica archeologica: alcune istruzioni per l'uso. *Archeologia e Calcolatori*. vol. 12, 199–210.

Huggett, J. 2006: Ten Years of ADS. *ADS ONLINE* – Issue 19 – Tenth Anniversary Issue, http://ads.ahds.ac.uk/newsletter/issue19/10yrs.html.

Killbride, W. 2006: Report on the United Kingdom, in F. Niccolucci, G. Geser & T. Varricchio (eds): *Digital Applications for Tangible Cultural Heritage*, Archaeolingua, Budapest, 153–160.

Lock, G. (ed.) 2000: *Beyond the map: archaeology and spatial technologies*. IOS Press, Amsterdam.

Lock, G. & Stančič, Z. (eds) 1995: *Archaeology and Geographic Information Systems: a European perspective*. Taylor & Francis, London.

Niccolucci, F., Geser, G. & Varricchio, T. (eds) 2006: *Digital Applications for Tangible Cultural Heritage*. Archaeolingua, Budapest. (Also available from the EPOCH site mentioned below).

Ore, C-E. & Eide, Ø. 2009: TEI and cultural heritage ontologies: Exchange of information? *Lit Linguist Computing* 24 (2), 161–172.

Pollard, A. M. & Bray, P. 2007: A Bicycle Made for Two? The Integration of Scientific Techniques into Archaeological Interpretation. *Annual Review of Anthropology* 36, 245–59.

Wickham, C. 2013: Open access in the UK and the international environment: the view from Humanities and Social Science, in N. Vincent & C. Wickham (eds): *Debating Open Access*, The British Academy, London, 42–54.

References to project websites mentioned in the paper

ARIADNE: www.ariadne-infrastructure.eu.

ADS: archaeologydataservice.ac.uk.

CAA: caaconference.org.

CIDOC-CRM: www.cidoc-crm.org.

EPOCH: www.epoch.eu.

ESFRI: http://ec.europa.eu/research/infrastructures/index_en.cfm?pg=esfri.

ICCD: http://www.iccd.beniculturali.it/index.php?en/1/home.

Open Access Berlin Declaration: openaccess.mpg.de/Berlin-Declaration.

PACTOLS: http://frantiq.mom.fr/thesaurus-pactols.

The London Charter: www.londoncharter.org.

9 | Discover the submerged prehistory of Europe – Scientific background, aims, methods, outcomes and perspectives of the European SPLASHCOS network

Hauke Jöns

Abstract: During the last 5 years the EU-funded SPLASHCOS network has shed light on the fledgling discipline of 'Continental Shelf Prehistoric Research'. It is based on an interdisciplinary research approach combining archaeological, geophysical, geological, oceanographic and biological methods and requires solid, specially developed technical equipment as well as highly skilled researchers.
Investigations so far have already enormously expanded the available knowledge about prehistoric life, especially the economic conditions and environments that these communities had to face. In many cases the excellent preservation conditions in waterlogged sediments for everyday objects, tools and structures made of organic materials have provided completely new insights into prehistoric life. These remains buried and preserved on the European seafloor should be regarded as an immense archive of human history, of shoreline displacement and of sea-level change.
Accessing and investigating these archives also poses a challenge for future research and will require interdisciplinary cooperation between all active offshore communities and companies. In addition, teams of highly and multi-skilled researchers are needed, with permanent access to the technical equipment and data that are essential for safeguarding, investigating and researching these sites and landscapes, as well as communicating and visualising the results.

Keywords: sea-level change, European Continental Shelf, submerged prehistoric settlement and landscapes, interdisciplinary scientific network

Introduction

During the last one million years six large glaciations dramatically shaped life on Earth. Each one lasted about 125,000 years and they were interspersed with smaller glacial advances and retreats. At their maximum extent, they created ice caps several kilometres thick on the major northern continents. During the last glaciation – the Weichselian, which reached its maximum 20,000 years ago – the Fennoscandian shield, the entire Baltic region and most of the British Isles were permanently covered by ice (Svendsen et al. 2004). The glaciations were accompanied by a strong drop in sea level of about 120 m because the huge volumes of ice on land drew and locked up masses of water from the sea (Flemming et al. 2014). As a consequence, the continental shelf around Europe saw the emergence of new dry land – some 3.2 million km^2, which added 40% to the land area of modern Europe (Figure 9.1; Bailey 2011). To give an example: most of the recent North Sea basin was dry land and the British Isles were directly connected to the continent. These landscapes should be considered as potential past habitats and living spaces for plants, animals and people. Due to the melting of the ice caps following deglaciation, the sea level rose rapidly and continuously and the water flooded first the lowest parts and then successively all the dry areas that today are located on the sea floor.

Before the flooding of these now 'drowned' landscapes, there was a rich vegetation that provided a habitat for a wide range of fauna (summarising Verhart 2005). The environmental conditions that existed there were comparable to those in the areas that are still part of the dry land today. This has been known for generations, especially with regard to the North Sea, where tons of mammal bones and large peat chunks have been dredged up or washed ashore, or caught in fishing nets.

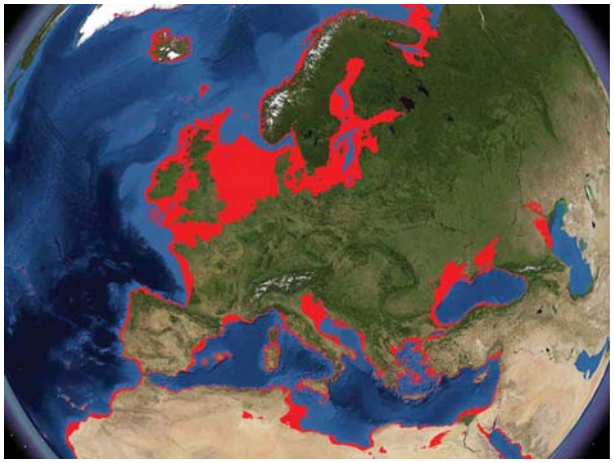

Figure 9.1: The maximum extent of land exposed at the Last Glacial Maximum plotted in red on a satellite image of Europe (after Bailey 2011, fig. 25.3).

At the latest, archaeologists also became aware of this fact when the trawler Colinda caught a Maglemose-type antler in its nets, embedded in a lump of peat, at Leman and Ower Banks northeast of Norfolk in the North Sea (Godwin & Godwin 1933). This find shows beyond doubt that hunter-gatherer communities had also once settled on what is today the sea floor when it still was dry land. The people of these periods faced radical changes in their environment, forcing them to constantly move their settlements further inland and to higher ground. This find also demonstrated the environmental conditions, shaped by a low oxygen supply, which may have led in many cases to exceptional preservation conditions for artefacts and settlement remains made of organic material (Van der Noort 2011, 55–61). This means that the finds and structures lying submerged on the seafloor may have archived key material that will enable us to reconstruct humankind's prehistoric history, the postglacial vegetation and landscape, and the development of climate change (Figure 9.2).

Improvements in diving technology and equipment for amateurs and researchers in the second part of the 20th century also led to an increase in underwater archaeology, which differed according to region (summarising Bowens 2008). Although investigations into ships have traditionally been a special focus, research on submerged settlements and landscapes has also produced spectacular results in some parts of Europe, indicating the high scientific significance of underwater research, especially for the prehistoric parts of our history. The last few decades have seen major steps forward in the development of modern technology, for example, in acoustic seabed survey techniques, data acquisition, data storage and diving technology, thus facilitating scientific access to submerged elements of prehistory (Flemming et al. 2014, 94–115).

This progress is demonstrated clearly in the history of research at the famous site of Pavlopetri, positioned off the coast of southeastern Laconia at the western end of the Bay of Vatika (Greece). The discovery of submerged ruins in 1967 caused a sensation that captured attention across Europe. At that time the research team produced a plan of a prehistoric town at depths ranging from one to four metres, with buildings and streets as well as chamber tombs and cist graves from the Bronze Age.

Figure 9.2: Salvaging a late Neolithic aurochs offering at rising tide in the North Frisian Wadden Sea (photograph: © L. Hermannsen, Archäologisches Landesamt Schleswig-Holstein).

The submerged site was recently resurveyed using modern technology such as side-scan sonar, multibeam echosounder, sector scan sonar, diver-operated photogrammetry and AUV stereo-photography (Mahon et al. 2011). Also conducted were an offshore geological survey with multibeam, subbottom profiler and side-scan sonar as well as geological mapping of the broad region, aimed at understanding the role of vertical tectonics and Holocene sea-level rise in the submergence of the city (summarising Henderson et al. 2011).

This example also shows that access to the submerged part of our common prehistoric heritage is both a scientific opportunity and a technological challenge that calls for the combined knowledge of archaeologists, palaeontologists, oceanographers, marine geologists and climate change experts, as well as a wide range of technical and engineering skills. As lately proposed by Flemming et al. (2014), these interdisciplinary investigations are accurately covered by the term Continental Shelf Prehistoric Research.

Combined with Europe's political and cultural diversity, the very different environmental conditions in the North Sea, Baltic Sea, Mediterranean Sea and Black Sea have led to major differences in the status of Continental Shelf Prehistoric Research in the various European regions and states (Benjamin et al. 2011). While neither submerged prehistoric sites nor landscapes have as yet been located and investigated in some regions, a few countries have well-established traditions of research into sea-level change in prehistory and the adaption of human communities to their changing world (summarising Fischer et al. 2015). In addition, there have been major efforts in some areas of European marine waters to identify and document submerged landscapes that may be excellent starting points for geophysical and archaeological surveys. The University of Birmingham's 'Doggerland' project in the northwestern North Sea is one such example (Gaffney et al. 2007).

The SPLASHCOS network – structure, aims and actions

As the research situation outlined briefly above and the results achieved so far are essentially based on research by a small community of researchers from various disciplines, this suggests that close interdisciplinary and international cooperation may be the key to establishing a sustainable scientific network that can broaden and intensify the research on the submerged part of European prehistory. As a background to this research situation, discussions about research strategies, experiences in fieldwork, technical equipment and exchanging skills and best-practice experiences on the European scale were seen as important goals for the SPLASHCOS ('Submerged Prehistoric Archaeology and

Figure 9.3: Early stage researchers taking part in training on the submerged Mesolithic site of Bouldnor Cliff (UK), organised by the SPLASHCOS project (after Flemming et al. 2014, Fig. 4.11).

Landscapes of the Continental Shelf') network, which was funded by the European Commission from 2009 to 2013 as an 'action' within the COST programme ('Action TD0902'). SPLASHCOS aimed not only to promote research on submerged archaeological remains, on the climate and environment of the submerged landscapes of the continental shelf, but also to improve our knowledge of the location, preservation conditions, investigation methods, interpretation and management of underwater archaeological, geological and palaeo-environmental evidence of prehistoric human activity, in order to create a structure for developing new interdisciplinary and international research collaboration. SPLASHCOS pursued the goal of providing guidance for archaeologists, heritage professionals, scientists, government agencies, commercial organisations, policymakers and a wider public (Link 1).

In keeping with these aims, SPLASHCOS focused on advancing and increasing interdisciplinary discussion and the exchange of best practice. This was organised within numerous meetings, conferences and plenary discussions (Link 2), focusing on key questions such as cooperation with the offshore industry, archaeology and palaeolandscapes, and submerged Holocene Baltic landscapes. Four working groups were also established (Link 3) to analyse archaeological data and interpretations (WG 1), environmental data and reconstructions (WG 2), technology, technical resources and training (WG 3), and commercial collaboration and outreach (WG 4).

Finally, six training schools were organised in Denmark, Estonia, Greece, Israel, Spain and Malta, aimed specifically at early stage researchers (Link 4). Sixty-six PhD students and postdocs were given an opportunity to gain practical experience in underwater excavation, acoustic survey, mapping, recording and conservation, sea-level modelling, and palaeoenvironmental and geochronological analysis of palaeocoastlines (Figure 9.3). In addition, 11 young researchers took the opportunity to visit specialist institutions in Belgium, Denmark, Estonia, Israel, Latvia, Portugal and the United Kingdom, where they were introduced to special technical equipment.

The completion of SPLASHCOS has provided a wealth of detailed information on thousands of known prehistoric sites in the sea, and has put nearly 200 Continental Shelf Prehistoric Research scholars in touch with one another (Flemming et al. 2014). Together they have collected, produced and analysed a large quantity of information that allows us to summarise the current state of research and the challenges to be faced in future. They have also produced a small number of guidelines, data collections and scientific tools that are certain to be helpful for future research. The most important outcomes are described below.

Submerged prehistoric sites in European marine waters in numbers: the SPLASHCOS viewer

Under SPLASHCOS, a database was also created on the Stone Age archaeological record from the sea territory of Europe and neighbouring parts of the eastern Mediterranean. Although not yet completed, the database will enable the first statistical analyses to be made. It is the result of cooperation between many scientists from European and northeast Mediterranean coastal states during the final stage of SPLASHCOS. Called 'SPLASHCOS viewer', this subproject aimed to collect primary and basic data on all underwater Stone Age sites known to the relevant European public museums, universities and government institutions.

The database was initially envisaged as a meta-database to link already existing national or regional databases and facilitate access to datasets that were already digitally reported and stored. But after a short discussion within SPLASHCOS it became obvious that standards for collecting archaeological data vary widely in structure and quality across Europe. There is also enormous variation in the terminology used because the approach to data recording and gathering differs by region and national state. Some countries have a tradition of keeping centralised, nationwide archives on archaeological finds and sites, while in others, the registration of the archaeological record is carried out by regional museums, local heritage authorities, research institutions, private companies or universities. To date, a considerable quantity of data is not digitally available or integrated into databases. Moreover, some countries do not allow full public access to existing databases

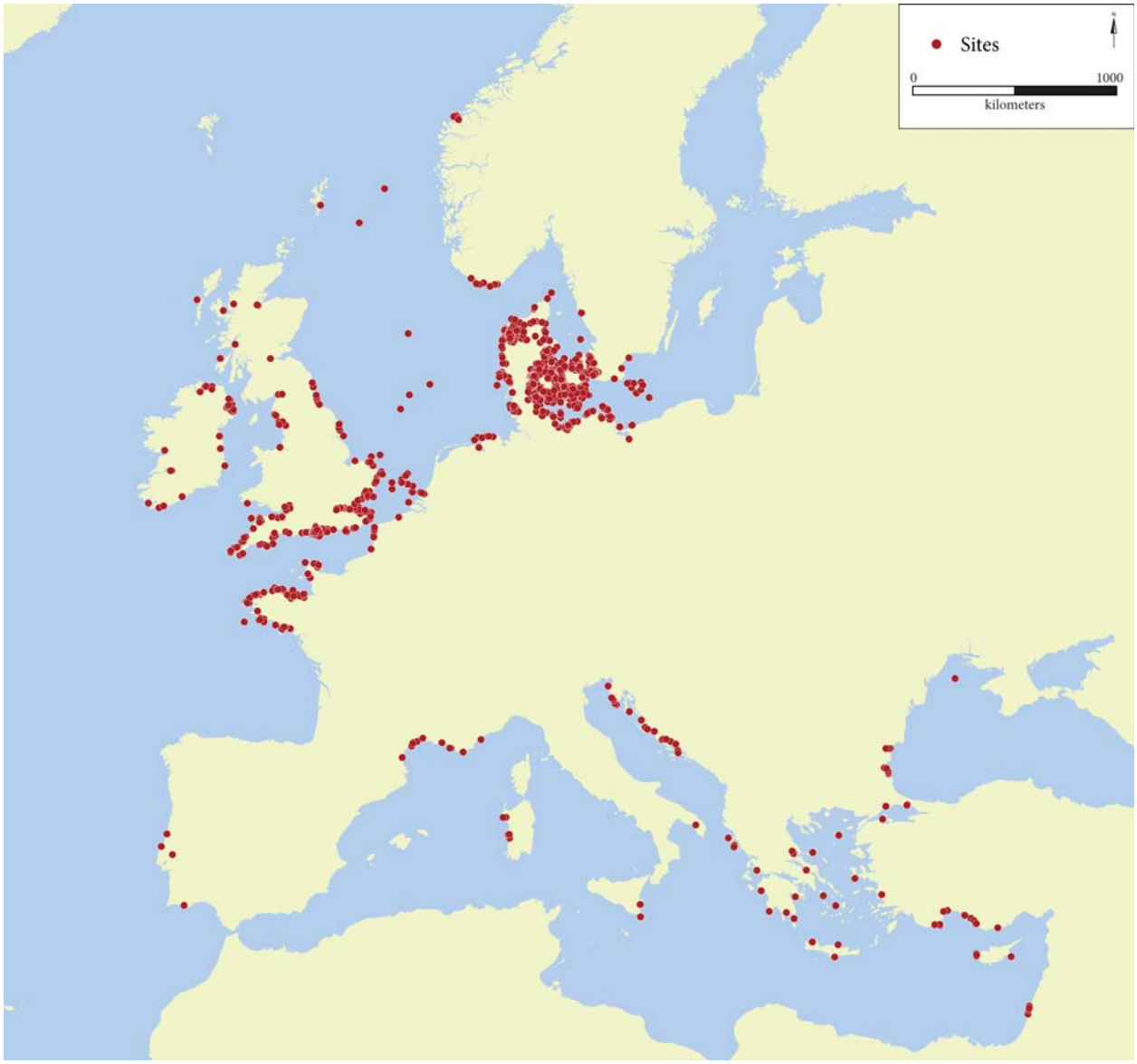

Figure 9.4: More than 2,500 prehistoric archaeological sites have been discovered so far (September 2014) off the coasts of Europe and collected by the SPLASHCOS network (graphic: © M. Mennenga, Lower Saxony Institute for Historical Coastal Research).

because of restrictions in heritage legislation regarding heritage. Thus existing archives and data as well as their accessibility reflect the diversity in heritage management and archaeological research practices across Europe.

A decision was therefore made to set up a simple database to enable users free access via the internet and standardised analyses, based on a common list of definitions agreed within the SPLASHCOS community and an accepted terminology (thesaurus) concerning chronology (relative and absolute), method of dating (typochronology, radiocarbon, stratigraphy, etc.) classification (single find, collection of finds, settlement, grave, offering, etc.), preservation of organic material and water depths. Relevant URLs and references, as well as standardised coordinates, are also saved in the database, thus creating a foundation for searching, statistical analyses and the mapping of results. The usability of the SPLASHCOS database for detailed studies of material from submerged prehistoric sites is and will remain limited because it only provides a small range of basic information. Nevertheless, the database will undoubtedly be an important tool for extracting primary data and references for more information.

It was in fact possible to collect data on 2672 sites in 19 countries (Belgium, Bulgaria, Croatia, Cyprus, Denmark, France, Germany, Greece, Ireland, Israel, Italy, the Netherlands, Norway, Poland, Portugal, Sweden, Turkey, United Kingdom and Ukraine), but the distribution and quality of the data differs from one area to the next (see also Fischer & Bailey 2015). The coasts with the largest amount of data are in the Baltic and Limfjord part of Denmark, Brittany (France), southern England, the German Baltic coast and north Croatia. They account for 85% of the entire data in the database. A significant proportion (64%) is located in Denmark (Figure 9.4).

Most of the 2672 sites are known through single (61%) or collection finds (14%) salvaged during activities such as fishing, drilling or diving. Most of the other sites were also primarily detected in that way, but could

Figure 9.5: Mesolithic settlement remains of organic material, found in the Baltic waters near Neustadt (Germany) (photograph: © S. Hartz, Archaeological State Museum Schleswig-Holstein).

be identified through further scientific investigations. As a result, a few sites have been identified as burials or depositions, but the vast majority – 430 sites – are classified as settlement remains. Fireplaces, cultural layers and wooden structures were covered and preserved by the sea over thousands of years. This means that the range of preserved material is often very different from that of contemporaneous sites located on dry land. The inventories consist of objects made of organic material, such as wooden fish weirs or tools made of antler, wood or bone, whereas comparable finds on land-based sites are viewed as rarities (Figure 9.5).

In terms of the chronological range of the submerged sites, it should be noted that about 30% of the sites detected so far can only be generally dated to the Stone Age or Early Prehistory because the salvaged artefacts do not allow a closer typochronological dating. The other findspots may be dated to at least the Paleolithic, Mesolithic and Neolithic periods – often with a more precise classification into a particular early, middle or late phase. In 95% of cases, the chronological setting of the sites is based on a typochronological classification of the artefacts. So far only 3.5 % of sites are dated directly using scientific methods such as radiocarbon dating or dendrochronology; only a few sites were dated with the help of well-established local or regional sea-level curves or stratigraphy.

If we compare the percentage of submerged sites dated so far, big differences are immediately apparent: only 10% existed during the Paleolithic period and represent the period of the first human migration to Europe. These findspots are fairly equally distributed in European waters; a conspicuous higher density is only detectable in the North Sea around the southern part of the United Kingdom.

The bulk of the 1713 datable sites (53%) can be classified as Mesolithic. Most are located in the southern Baltic area and the waters around the United Kingdom. It is noted that no Mesolithic finds are reported from the Atlantic waters of France, despite a high density of findspots, nor are any sites known from that period for the whole of the Mediterranean Sea. This may be because the process of Neolithisation already started there in 10,000 cal. BP. following more or less directly on from the late Paleolithic in the cultural classification (Fischer et al. 2015). In established chronological regional systems, the Mesolithic period was very short or even non-existent.

420 sites – comprising 16% of the recorded material – are dated to the Neolithic period. Sites from this period are fairly evenly distributed in most European marine waters. This indicates that the coastal zone was still an attractive habitat, although agriculture had become the economic base for most communities. A reason for the relatively large number of known Neolithic sites in the Mediterranean waters could be the lengthy duration of the Neolithic in the south and east of Europe, as already discussed. Another reason could be the construction of stone buildings and graves, which are characteristic of the Mediterranean Neolithic. If there is good visibility, amateur divers are much more likely to recognise and identify them than scatters of lithic or bone artefacts from previous periods.

Last but not least, the water depths so far reported for the sites below recent sea level are also highly interesting because they clearly indicate that the sites can be accessed without the need for highly elaborate technical equipment (Figure 9.6). Most of the sites were situated in fairly shallow waters up to 10 m deep in areas with excellent visibility. By comparison, our knowledge of sites and landscapes from deeper waters, in conditions of poor visibility and with a strong current and high sediment transport, is rather limited. In most cases, whenever sites have been discovered at greater depths, this has occurred as part of interdisciplinary research projects. This shows that prehistoric sites and landscapes are also preserved on the seafloor in deeper waters and that more and broader based interdisciplinary cooperation is needed to extend the research to locate, identify and investigate them (Figure 9.7).

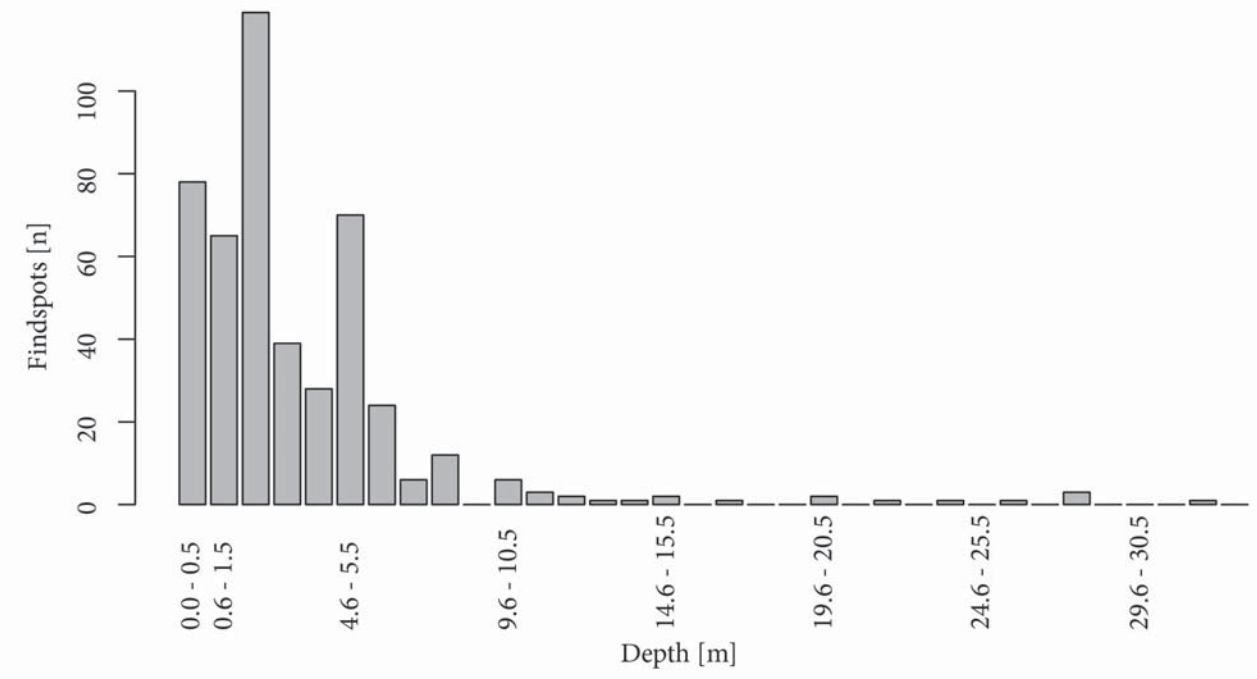

Figure 9.6: Number of known submerged prehistoric sites according to water depth, extracted from the SPLASHCOS database (graphic: © M. Mennenga, Lower Saxony Institute for Historical Coastal Research).

There are plans to integrate the SPLASHCOS viewer database into the web-based platform Geo-Seas (Link 5). Geo-Seas is part of the SeaDataNet (Link 6) for marine and ocean data management and provides an infrastructure to handle marine geological and geophysical data. The SPLASHCOS viewer will also be linked to the 'Human activities' subportal of the European Commission's European Marine Observation and Data Network (EMODnet) Programme (Link 7). EMODnet is an initiative of the European Commission's Directorate-General for Maritime Affairs and 2074 Fisheries (DG MARE) as part of its Marine Knowledge 2020 strategy, aiming to unlock fragmented and hidden marine data resources and to make them available to individuals and organisations. Integrating the SPLASHCOS viewer into these web portals will provide an opportunity for public access. People will be able to view archaeological data (on bathymetry, salinity and currents, etc.) on the maps provided, as well as follow links to relevant geological and geophysical data.

Continental Shelf Prehistoric Research in times of threat to submerged prehistoric landscapes and sites

It should be considered a fact that we are facing significant climate changes that are also affecting the chemical, physical and biological conditions of the geosphere and biosphere of the waters covering the submerged parts of the continental shelf. In addition, there has never been as much economic activity in offshore areas as today – and this is still expanding. Recent and future anthropospheric activity in the form of industrial fishing, oil and gas extraction, the construction of wind farms and energy pipelines, as well as dredging for gravel and sand, leads not only to far-reaching interventions in the seabed, but also to large-scale destruction and relocation of sediments in the active zone, and to changes in local systems of currents and sediment transport. Although in many cases these new artificial landscapes soon become habitats for recovering or new migrating aquatic communities, the landscape and historic archives of prehistoric settlements are lost forever.

Changes in the biosphere

In combination with other factors, a decrease or increase in salinity and temperature are changing environmental conditions that attract the settling of new bacteria, fungi, benthos, microbes, plants, fish and other species of various kinds (Figure 9.8). These could change not only the biosphere in particular waters but also the preservation conditions for archaeological remains. An example that should be mentioned here is the decline in eelgrass vegetation, especially in the western Baltic (Fischer 2011). These plants usually settle in shallow waters near the coast and can reach a height of more than a metre. They significantly reduce currents and water turbulence, as well as stabilising the soil they cover with their systems of roots and belowground stems. Thus eelgrass meadows are effectively able to prevent erosion of the underlying sediments. Observations in Denmark and Germany have demonstrated a progressive decline in the extent and density of the eelgrass vegetation due to various causes. This is leading to augmented erosion of the shallow part of the sea bed and hence to the destruction of numerous archaeological sites. Erosion often leads to the exposure of prehistoric artefacts, tools and structures that have been embedded and preserved in waterlogged layers for thousands of years. Now they may be easily be attacked and destroyed in the space of a few years by migrating shipworms, piddocks, worms and other species. Similar accelerating processes of erosion and devastation of the shallow part of the

(a) Simplified diagram showing technologies involved in submerged prehistoric research. (b) Illustration of a number of seabed and sub-seabed remote sensing and intervention technologies. The research ship is operating above a partly buried palaeo-landscape marked by faults and locally complex internal bedding. Coring can sample the sediments whereas acoustic sensors image the seabed and substratum, while divers and towed/propelled vehicles can make observations, or conduct mechanical work.

METHOD	TECHNIQUE	TYPE OF DATA	TECHNOLOGY
REMOTE SENSING	Acoustic	Seafloor map	Side scan sonar, multibeam echosounder
	Acoustic	Sub-seafloor image (2D) Sub-seafloor image (3D)	Sub-bottom profilers 3D Chirp, SES-2000 Quattro
	Lidar (Electro-)magnetic	Seafloor topography Seafloor and sub-seafloor magnetic/resistivity map	Airborne Lidar Bathymetry EM profilers, gradiometers
DIRECT INVESTIGATION	Coring and sampling	Sedimentological/environmental	Grabs (van Veen, Shipek) Boxcore, vibrocore, gravity core, piston core
	Dive surveys	Sedimentological/archaeological	Swim dive (corridor/jackstay/circular)
UNDERWATER PLATFORMS	Submersibles (manned/unmanned)	Wide spectrum of data (acoustic maps, water/sediment samples, cores, video etc.)	HOV, ROV, AUV
PHOTOGRAPHIC	Photo, video, stereo	Exposed seafloor	Digital 2D/3D cameras, photo/video-mosaicing, video microscope

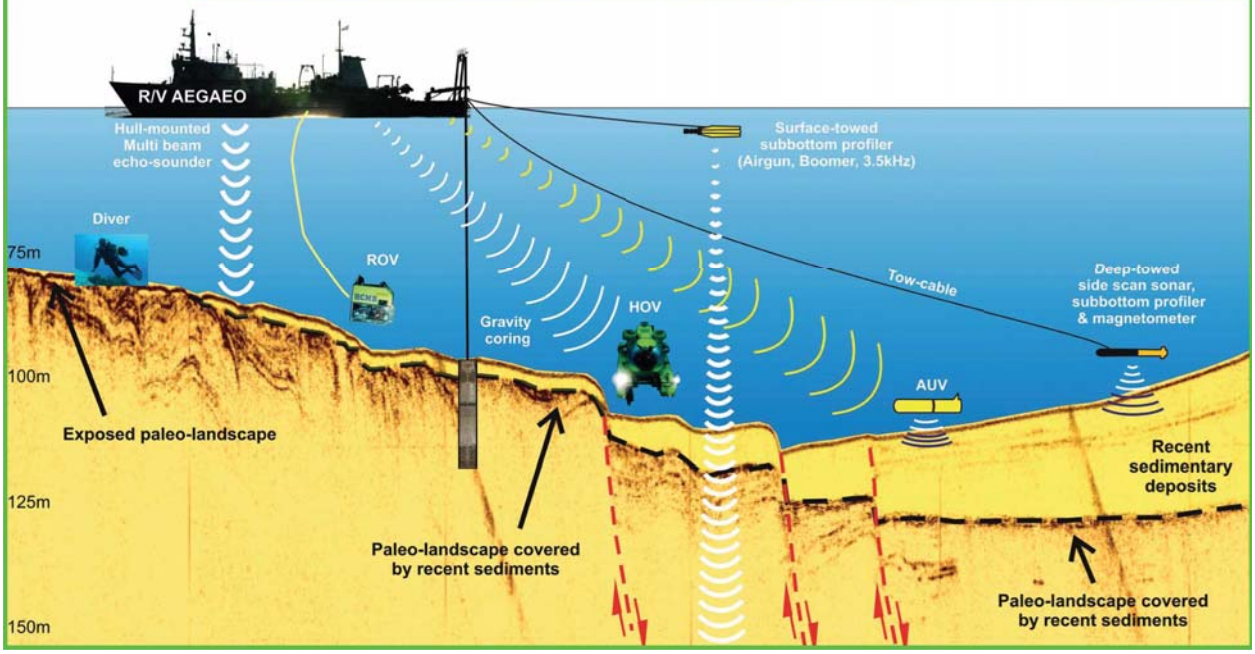

Figure 9.7: Simplified diagram and illustration showing technologies involved in submerged prehistoric research (after Flemming et al. 2014, 98; Box 6.2).

marine sea floor are also reported from several other parts of the European waters and could even be considered a global phenomenon. Even though at least a rough photographic documentation or video recording of visible prehistoric fireplaces, graves and other man-made remains is often possible, a proper scientific investigation of the eroding sources is not. Covering the threatened areas with geotextiles or sand can only be done in a few exceptional cases. Developing new intelligent methods to protect eroding sites and landscapes on the sea floor is therefore an important challenge for the future; this is currently occurring within the European-funded SASMAP Project (Gregory 2012, see also Link 8).

Expansion of the anthroposphere

We are currently seeing unprecedented levels of offshore economic activity in almost all parts of

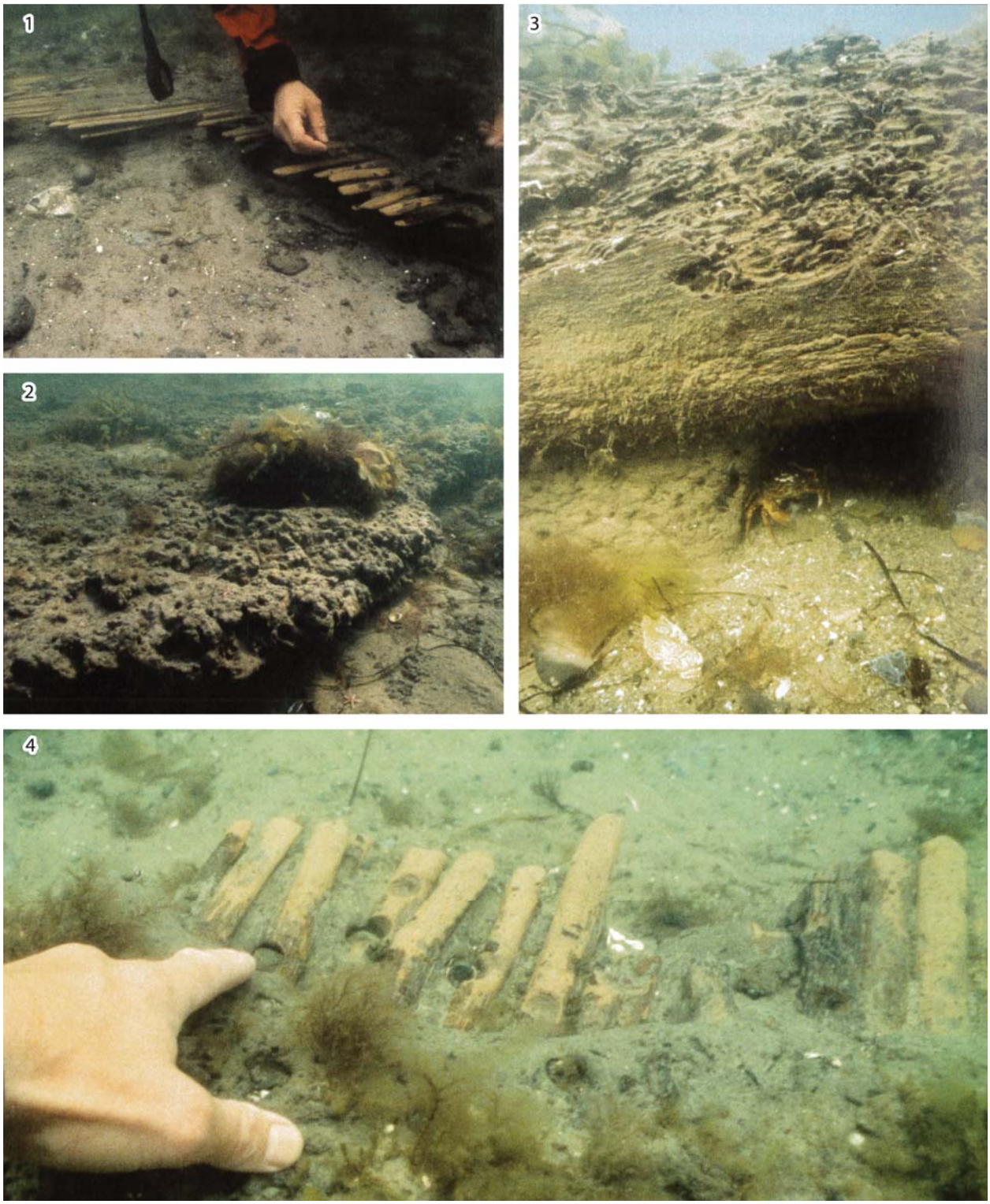

Figure 9.8: Examples of seafloor erosion and destruction by biological factors, documented in the Danish part of the Baltic Sea. (1) Erosion of a Neolithic wattle construction (2) Clay gyttja exposed by erosion and pitted from an attack of piddocks. (3) Mesolithic oak trunk destroyed by shipworms, (4) Hazel rods from a prehistoric wattle, penetrated by piddocks (after Fischer 2011).

European marine waters. Traditionally, up until the end of Second World War, people considered marine waters primarily as fishing grounds or as transport zones. This has changed considerably. Today, in particular the exclusive economic zones (EEZ) prescribed by the United Nations Convention on the Law of the Sea are used by many countries for oil and gas extraction and especially in the last two decades for the installation of large-scale wind farms for the production of sustainable and renewable energy. In addition, a growing number of supply lines, service lines and pipelines have been constructed to connect offshore industrial platforms to the onshore transport and consumption system. All this unavoidable construction activity entails disturbance of the seabed and in many cases also effects changes in current, erosion and sedimentation processes in

Figure 9.9: Dredger in action off the English coast (after Bicket 2011).

the active area and its surroundings. As a side effect, prehistoric remains may be disturbed, damaged, exposed to erosion or even destroyed.

During the last five decades large-scale dredging and flushing of gravel and sand have become an important economic activity (Figure 9.9). Many European countries use flushing of offshore extracted material as a coastal protection measure to protect against the erosion of beaches and sea cliffs caused by sea-level rise. The dredging of the required sand and gravel is often done in the vicinity of the areas to be protected, with rearrangement of sediments on an enormous scale as the logical consequence for coastal areas. If the dredging is practised near a prehistoric site, it will not only affect or disturb this archive but also lead to a relocation of the archaeological material to a new spot, thus forming a secondary findspot at a place where a human settlement may never have existed.

Although European fishery has lost its foremost economic significance in recent decades, it is still practised in almost all European marine waters. Bottom trawls or dragnets have been in use since the beginning of the 20th century, especially in the North Sea and the Atlantic. This has a strong impact on the archaeological remains on the seafloor, because they stir up the sediment at the sea bottom. This leads not only to ecological disruption but also to the relocation of sediments and archaeological artefacts. Although the United Nations General Assembly urged nations in 2004 to consider at least temporary bans on high seas bottom trawling, because of its high benthic damage, it is still practised today and probably will be for the foreseeable future.

Strategic consequences for Continental Shelf Prehistoric Research – where to next?

At present climate change, rapid changes in environmental conditions, combined with extensive economic offshore exploration of the European marine areas, are threatening the submerged prehistoric landscapes and archives of settlements hidden in the sediments of the European marine seafloors of the Continental shelf. Although many methods for the identification, documentation and scientific investigation of these sites have been developed in recent decades and large volumes of new data have been produced, we are still far from systematic open accessibility and management of the diverse sources of information, which are of extraordinary importance for the reconstruction of our prehistory. As already pointed out most of the sites known and investigated so far were situated in fairly shallow waters in areas with excellent visibility, dating to the Mesolithic or Neolithic period. By comparison, our knowledge about sites and landscapes from deeper waters, in poor visibility conditions and with strong currents and sediment transport, is rather limited. Following the rule of thumb 'the deeper below sea level, the older the site', it is no surprise that submerged Late Paleolithic sites that can be expected in water depths more than 25 m below recent sea level are known in much smaller numbers. When sites of that period have been discovered, in most cases this happened in the context of interdisciplinary research projects. This indicates not only that these early Holocene sites and landscapes are still preserved on the seafloor but also that more and broader based interdisciplinary cooperation is needed to extend the research and to locate and investigate them.

Research in the context of industrial exploitation and construction works

The implementation of the cost-by-cause principle as defined in the Valletta Treaty in most European countries has already created a foundation in many countries for funding investigations of those prehistoric sites and landscapes that are affected directly by construction works – on land as well as underwater. When the archaeological investigations are integrated into the planning process and the construction project from the beginning, effective cooperation between industry and science can be achieved (see also Jöns' paper in this volume).

An example of a large-scale archaeological and palaeoenvironmental investigation was one that was recently carried out during construction works to enlarge the port of Rotterdam in the Netherlands. Here large-scale archaeological investigations took place in the sea and seabed prior to the construction works at the 'Maasvlakte 2' location. Artefacts up to 30,000 years old, such as teeth, tusks, vertebrae, bones of mammoths, hyenas and many other animal species, were salvaged together with tools and weapons of prehistoric peoples, indicating that this area was part

of the habitat of Paleolithic hunter communities. Based on an agreement between the Port of Rotterdam Authority, the contractor for the Maasvlakte Expansion Project and the Cultural Heritage Agency of the Netherlands, efforts were made to ensure, on the one hand, that the archaeological finds were systematically salvaged, carefully handled and profoundly scientific analyzed and, on the other, that the progress of the construction process would stay on track as scheduled. The archaeological project was completely funded by the Port of Rotterdam Authority. Thus as a side product the construction works led to the discovery of outstanding cultural remains as well as to a wealth of detailed new data about the submerged prehistory of the southern North Sea (Van Ginkel, Reumer & Van der Valk 2014; Link 9).

Prehistoric landscape research on the continental shelf has not only accompanied large-scale construction works at single locations. Offshore construction activities as part of cable and pipeline projects have also emerged in some cases in conjunction with international archaeological projects. Even if the pipe or cable widths are mostly limited to a few metres, they often penetrate the seafloor for hundreds of kilometres, potentially affecting the current. This may influence the rate of sedimentation as well as other environmental conditions that might also affect the preservation of submerged sites or even destroy them. In the past, the main focus for this kind of project was historical shipwrecks. However, this has changed considerately in recent years; today the enormous scientific significance of submerged prehistoric landscapes and sites is also broadly accepted. An example is the well-known Nord Stream pipeline, designed to provide a new gas supply route from Russia through the Baltic Sea to Western Europe. Starting in the Portovaya Bay near Vyborg in northwestern Russia and ending in Lubmin near Greifswald in northeastern Germany, the pipeline runs for more than 1200 km through the exclusive economic zones (EEZs) of Russia, Finland, Sweden, Denmark and Germany; in Russia, Denmark and Germany the pipeline also passes through national territorial waters (Link 10). The responsible national archaeological authorities of these countries were involved throughout the planning and construction process, so that historical remains – shipwrecks as well as submerged landscape remains – were respected from the very first plans to the opening ceremony. The scientific investigations were completely financed by the project budget.

In an early stage of the project a reconnaissance survey was carried out to facilitate the selection of the best pipeline route based on information on geological and anthropogenic features. A 2 km-wide corridor was surveyed with full geophysical spread, using side-scan sonar, multibeam echosounder and magnetometer. The survey aimed to document the seabed topography, to model the bathymetry in a 2x2 m grid and to identify active geomorphological processes. In addition, the mapping included potential geological features, environmental constraints, munitions and debris but also historic shipwrecks and remains of submerged prehistoric landscapes. In the next step the data were carefully analysed by skilled experts at research institutes or universities; identified sites and features were finally visually inspected by ROVs and, if needed, further investigated and sampled by scientific diver teams.

A growing number of large-scale projects to upgrade transport facilities have been initiated in different parts of Europe – in many cases including new-built connections between islands and mainlands involving systems of bridges and tunnels. Major examples include the Marmaray Rail Tube Tunnel in Istanbul, connecting the European and Asian sides of the city under the Bosphorus (Link 11), and the Channel Tunnel linking the southeast of England with Northern France, for rail transport beneath the English Channel at the Strait of Dover. Of special interest for the research on submerged prehistoric landscapes are similar projects in southern Scandinavia. Denmark and Sweden in particular have invested a good deal of money to improve their transport systems during the last three decades by replacing the traditional ferries with bridges and tunnels. The connection from the Danish island of Funen to Sealand over the Great Belt (1988–1998) or from Sealand to Skane in Sweden crossing the Øresund (1991–2000) should be regarded as pioneering works, not only in terms of the newly established infrastructure, but also in the integration of research on prehistoric landscapes and archaeological sites during construction activity. The results have widened our knowledge about prehistoric settlement history enormously (summarising Pedersen et al. 1997).

Against this background it was already felt that submerged prehistoric landscape research and heritage management should form a fully integrated part of the planning during an ambitious construction project designed to connect the Danish island of Lolland with the German Fehmarn Island by a tunnel through the Fehmarnbelt. As part of the general environmental impact assessment, extensive geological, geophysical, biological and archaeological investigations have been carried out since 2008 in the waters of the Fehmarnbelt as well as in the affected coastal zones.

Within this project a number of geophysical surveys using seismic and side-scan sonar equipment were carried out primarily to obtain a clearer understanding of the stratigraphic sequence of the seabed. They were followed by an extensive geological boring programme leading among other things to the discovery of well-preserved peat layers, covered by limnic-fluviatile and subsequent marine sediments (Figure 9.10). Pollen and diatom analyses in combination with a geochemical screening show clearly that, prior to the marine transgression of the landscape during the Littorina stage some 8,000 years ago, a fresh-water lake existed here, originally positioned far inland away from the coast. Today this submerged lake should be seen as an important archive of landscape history. All funding for the archaeological and palaeoenvironmental investigations will be borne by the construction company.

Research on climate change, sea-level development and human adaption

Climate change – leading to shoreline displacement and, as in the past, confronting humans with a changing environment – must be considered a global phenomenon. During the last two decades enormous budgets

Figure 9.10: Retrieval of sediment cores in the Fehmarnbelt project for geological and palaeoenvironmetal investigations (after Flemming et al. 2014, Fig. 4.10).

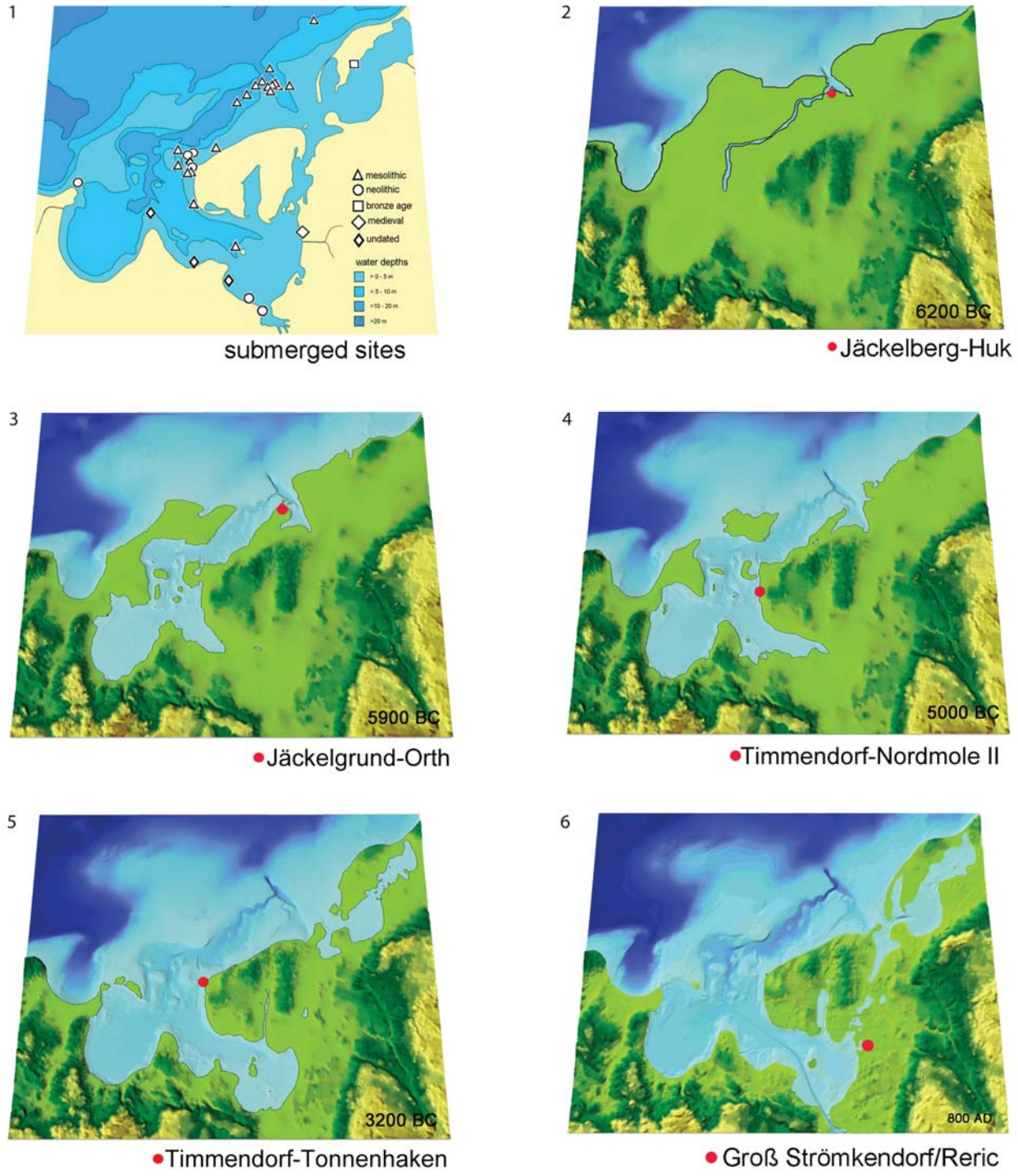

Figure 9.11: Submerged archaeological sites and scenarios for different stages of the Wismar Bight (Germany) from the late 7th millennium BC to the 1st millennium AD (after Jöns 2011).

have been spent worldwide on identifying the driving forces behind climate change and on creating models that might allow us to predict future developments and to prepare measures to address the unavoidable consequences. On the other hand, so far only a few funding bodies have initiated or encouraged new research on the comparable developments our prehistoric ancestors had to face thousands of years ago. Applications for financial support or grants for the investigation of submerged prehistoric landscapes are currently almost only possible at the regional or national level. Of course, studying the strategies that prehistoric communities used in their day cannot be directly adapted to our industrial world of the 21st century, but the scientifically based data that research may produce on the intensity and consequences of sea-level change for the environments and landscapes in the past are surely of great interest for testing the plausibility of predictive models about expected future developments.

This can be impressively demonstrated by the transdisciplinary Sinking Coasts or SINCOS Project that was nationally funded for almost a decade by the German Research Foundation (DFG). The main focus

of the project was the reconstruction of the Littorina Transgression for the southwestern part of the Baltic Sea during its highest intensity between 8,000 and 4,000 years BC and the consequences this development had for climate, vegetation and landscape (Harff & Lüth 2007). In addition, it aimed to find out the extent to which the sea-level rise shaped the life of the hunter-gatherer and fisher communities along the southwestern Baltic coast in that period and how they adapted their economic and social system to their changing environments (Jöns et al. 2007; Jöns 2011).

These investigations showed clearly that people living in the maritime zone between the Oder estuary and the Oldenburg Rift were facing a continuous shore displacement and a coastal decline during the Littorina Transgression, forcing them to move their settlements successively to protect them from inundation. Because of the differing regional intensities of the isostatic rebound to the isostatic uplift of northern Scandinavia, the coasts of the Bay of Mecklenburg in the western part of the investigated area were affected by this phenomenon on a much larger scale than those of the Arkona Basin and the Pomeranian Bay in the east. These areas were separated by the Darss Sill, which acted as a threshold between them. In order to compare the environmental developments and human strategies employed in these regions, both areas were chosen as research areas and investigated using the same methods. All available information about settlement remains originally positioned on the shore and indicating the relative sea level at their particular period of utilisation – and which can therefore be used as sea-level index points – were systematically recorded in both areas. A systematic survey based on geophysical measurements (side-scan sonar and seismic) led to the discovery of numerous submerged sites and landscape remains such as tree trunks, peat blocks and riverbeds of late glacial natural draining systems in both research areas. Some of these sites offer exceptional conditions for the preservation of organic material, so that artefacts as well as tools and multifaceted settlement refuse in large quantities could be recovered during surveys and excavations.

Fieldwork was restricted to sites from the Late Mesolithic to Late Neolithic period between 6,000 and 2,000 cal. BC, because their remains should reflect the human reaction to the Littorina Transgression in a particular manner. For Wismar Bay especially, a large number of well preserved, submerged – originally coastal – sites were located, surveyed, and in some cases partly excavated. The material from these sites forms the basis for a detailed reconstruction of the chronological development from the Late Mesolithic to the Early Neolithic and the settlement history for the period from 6,000 to 4,000 cal. BC, as well as for a reconstruction of the intrusion of marine waters during the Littorina Transgression and the subsequent emergence of Wismar Bay.

In the discussion of the suitability of archaeological sites as sea-level index points, particular attention has been paid to a group of more than 20 submerged settlements, today located at the bottom of the Wismar Bight at depths between 2.5 and 11 m below the present sea level. Most of these were discovered during side-scan and Hyball surveys and, in a second stage, partly excavated underwater. As well as seeking answers to several questions about the settlement pattern and chronology of the respective sites, a further aim is to gather data about ancient coastlines and the dynamics of the rise in sea levels. The most important sites will be presented here briefly (Figure 9.11).

Of special importance is the Jäckelberg-Huk site, located on the edge of the Jäckelberg at a depth of 8.5 m below the present sea level. Radiocarbon analyses indicate that the site existed in the period between 6,400 and 6,000 cal. BC. So far it is one of the oldest known submarine sites in the waters of the Wismar Bight. The fish remains found on the site indicate a freshwater environment; the settlement must therefore have been situated in immediate proximity to a fresh-water lake. Only a few kilometres south of the Jäckelberg, the Timmendorf-Nordmole II site was found. Here, parts of a fishing fence were excavated at a depth of 5 m below the present sea level, which had blocked the end of a small brook. The preservation conditions for organic material on the site were excellent; wooden artefacts such as several leister prongs and parts of a fish trap could be recovered. Analysis of the find material and a series of radiocarbon dates place the site in the period between 5,100 and 4,800 cal. BC (Hartz & Lübke 2006). The neighbouring site, Timmendorf-Nordmole I, was investigated at a depth of 2.5–3.5 m below the present sea level. Radiocarbon dating places it in the period between 4,400 and 4,100 cal. BC. (Lübke 2005). The sequence of Stone Age sites around the island of Poel concludes with the Timmendorf-Tonnenhaken site, where settlement remains were identified at a depth of 2 m below the present sea level (Lübke 2002). The site is situated on a former peninsula and has a cultural layer with well-preserved artefacts made of stone, bone and antler; potsherds prove that it was occupied by people of the Neolithic Funnel Beaker culture in the period between 3,200 and 2,700 cal. BC.

That the transgression did not stop in the area of Wismar Bay with the end of the Littorina Transgression can be seen not only from recent measurements of the coastline but also from the remains of a trading centre from the early medieval period, which were investigated near Groß Strömkendorf on the shore of the Wismar Bight. This site is located only a few kilometres southeast of the above-mentioned Mesolithic and Neolithic sites off the coast of Poel island. It was occupied from the early 8th to the beginning of the 9th century AD and is presumably identical to the Emporium Reric mentioned in the Frankish annals (summarising Schmölcke & Jöns 2013). The site's waterfront is of special interest in the discussion of shore displacement in the area of the Wismar Bight. Geological and geophysical investigations have proved that the harbour was located in a long stretched-out bay that had been washed out by meltwater in the deglaciation phase and that formed an ideal natural harbour in the early medieval period. Due to the rising sea level the shoreline of the ancient harbour bay is today displaced about 80 m towards the coast so that the former waterfront area and harbour basin are now completely submerged. This indicates that the sea level in the 8th century AD was 80 to 100 cm lower than it is at present.

Within the SINCOS project the archaeological data reported briefly above were used together with geological and palynological data to calculate a new sea-level curve for Wismar Bay (Lampe et al. 2005). When all these data are plotted on the curve, there is a high degree of concordance between the different sources, which emphasises the significance of archaeology-based data from sites that were occupied for only a short time. Based on these data and the IPCC (Intergovernmental Panel on Climate Change) suggestions about the future development of the global sea level, a prognostic coastline scenario was developed for Wismar Bay that may demonstrate possible implications for the future.

In summary, we can say that a large number of extraordinary well preserved artefacts were salvaged during the SINCOS project, and that a large set of new scientifically robust data was recorded about sea-level change, shoreline displacement, environmental conditions and human strategies to adapt to their changing world. We can also point out that, within the SINCOS project, research methods and standards for interdisciplinary research on maritime and submerged prehistoric landscapes and sites were developed and established for the southwestern Baltic area, which have the potential to be transferred to other coastal areas affected by sea-level changes and shoreline displacement.

Research on preservation, safeguarding and conservation

The above investigations, irrespective of whether they were driven by research or heritage management, show impressively that the development of commonly accepted international standards and best practice guidelines for organising research and preservation of submerged prehistoric landscape remains and archaeological sites must be an important goal for the European marine research community. Some partial attempts have already been made that need further development now and in the future. Most of them were products of a couple of international projects funded by the European Commission as part of different programmes. Based on the Valletta Treaty (1992) and on UNESCO's Convention for the Protection of the Underwater Cultural Heritage (2001), their goal was to make sure that the sites should, if at all possible, be protected in situ and, where possible, only be investigated with non-intrusive methods to document and study them. Although most of the projects primarily dealt with shipwrecks, their results concerning the safeguarding and long-term preservation of waterlogged wood, the threats to this material by shipworms, bacteria, fungi, etc. and measures to protect it, are also of high value for submerged prehistoric landscape research. In particular, the MoSS project (Monitoring, Safeguarding and Visualization of North European Shipwreck Sites; Link 12), MACHU (Managing Cultural Heritage Under Water; Link 13), the 'Wreck Protect' project (Link 14) and the WoodCultHer project (Wood Science for Conservation of Cultural Heritage; Link 15) with their combined analytical and experimental approach have produced a large volume of information, which is already partly integrated into some national safeguarding strategies.

Thanks to a research grant from the European Commission under environment working theme ENV. 2012.6.2–6, 'Development of advanced technologies and tools for mapping, diagnosing, excavating and securing underwater and coastal archaeological sites', these important investigations are currently being extended and intensified in the SASMAP project. The project's full title, 'Development of Tools and Techniques to Survey, Assess, Stabilise, Monitor and Preserve Underwater Archaeological Sites', gives a clear indication of its broad scientific approach and its aim to develop new technologies and best practices in order to locate, assess and manage Europe's underwater cultural heritage more effectively than is possible today. The SASMAP project is run by a consortium of seven museums, universities and governmental institutions and four small and medium enterprises (SMEs) from Denmark, the Netherlands, Germany, Sweden, Italy, the UK and Greece. Whereas the SMEs will focus on the development and production of marine geophysical instruments, equipment for measuring biogeochemical parameters in the marine environment, the protection of sub-sea installations (pipelines, cables) and hand-held diving tools, it is the task of the institutional partners with special skills in marine archaeology and conservation, in situ preservation, wood degradation, marine geochemistry and marine geophysics to develop further methods and strategies for the long-term safeguarding of waterlogged archaeological materials and sites. In so doing, the SASMAP team will assuredly improve the assessment of underwater archaeology in connection with sub-sea development by providing heritage agencies and research institutes with new tools, guidelines and best practices for the investigation of underwater archaeological sites.

Submerged prehistoric sites and landscape in marine spatial planning

In almost all European countries, the integration of the archaeological record in spatial planning on land is based on all available information about archaeological finds and features of scientific significance, salvaged or documented by amateur archaeologists or volunteers, discovered in the context of research projects, heritage excavations or during construction works as chance finds.

Some 1.3 million findspots of different age and preservation status are currently registered for Germany's on-land area, meaning an average of three known sites for every square kilometre (Jöns 2013). Around 10% of these sites are dated to the prehistoric period. Archaeological excavations carried out in the context of laying gas pipelines or building new roads or highways have in many cases demonstrated that only one or two out of every 10 sites located along the routes had already been registered in the heritage archives. Based on that experience, we can calculate that 20 to 30 sites lie hidden in every square kilometre in Germany, two to three of which probably originated more than 5,000 years ago during prehistoric periods. Although no study can be cited as yet, similar numbers may be estimated for most other European countries. Consequently, we can deduce comparable numbers by extrapolation for the now submerged parts of the continental shelf that were settled in prehistory.

This calculation seems unlikely given the big discrepancy between the estimated number of sites and the number of submerged prehistoric finds actually registered. But compared to the numbers of prehistoric sites known from intensively investigated submerged areas such as Wismar Bay in Germany or the waters around the Danish islands of Funen and Lolland/Falster, we should clearly view this estimate as realistic.

Particularly in offshore areas that are shaped by currents, poor visibility or a high rate of sedimentation, sites may only be visible and identifiable by chance when they are just beginning to erode or are disturbed by construction works, fishing with bottom trawls or dragnets, or other activities that penetrate the sea floor. Consequently, we have to be aware that many submerged prehistoric sites cannot be protected from natural erosion and we have to accept a logical system for measurement and abandonment. Indeed, we have to face the threat that many of these archives will be exposed and destroyed without being discovered, let alone documented and thoroughly investigated. Moreover, protection and preservation is only possible in some special and extraordinary cases.

On the other hand, our knowledge about the topographic settings that prehistoric communities favoured for settling, fishing, hunting or gathering and about their settlement pattern may be used to predict where we might expect prehistoric settlement remains. This kind of predictive modelling is highly dependent on the quality and resolution of the available data and information about the original landscape and environment inhabited by our prehistoric ancestors. Therefore detailed geophysical and geological investigation of the seabed and large-scale documentation of the submerged landscape remains must be viewed as indispensable for the development of plausible models.

Such data should be able to indicate in which submerged areas there is a high probability of the survival of well-preserved settlement and landscape remains. This might be the case when the prehistoric landscape was shaped by rivers or shallow bays close to sandy and dry spots, offering favourable conditions for building huts and fireplaces as well as for the control of nearby fishing fences, traps and bird nets. Especially if these locations were not directly exposed to the wind and weather of the open sea, they would have been very attractive to prehistoric communities for building specialised, temporary camps for fishing, hunting or gathering roots, fruits and nuts. For spots with excellent living conditions, we can even expect the establishment of base camps that stayed in use for generations.

On the other hand, the predictive model should also point out areas with relatively low archaeological potential. This might be true for areas that, according to the reconstructed paleolandscape, were probably not attractive for settling by prehistoric hunter gatherers and fishermen. For example, originally sandy areas and dry plains, positioned far from a permanent water supply, played a comparatively small role as living space for prehistoric societies. Also, for areas with originally attractive living conditions, the probability of finding well-preserved prehistoric submerged landscapes and sites might be very small if these areas had experienced severe erosion and relocation of sediments – as may be the case with natural or anthropogenic erosion.

Predictive modelling will therefore neither replace future research nor obviate the need for a systematic recording of finds and structures on the seafloor, but it may help to focus scientific attention on those submerged areas that have probably archived important and unique information about prehistoric life, landscape, sea level and climate. The location of every new site or landscape element may lead to modifications and improvements in the model, so that predictive modelling should be considered more as a programme that is constantly being perfected than as a project limited by time.

In the western Baltic waters of Denmark, Sweden and Germany, in areas where geophysical and geological data allow a high-resolution reconstruction of the topography and environment that prehistoric people inhabited, predictive modelling has already been used successfully to locate prehistoric fishing camps or settlements. Examples are the submerged sites described above in Germany's Wismar Bay or around the Danish islands. In recent years, this has prompted the increasing development of predictive modelling in the North Sea area as an important tool for the location of submerged prehistoric sites as part of research projects; predictive modelling is also being integrated into marine spatial planning. Current projects in Belgium, the Netherlands and Germany are busy preparing highly robust predictive maps to be integrated into environmental impact assessments, as well as into concrete building projects. This has already produced many convincing results, as the example of Maasvlakte II/Rotterdam has shown.

Future perspectives for Continental Shelf Prehistoric Research: challenges and opportunities

As already pointed out, we are facing a situation where submerged archives of high importance for the prehistory of Europe are in danger of being lost without ever being known, not to mention accessed, read and interpreted. Against this background it is essential to design a research and communication strategy that may be the foundation for a systematic compilation, documentation and analysis of the submerged prehistoric landscapes. To reach that goal the following actions should be taken:

Exchanging best scientific practice at the European and international level

As the SPLASHCOS action has impressively shown, thanks to funding from the COST programme, there is already a wealth of knowledge, information and experience from a range of disciplines that has – at least in part – been put into practice in projects of various scales. Increased international and interdisciplinary collaboration, especially in marine geology and geophysics, macro-biology and archaeology, is surely the key for future joint efforts in submerged prehistoric landscape research. Interdisciplinary cooperation

should focus not only on fieldwork, such as surveys, sampling and excavations and their evaluation, but also on the preparation of public access and visualisation of the results in different media ranging from scientific publications to newspaper articles, films and TV programmes.

Synergy through cooperation

It will be equally important to build up a sustainable network with other professional and volunteer actors working in European marine waters. Although it is well known that the fishing industry is constantly salvaging mammal bones, chunks of peat (moorlog) and single artefacts as bycatch, only in a few countries is there a systematic registration of this material, which may provide important clues for the location of submerged prehistoric landscapes and sites, their dating and environmental conditions. Existing contacts and cooperation between archaeologists, geologists and paleontologists on the one hand and the fishing and dredging industries on the other should be upgraded and intensified, and extended to the European continent as a whole.

Close cooperation with the offshore industry is equally important. Most of their projects start with intensive geological and geophysical surveys designed to obtain data about embedded natural resources or the consistency of the bedrock, but they may also be the basis for high-resolution reconstructions of submerged landscapes. The drilled cores from these investigations may also allow additional geochemical, palynological or macrofossil analyses and dating, which produce important data about the local landscape and sea-level history. There are already some fruitful collaborations in Europe between the marine industry and research on submerged landscapes. One of the best known examples, the Doggerland project, integrated datasets from the marine industry of the UK part of the EEZ in order to model the prehistoric landscape of the Dogger Bank (Gaffney et al. 2009). Experiences so far in cooperation between science and industry are very promising. They show not only that the data already measured and stored are of extremely high value, but that cooperation helps industry management have a better understanding of the scientific interest of submerged landscape research. This may be of great help in the discussion about protecting known sites and when it comes to reporting and salvaging new artefacts and sites.

Systematic access and elaboration of high-quality data

Another key for enlarging our knowledge about the drowned landscapes of the European marine waters is to improve the quality and availability of detailed maps of the preserved structures. A welcome development is the European Commission's support for a web-based data management infrastructure to manage large and diverse sets of data deriving from in situ and remote observation of the seas and oceans (Link 16). This system links the databases of the professional data centres of 35 countries engaged in data collection. This pan-European network provides commonly accessible online integrated databases of standardised quality and is of high importance for prehistoric submerged landscape research.

Nevertheless, it is still a big challenge to improve the quality and resolution of the seabed data. As already mentioned, large quantities of acoustic data have been produced by the marine industry and are often held as classified information, although they often have no commercial value. The complete integration of these often high-resolution data into the publicly accessible data management infrastructure, such as the SeaDataNet mentioned earlier, should be regarded as a high-priority goal. If successful, it would considerably broaden and consolidate the foundations for research on submerged prehistoric landscapes.

In that case, the research partners' measurements and investigations could concentrate on closing the gaps between these 'industrial' datasets to obtain high-resolution seabed data, so that bathymetric and sediment/rock data can be converted and used for the visualisation of landscape features. As the already mentioned 'Doggerland' project has impressively shown, the common use of 'industrial' and 'research' data from the seabed can be used for mapping ancient coastlines, river valleys, palaeo-lagoonal systems and lakes. But they can also be highly important for modelling the rise and fall of sea levels at the detailed coastal level.

Expansion of predictive modelling

The results achieved so far have proven that predictive modelling is an effective scientific tool that could also be developed in future into a vital tool for marine spatial planning, especially in areas where direct detection of submerged settlement remains is more or less impossible because they are covered by sediments or are invisible for other reasons. Extending the integration of this method to marine spatial planning of the entire continental shelf would certainly boost the dependability of offshore planning, as well as opportunities for intensifying prehistoric submerged landscape research.

Calibration and trials of offshore predictive modelling are essential to check the incidence of success in predicting site occurrence, and the incidence of false positives and false negatives. If this is done carefully, then predictive modelling can be used in well-controlled cases as a substitute for extensive and expensive fieldwork. This check on the reliability of modelling needs to be done in areas where sites are already known.

These models are of high value for archaeology because they may be used to identify areas and sites that offered favourable living conditions for prehistoric communities. The chances of finding remains of human settlement at these locations have to be considered high. But reciprocal effects can also be expected: archaeological surveys and excavations may produce precise data about the inundation of prehistoric settlements and thereby yield valid information for the reconstruction of the ancient sea level or shoreline displacement on a local scale.

Although high-resolution predictive modelling has so far only been used in a few submerged areas of the European shelf to predict the location of single sites, it could already be used in the western Baltic, parts of

the North Sea and the Mediterranean Sea to separate areas with high archaeological potential from those with low or no potential. If in future it is possible to further integrate all geophysical, bathymetrical and geological data – irrespective of whether it is produced by heritage management, research or offshore industry – into the predictive models, they are certain to become an increasingly important part of marine spatial planning.

Educating the next generation of researchers and managers

At present, the young discipline of submerged prehistoric landscape research is being shaped by researchers from different scientific fields. Most of them are geologists, geophysicists, archaeologists or heritage managers. Until now, there has been a shortage of professionally trained personnel in this field. It is hard to find university degree programmes or even special university courses in submerged prehistory, and standard courses on marine archaeology are rare. Improving this unsatisfactory situation in education must be a key for the future of submerged prehistoric landscape research on the continental shelf and other parts of the world. As special interdisciplinary field courses organised as part of the SPLASHCOS Action in Denmark, Estonia, Greece, Israel, Spain and Malta have shown, both students and early stage researchers are keenly interested in high-standard courses. It would therefore be a good idea to establish interdisciplinary university courses comprising underwater excavation and mapping, recording and conservation of artefacts, as well as acoustic surveys, sea-level modelling and palaeoenvironmental and geochronological analysis of palaeocoastlines.

These courses should also be open and attractive to young technicians and engineers about to begin their careers in the offshore industry. These graduates will be aware of the special technical requirements and needs of the research on submerged landscapes and sites, and their special technical approach will be invaluable for the development of future documentation and sampling technologies, especially in areas with depths of more than 10 m and with low visibility. In addition, engineers and managers in the marine industry who have experience with the aims and methods of prehistoric submerged landscape research will probably be enthusiastic about close cooperation.

The granting of an endowed professorship would be an important step forward to improve the current situation in education on submerged prehistoric landscape research. It could be installed in an institute for marine geology, archaeology or engineering at a European university so that the required technical equipment is available.

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References

Bailey, G. 2011: Continental Shelf Archaeology: where next?, in J. Benjamin, C. Bonsall, C. Pickard & A. Fischer (eds): *Submerged Prehistory*, Oxbow Books, Oxford, 311–331.

Benjamin, J., Bonsall, C., Pickard, C. & Fischer, A. (eds) 2011: *Submerged Prehistory*, Oxbow Books, Oxford.

Bicket, A. (ed.) 2011: *Submerged Prehistory: research in context*. Marine Aggregate Levy Sustainability Fund (MALSF), Science Monograph Series: No. 5, Edinburgh.

Bowens, A. (ed.) 2008: *Underwater Archaeology: The NAS Guide to Principles and Practice, 2nd Edition*. Wiley-Blackwell, Chichester.

Fischer, A. 2011: Stone Age on the Continental Shelf, in J. Benjamin, C. Bonsall, C. Pickard & A. Fischer (eds): *Submerged Prehistory*, Oxbow Books, Oxford, 298–310.

Fischer, A. & Bailey, G. (eds) 2015: *Atlas of the submerged Prehistory of Europe*. Kopenhagen in print.

Fischer, A. Mennenga, M. & Jöns, H. 2015: The European Stone Age underwater archaeological record by numbers. In: A. Fischer & G. Bailey (eds): *Atlas of the submerged Prehistory of Europe*. Kopenhagen in print.

Flemming, N.C., Çağatay, N., Chiocci, F.L., Galanidou, N., Jöns, H., Lericolais, G., Missiaen, T., Moore, F., Rosentau, A., Sakellariou, D., Skar, B., Stevenson, A., Weerts, H. 2014: *Land Beneath the Waves: research strategies in submerged landscapes and sea level change – A joint geoscience-humanities research strategy for European Continental Shelf Prehistoric Research*. Chu, N.C. & McDonough, N (eds) Position paper 21 of the European Marine Board, Ostend.

Gaffney, V., Fitch, S. & Smith, D. 2009: *Europe's lost world: the rediscovery of Doggerland*. CBA research report 1955, York.

Gaffney, V. L., Thomson, K. & Fitch, S. (eds) 2007: *Mapping Doggerland: the Mesolithic landscapes of the southern North Sea*. Archaeopress, Oxford.

Ginkel E. van, Reumer, J. & Valk, B. van der 2014: *Schatten van het mammoetstrand*. Havenbedrijf Rotterdam, Rotterdam.

Godwin, H. & Godwin, M. 1933: 'British Maglemose harpoon sites'. *Antiquity*, 7, 36–48.

Gregory, D. 2012: Development of Tools and Techniques to Survey, Assess, Stabilise, Monitor and Preserve Underwater Archaeological Sites: SASMAP, in M. Ioannides, D. Fritsch, J. Leissner, R. Davies, F. Remondino & R. Caffo (eds): *Progress in Cultural Heritage Preservation. 4th International Conference, EuroMed 2012, Lemessos, Cyprus, 2012*. Lecture Notes in Computer Science, Vol. 7616, 367–371.

Harff, J. & Lüth, F. (eds) 2007: SINCOS – Sinking Coasts: geosphere, ecosphere and anthroposphere of the Holocene Southern Baltic Sea. *Bericht der Römisch-Germanischen Kommission* 88, 7–266.

Hartz, S. & Lübke, H. 2006: New evidence for a chronostratigraphic division of the Ertebølle culture and the earliest Funnel Beaker culture on the southern Mecklenburg Bay, in C. J. Kind. (ed.): *After the Ice Age: settlements, subsistence and social development in the Mesolithic of Central Europe*, Materialhefte zur Archäologie in Baden-Württemberg 78, 59–74.

Henderson, J., Gallou, C., Flemming, N.C. & Spondylis, E., 2011: The submerged prehistoric town at Pavlopetri in southern Greece, in J. Benjamin, C.L. Bonsall, C. Pickard & A. Fischer (eds): *Underwater Archaeology and the Submerged Prehistory of Europe*, Oxbow, Oxford, 207–218.

Jöns, H. 2011: Settlement development in the shadow of coastal changes: case studies from the Baltic rim, in J. Harff, S. Björck & P. Hoth (eds): *The Baltic Sea basin*. Springer-Verlag, Berlin-Heidelberg, 301–336.

Jöns, H. 2013: Von den Naturwissenschaften lernen? Überlegungen zu Beprobungs- und Untersuchungsstrategien in der archäologischen Siedlungsforschung, in S. Brather & D. L. Krausse (eds): *Fundmassen. Innovative Strategien zur Auswertung frühmittelalterlicher Quellenbestände,* Materialhefte zur Archäologie in Baden-Württemberg 97, 65–74.

Jöns, H., Lübke, H., Lüth, F. & Terberger, T. 2007: Prehistoric settlements and development of the regional economic area: archaeological investigations along the Northeast-German Baltic Sea coast. *Bericht der Römisch-Germanischen Kommission* 88, 149–188.

Lampe, R., Endtmann, E., Janke, W., Meyer, H., Lübke, H., Harff, J. & Lemke, W. 2005: A New Relative Sea-Level Curve for the Wismar Bay, N-German Baltic Coast. *Meyniana* 57, 5–35.

Lübke, H. 2005: Spät- und endmesolithische Küstensiedlungsplätze in der Wismarbucht: Neue Grabungsergebnisse zur Chronologie und Siedlungsweise. *Bodendenkmalpflege in Mecklenburg-Vorpommern, Jahrbuch* 52, 83–110.

Lübke, H. 2002: Submarine Stone Age settlements as indicators of sea-level changes and the coastal evolution of the Wismar Bay area, in Lampe, R. (ed.): *Holocene Evolution of the South-Western Baltic Coast: geological, archaeological and palaeo-environmental aspects*. Field meeting of INQUA Subcommission V, 2002. Greifswalder Geographische Arbeiten 27, 203–210.

Mahon, I., Pizarro, O., Johnson-Roberson, M., 2011: *Reconstructing Pavlopetri: mapping the world's oldest submerged town using stereo-vision*. IEEE International Conference on Robotics and Automation, 2315–2321.

Noort, R. van der 2011: *North Sea archaeologies: a maritime biography, 10,000 BC to AD 1500*. Oxford University Press, New York.

Pedersen, L., Fischer, A. & Aaby, B. (eds) 1997: *The Storebælt Publications. The Danish Storebælt since the Ice Age: man, sea and forest*. A/S Storebaelt Fixed Link, Kopenhagen.

Schmölcke, U. & Jöns, H. 2013: Livestock in Early Medieval Ports of Trade on the Baltic Sea: the Emporium Reric and other Northern German sites, in S. Kleingartner, T.P. Newfield, S. Rossignol, & D. Wehner (eds): *Landscapes and Societies in Medieval Europe East of the Elbe: interactions between environmental settings and cultural transformations*. Papers in Medieval Studies 23, Toronto, 54–72.

Svendsen, J.I., Alexanderson, H. & Astakhov, V.I. 2004: Late Quaternary ice sheet history of northern Eurasia. *Quaternary Science Review* 23, 1229–1271.

Verhart, L. 2005: Mesolithic from the North Sea floor, in L. P. Louwe Kooijmans, P. W. van den Broeke, H. Fokkens & A. L. van Gijn (eds): *The Prehistory of the Netherlands, Vol. 1*, Amsterdam University Press, Amsterdam, 157–160.

Websites

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Link 6: http://www.seadatanet.org/

Link 7: http://www.emodnet.eu/human-activities

Link 8: http://sasmap.eu/

Link 9: https://www.maasvlakte2.com/kennisbank/archaeology.pdf

Link 10: https://www.nord-stream.com/press-info/library/?category=&country=&q=EIA&type=&page=2&sort_documents=document_type

Link 11: http://www.marmaray.com/

Link 12: http://www.mossproject.com/

Link 13: http://www.machuproject.eu/

Link 14: http://wreckprotect.eu

Link 15: http://www.cost.eu/domains_actions/mpns/Actions/IE0601

Link 16: http://www.seadatanet.org/

10 | How should we manage the archaeological sources in Poland?

Paulina Florjanowicz

Abstract: The issue of managing archaeological sources has been debated for over a century, ever since archaeology became a full-fledged scientific discipline. In order to pass on knowledge about our common heritage to future generations, we must improve and intensify archaeological heritage management. Archaeology is not restricted to fieldwork alone, which is simply the beginning of a lengthy research process. Adopting this principle will produce a more efficient research funding system in accordance with the Valletta Convention. There needs to be broader access to research results: the immediate integration of new data into the scientific system will facilitate a wide range of synthesis studies. Financial regulations and the conditions for applying for research permits should be clearly defined. Heritage conservation services need to be more efficient in terms of monitoring and enforcing the law. Field data standards should be developed using digital technologies in order to ensure the quality and compatibility of research results. All stakeholders must be consulted in order to develop a national strategy for the storage and conservation of archaeological materials. Archaeology is not only for specialists: broad access to the results of archaeological research for different audiences, together with a clear and rigorous interpretation of data, are prerequisites for sustainable programmes and for a legal framework for the protection of archaeological heritage.

Keywords: synthesis, standards, sharing, storage policy, access

Introduction

When discussing the management of sources for European history from an archaeological perspective, we first need to ask: What are these sources? Are they – as we were once taught – whatever has been excavated, or is this too narrow a definition?

More than a century of professional archaeology in Europe and, in particular, several decades of large-scale rescue excavations, have given us not only a huge number of artifacts and samples, but also thousands of volumes of valuable field documentation, as well as terabytes of digitised archives from more recent times. Most will never be exhibited or published, which raises the question: what should we do with it all? How should we manage it?

This issue has been the subject of debate in Poland for a long time. The first book on heritage management, including archaeological sources, was published in 1920, only two years after Poland's independence following 123 years of being off the map of Europe. This was a short publication from the Ministry of Fine Arts and Culture, presenting basic heritage management standards and explaining the idea of heritage protection to a broad public. It was published long before the Athens Charter of 1931, not to mention the Valletta Convention of 1992. It demonstrates that we have known for almost a hundred years what needs to be done in order to protect heritage: 'We observe everywhere this paramount principle: it is our duty to strive to bequeath existing historical monuments to posterity in as pristine a shape as possible.' (*Opieka* 2005).

It goes on to say about archaeological heritage:

'Of all the historical monuments, excavations face the greatest threat, as their discovery is in general accidental and equivalent to a total obliteration of the find. The value of an excavation lies not in that it is an extraction of individual objects from the soil. It usually gains significance after all the circumstances that accompany the discovery of the objects have been investigated and recorded, i.e. the topography of a locality, the geological layer, the positioning, the distribution and the mutual relationships of the objects.' (*Opieka* 2005).

The reality is quite different, however. For most archaeologists, fieldwork is the best part of the job. It is what many would prefer to focus on; it is also what economic reality obliges them to focus on anyway. Nowadays, archaeologists are often paid not for actual research but to make land available for construction.

A less exciting part of the job, for most, is when the actual results of research are being generated. This is the evaluation, analysis and – something that is often forgotten – synthesis, based on an analysis of the data.

Poland has seen a huge programme of large-scale rescue excavations over the past 10-15 years. This initially related to investment in gas pipelines, and then to the construction of motorways throughout the country. Thousands of sites were excavated and truckloads of finds were sent into museum storage every year. The quantity, scope and quality of these

newly collected sources show clearly that the entire prehistory of Poland as we know it has to be rewritten. Nevertheless, the number of new publications is quite small, the curricula for archaeology students remain unchanged and it seems as though everyone is still out in the field.

Given all the above, what is the proper and feasible way to reach a stage at which the sources we have gathered are actually well managed and usable?

To be able to answer this question, it makes sense to divide it into four parts: research programme, documentation standards, storage policy and access to results. Let's look at them one by one, with the aid of contemporary examples from Poland.

It is worth noting that Poland ratified the Valletta Convention in 1995 and began work almost immediately on a new heritage act that would implement all the Convention's requirements into the system of national legislation. The new act entered into force in 2004 and its provisions provided a fairly solid foundation for securing archaeological heritage.

Unfortunately, the implementing regulations were (and continue to be) the weakest part of the new legislation process. They are very general and leave too much room for interpretation. This makes execution of the law rather difficult and the final outcome is often far removed from the spirit of the Valletta Convention. In addition, the official requirements for documenting fieldwork and for analysing the process are very general and rather anachronistic.

Clear and up-to-date implementing regulations are very important, however, for the process of managing the finds. In Poland, where archaeology operates in a free market, the right control is especially important. There are approximately 450,000 archaeological sites in the national inventory, and the heritage inspectorate issues more than 7000 permits for archaeological works each year. The vast majority of these (almost 90%) are rescue excavations conducted by commercial archaeology companies. Standardised field documentation and reports are therefore extremely important since they underpin the interpretation of sites in the post-excavation process. In most cases, this is all that remains of the work once the site no longer exists.

Research programme

Before conducting any research in any area, we need to ask one fundamental question: why? Why do we want to conduct this particular research? What is its purpose? In the case of archaeology, the answer seems obvious: to gather more data for scientific research and to protect the archaeological heritage (in the case of rescue archaeology, it means protecting movable finds and securing knowledge about the site itself through proper documentation). Field documentation is of course essential. However, for the uncovered sources to be actually used (and therefore saved), there also needs to be a proper analysis subsequently, and the research results have to be disseminated/shared.

Under Article 6 (ii) of the Valletta Convention, the financing of any rescue archaeology project should cover not only the fieldwork stage but also the later analysis and dissemination of results.

Unfortunately, the reality is often very different. Polish regulations require that, once the fieldwork is concluded, archaeologists should provide the heritage inspectorate with proper records (field journals, find inventories, plans, drawings, photographs, stratigraphy schemes, etc.) and the final report (the regulations do not specify the content and structure of the report). The law does not require that any further analysis be conducted or that the results be published. Site owners, on the other hand, are unhappy at the prospect of any archaeological work, let alone at having to fund anything beyond the minimum required by law. The upshot, in many cases, is that excavation results remain unknown to other researchers and are not included in further scientific discourse.

Given that almost all excavations in Poland are nowadays conducted by commercial archaeology firms, most archaeological finds are never properly researched, preserved or published. These companies are not to blame for this situation; rather, it is an inefficient archaeological policy that turns what should be a properly recorded archaeological site into a simple case of 'making the plot available for construction'.

There are, however, some positive exceptions to this general trend – all initiated in recent years by the National Heritage Board of Poland.

In 2011 the General Directorate for National Roads and Motorways (GDDKiA), Poland's main construction investor, signed a licence agreement with the National Heritage Board allowing the latter to publish online many of the reports from rescue excavations financed by GDDKiA.

In that same year, the National Heritage Board also relaunched its *Report* series, announcing research results from rescue excavations conducted in areas of motorway construction in Poland (the series was initiated in 2001 but then suspended in 2007). *Report* is published in book form but all the articles are also available online in PDF format.

Finally, the National Heritage Board, which runs the Ministry of Culture and National Heritage's grant scheme for protecting archaeological heritage, reoriented the programme priorities to support the publication of archaeological research results from past excavations, some of which took place decades ago but whose results had never been widely disseminated.

The common goal of all these initiatives was to bring the focus of Polish rescue archaeology back to research and to sharing sources. After just a few years, we can already see the benefits, as new publications and archive information are frequently being referred to in the archaeological literature.

But there is a lot more to be done in this area. There is a great need for the instant sharing of the latest excavation results among archaeologists – not only in terms of publishing reports, but also sharing basic data to allow for a more synthesising approach in research. This is definitely possible, given today's IT opportunities.

It is worth mentioning that the Polish Academy of Sciences has recently launched a project aimed at writing a new prehistory of Poland, based on the enormous volume of finds and information from the intensive, large-scale rescue archaeology programmes that have led to thousands of sites throughout the country being unearthed and recorded.

Above all else, however, essential changes must be made to the national heritage policy relating to archaeology. Without clear, significant changes to the implementing regulations relating to archaeology in heritage law (unambiguous, up-to-date requirements regarding permits for research and subsequent reporting, with an obligation to analyse and publish the results), the entire system of archaeological protection will continue to be inefficient. Another area in which improvements can be made is for the heritage inspectorate to exercise stronger control and ensure that the law is enforced.

Documentation standards

Another critical issue for improving the management of archaeological sources is the need for clear guidelines on field recording and documentation. These should also include and promote the use of the latest digital technologies.

Unfortunately, as already mentioned, Polish regulations relating to archaeological site recording are anachronistic and very general. Furthermore, given the general legislative tendency to remove constraints in all spheres of life, we can expect further simplification and facilitation when it comes to carrying out archaeological works in the near future. Whereas such a trend is generally highly commendable, some specific areas require strict regulations and controls. As a non-renewable and highly endangered resource, archaeological heritage is definitely one such area. Minimum provisions on issues such as the field experience needed to conduct archaeological excavations, and anachronistic requirements with respect to documentation techniques, will eventually reduce the quality of research overall, which could ultimately call into question the validity of conducting such research.

Thus one of the most important ways to enforce the proper management of archaeological resources is to have clear requirements for how research is conducted and recorded. Making them less stringent is not the right solution.

As part of the heritage law implementing regulations, these requirements should also include standards for field site recording and documentation to ensure that the quality of work does not decline, that all data is properly recorded and that all available technological solutions have been deployed. At present, different archaeologists apply different documentation techniques, which in some cases affects both the quality and compatibility of the research results.

Storage policy

When discussing the proper way to manage archaeological data, it is important not to forget about the actual finds and what happens to them once the research project is over.

When applying for a permit to conduct any archaeological work in Poland, applicants must secure a proper place to store all finds. The law also stipulates that all archaeological finds belong to the State. Most applicants name a museum or university as the place of storage, but the law does not specify the requirements for such places more closely, so other locations can also be nominated.

As mentioned above, more than 7000 permits are issued annually for different kinds of archaeological investigation, so we can only imagine the number of new finds being discovered each year. Nearly 90% of the permitted works are rescue excavations, where the funding does not cover the costs of conserving and storing the finds after the contract ends. On the other hand, there are only about 20 museums in Poland that either specialise in archaeological heritage or at least have professional archaeology departments. Only a few of them have professional storage facilities. There is no national system for storing archaeological finds, even though, technically, they all belong to the State.

On top of that, all finds are recorded and stored in perpetuity, for the purposes of possible further analysis, even though the majority are bulk finds with no exhibition potential (animal bones, remains of clay floors, non-characteristic pieces of pottery). Their value is statistical, or they may be used for further analysis, which in most cases will never take place.

Given the enormous increase in the number of excavated sites in Poland during the last twenty years, there is an urgent need to discuss a new policy on the storage of archaeological finds. There are several questions that have to be asked: Is the eternal storage of all finds useful/justified? If so, who should finance it (the State, investor)? If not, what should be kept and who should decide?

For the time being, this is still a taboo issue for many archaeologists. Other stakeholders, on the other hand, are becoming less interested in storing the finds. A discussion is therefore unavoidable and the sooner it starts the better. There is still a chance it will focus on the actual value of archaeological heritage and lead to solutions that are acceptable to all parties, including archaeologists. If, however, archaeologists ignore the subject, economic dictates will take over, causing a true archaeological catastrophe.

Figure 10.1: The ruins of the *palatium* in Ostrow Lednicki (10th century AD) are among the oldest evidence of the Polish state. The site is managed by the Museum of the First Piasts at Lednica, which conducts both professional research and educational programmes for the general public. (© Paulina Florjanowicz).

Figure 10.2: The first reconstruction of the fortified settlement in Biskupin, belonging to the Lusatian culture, was made as early as the 1930s. Today, Biskupin is still the best known and most frequented Polish archaeological site. (© Paulina Florjanowicz).

Access to results

As mentioned above, opportunities to access the results of archaeological investigations and to share them with other researchers are essential in the process of protection and management. However, it is equally important that all stakeholders be offered access to these results, especially the general public. This statement may sound like a truism, but a good deal of work is still required in this area in Poland.

A nationwide survey conducted in Poland in 2011 shows that Poles attach great value to cultural heritage, with 89% of respondents saying it was important to society (Florjanowicz 2012). However, when asked what kind of monument or heritage site they were most likely to visit, only 21% mentioned an archaeological site (Florjanowicz, Kozioł & Trelka 2013). Castles (41%), palaces (38%) and old towns (30%) were much more popular.

Archaeological heritage is not widely known within Poland. There is more than one reason for this; in any event, I believe it is due to lack of information, rather than lack of interest. This makes it even more important that the results of the thousands of excavations conducted each year are widely shared with the public.

There are some positive examples of archaeological promotion in recent years. These include archaeological museum development, such as the new exhibition in the Museum of the First Piasts at Lednica (Figure 10.1) or the Biskupin Museum (Figure 10.2), as well as highly popular archaeological fairs that take visitors

Figure 10.3: Every year the Slavs and Vikings Festival attracts thousands of visitors to the small island of Wolin. They come from all over the Baltic Sea region to enjoy the benefits of experimental archaeology and to rediscover old and powerful connections. (© Paulina Florjanowicz).

back in time and show the potential of experimental archaeology. The most popular in this regard is the Slavs and Vikings Festival, organised on Wolin island every August (Figure 10.3).

The great popularity of these places proves that archaeology is indeed very attractive to the general public. The number of attractions, however, is still insufficient. Most archaeological museums have traditional, non-interactive exhibitions and most archaeologists do not pay enough attention to sharing the results of their work with non-professionals. Such negligence only widens the gap between archaeology and the 'real world'. In the long term, this attitude will not only cause society to lose interest in archaeological heritage, but will place all of archaeology in jeopardy. It might lead to a situation in which the general public (taxpayers) and the decision-makers no longer accept or understand the need to save this kind of heritage, and in which rescue or preventive archaeology is no longer carried out. A cynic would say that all problems with archaeological sources management will then resolve themselves, simply because there will be no sources left to manage.

Conclusions

To prevent this from happening, the following changes should be made to Polish archaeological policy, and in some cases also to the mentality of archaeologists:

- Archaeology should be about more than just fieldwork – that is merely the beginning of the research and protection process.
- The results of archaeological investigations should be shared as quickly and widely as possible. This is the only way to justify research in this area and to allow synthesising studies.
- There need to be unambiguous, up-to-date implementing regulations with regard to permits and reporting of any archaeological investigation, as well as stronger control over their execution.
- There need to be clear, up-to-date standards for fieldwork recording, also using digital technologies, in order to ensure the high quality and compatibility of research results.
- There needs to be a new storage policy for archaeological finds – a state-supported (legally and financially), nationwide system should be developed after consultations with all stakeholders.
- Archaeology is not only for archaeologists – broad access for all is the *sine qua non* if archaeological heritage protection policies are to continue.

References

Literature

Florjanowicz, P., 2012: The value of archaeology: Resource, heritage or pure fun?, in A. Lagerlöf (ed.): *Who cares? Perspectives on Public Awareness, Participation and Protection in Archaeological Heritage Management*, EAC Occasional Paper No. 8, 73–78.

Florjanowicz, P., Kozioł, A., Trelka, M., 2013: *Społeczno-gospodarcze oddziaływanie dziedzictwa kulturowego*. Raport z badań społecznych, Warsaw (PDF available at http://www.nid.pl/upload/iblock/472/472e646a7a6f116cb09105f922695509.pdf, (accessed 30/08/2014)).

Opieka, 2005: *OPIEKA NAD ZABYTKAMI I ICH KONSERWACJA: Conservatio aeterna creatio est 1920* (reprint with English translation), Warsaw.

Legal Acts

European Convention on the Protection of the Archaeological Heritage (Revised), Valletta, 16 January, 1992.

Act on the protection of monuments and the guardianship of monuments (Dz. U. no. 162, poz. 1568), 2003 (Polish).

Decree of the Minister of Culture and National Heritage on conducting conservation, restoration and construction works, conservation and architectural research and other activities affecting a listed monument, as well as archaeological research (Dz. U. no. 165, poz. 987), 2011 (Polish).

Websites

http://www.nid.pl/pl/Dla_specjalistow/Badania_i_dokumentacja/zabytki-archeologiczne/badania_archeologiczne_zestawienia/ (accessed 30/08/2014).

http://www.nid.pl/pl/Dla_specjalistow/Badania_i_dokumentacja/zabytki-archeologiczne/publikacje-wynikow-badan/ (accessed 30/08/2014).

http://www.nid.pl/pl/Dla_specjalistow/Wydawnictwa/wydanie.php?ID=2239 (accessed 30/08/2014).

http://nimoz.pl/pl/bazy-danych/wykaz-muzeow-w-polsce/baza-muzeow-w-polsce?q=archeolo&sort=nazwa&by=asc (accessed 30/08/2014).

https://www.facebook.com/pages/Centrum-S%C5%82owian-i-Wiking%C3%B3w-Wolin-Jomsborg-Vineta/245778572122704 (accessed 30/08/2014).

http://www.lednicamuzeum.pl/ (accessed 30/08/2014).

http://www.biskupin.pl/ (accessed 30/08/2014).

Résumés

Marie-Jeanne Ghenne

1 | 'Je voulais être un archéologue' – Une crise de confiance propre au 21e siècle

Graham Fairclough

Ce chapitre résulte d'une présentation au symposium de l'EAC consacré à « L'esprit de la convention de Faro : intégrer l'archéologie dans la société ». Il répond aux inquiétudes exprimées dans les notes de réunion quant à la pertinence de l'avenir social des archéologues à la lumière des différences entre les conventions de La Valette et de Faro, des tendances idéologiques actuelles dans beaucoup de pays européens vers l'amoindrissement de la puissance publique et la fin du support des gouvernements en matière de gestion du patrimoine archéologique. De plus, ce chapitre envisage la possibilité que cette crise, outre le fait qu'elle est imposée de l'extérieur, soit aussi une crise d'identité interne ; on peut conclure sur la question de savoir si ce n'est pas nous les archéologues qui devrions mieux nous intégrer dans la société, grâce à un *aggiornamento* de notre relation au travail.

2 | De Malte à Faro, dans quelle mesure y sommes-nous arrivés? Quelques faits et chiffres de l'engagement public dans le secteur du patrimoine archéologique en Europe

Monique H. van den Dries

Le 15e anniversaire du symposium de l'*Europae Archaeologiae Consilium* (EAC), tenu en mars 2014 à Amersfoort (Pays-Bas), avait pour objectif de fixer le programme pour les agences patrimoniales nationales d'Europe. Intégrer l'archéologie dans la société, en accord avec l'esprit de la convention de Faro du Conseil de l'Europe (2005), était prioritaire dans ce programme. Comme l'engagement du secteur avec le public est maintenant à l'ordre du jour pour plusieurs décennies, durant le symposium l'auteur a considéré dans quelle mesure la discipline avait progressé. Dans cet article, la discussion est prolongée, principalement sur la base de deux études paneuropéennes parmi des travaux professionnels en archéologie, une enquête EAC (2013) et l'enquête « *Discovering the Archaeologists of Europe* (2012-2014) qui offre un aperçu pertinent.

3 | Le patrimoine dans une société dynamique: modification sociétale et ses défis pour les experts en patrimoine

Roel During

Dû à la récession du rôle des gouvernements, le patrimoine culturel est en train de devenir de plus en plus l'affaire des profanes en quête de points d'ancrage au sein d'une société en constante mutation. En conséquence, les experts du patrimoine culturel rencontrent des prétentions *bottom-up* surexploitant les critères de « canonisation » et des pratiques en conflit avec leur savoir-faire scientifique. Si l'expert participe aux initiatives des profanes, il sera confronté à de difficiles dilemmes exposés ici dans le contexte de cas variés de *bottom up*. On arrive à la conclusion qu'il est nécessaire de repenser le rôle et la position de l'expert, étant donné que la participation de la société interviendra dans un processus en cours de changement dans un contexte de gouvernance.

4 | Oser choisir: la fabrique de la recherche

Dries Tys

Au début des années quatre-vingt-dix, dans de nombreux pays, la convention de La Valette fut accueillie avec grand enthousiasme. Depuis, dans beaucoup de régions, l'archéologie fait partie du processus de l'aménagement du territoire. Aujourd'hui le travail de terrain est devenu un processus mécanique et la production archéologique qui est payée par l'aménageur, consiste en un « nettoyage » du terrain de tout ce qui est patrimoine, de préférence court et bon marché. Que l'autre production archéologique - la connaissance de notre passé matériel - manque souvent totalement alors que la société n'a jamais payé autant pour l'archéologie, alors que le nombre de données extraites est chaque jour en augmentation. De manière à résoudre ce « Catch 22 » pour l'archéologie, il est indispensable de se réorienter et de réintégrer la recherche dans le processus de la gestion archéologique.

5 | Críoch Fuinidh (le pays le plus éloigné ou le dernier) : une interprétation de La Valette

Margaret Keane

En tant qu'Européens et archéologues, nous avons divers points de vue sur la manière dont La Valette devrait être appliquée. Des approches différentes ont été mises sur pied en fonction des contextes de nos états, de nos différences historique, sociétale et législative. Cette contribution met en évidence un débat à propos de la protection en relation avec le système de planification de travaux d'aménagement privés et publics. L'article trace les changements de règlementation intervenus en Irlande entre la fin des années 80 et l'heure actuelle, en références aux jugements légaux et controverses publiques. Il entame une discussion sur le rôle de programmes tels qu'INSTAR, cherchant à franchir le fossé entre l'archéologie académique et l'archéologie commerciale, développant une réponse concertée de recherche pour la production de données archéologiques. Le défi est de savoir comment un vaste programme européen peut respecter la diversité d'approches. J'espère démontrer comment la règlementation irlandaise, en matière de fouilles, a été en grande partie efficace dans le développement de notre connaissance de la ressource archéologique, dans la réponse aux exigences de La Valette et dans l'apport d'une réponse appropriée à la

valeur que la société civile irlandaise accorde à notre passé.

6 | Initiatives néerlandaises pour rendre les résultats des fouilles dites de « Malte » pertinents en faveur de la gestion du patrimoine, de la science et de la société

Bert Groenewoudt

A moins que les fouilles issues de « Malte » ne soient de haute qualité et pertinentes, elles présentent une dépense inutile. L'archéologie dite de Malte, comme l'archéologie académique, doit se justifier par des questions de recherche scientifique.
La synthèse – phase finale critique dans le processus de la connaissance scientifique (et formulant de nouvelles questions) doit être bien structurée. Cet article se concentre sur les initiatives qui ont été lancées aux Pays-Bas afin d'encourager systématiquement la recherche synthétique, spécialement fondée sur les résultats de l'archéologie dite de Malte. L'archéologie académique qui est sous pression à travers l'Europe pourrait réaffirmer son rôle et sa pertinence en cherchant des liens plus étroits avec la recherche liée à l'archéologie dite de« Malte ». Le défi est d'envisager le bon côté de cette archéologie, et de tirer le meilleur parti des opportunités qu'offre l'archéologie dite de « Malte ».

7 | Oser sélectionner des échantillons – sans fouilles. Réflexions sur des stratégies d'échantillonnage et d'investigation en matière de recherche archéologique sur des implantations

Hauke Jöns **(Session 2 Dare to choose)**

En dépit d'une coopération étroite depuis de nombreuses décennies entre archéologues et experts à partir d'un large éventail des sciences naturelles dans le but de clarifier des questions liées à l'histoire de la culture, de grandes divergences d'opinions entre les différentes disciplines règnent encore, non seulement au niveau de l'importance et de la représentativité d'échantillons hasardeux, mais aussi concernant les stratégies à déployer en matière de récupération et d'analyse du matériel au cas par cas. Dans ce contexte, un appel est lancé pour qu'à la fois durant la planification des fouilles et l'évaluation des résultats, les disciplines participatives soient associées et discutent quelles composantes devraient être incorporées aux archives de manière à ce que les futures générations de chercheurs soient aussi à même d'étudier le matériel enregistré, prélevé et stocké. Simultanément, lors de l'évaluation des résultats des fouilles, une plus grande attention mériterait d'être accordée au fait que des conclusions scientifiques fiables sur certaines questions relatives à l'histoire de la culture ne pourraient aussi être atteintes par le biais de l'analyse d'échantillons.

8 | Les archives archéologiques numérisées en Europe : opportunités et défis

Franco Niccolucci

L'usage de l'informatique en archéologie a offert un grand nombre de séries de données contenant des informations au sujet de fouilles, d'artefacts et de sites. La plupart d'entre elles se sont développées indépendamment les unes des autres, au moyen de diverses structures de données et organisées selon les besoins spécifiques provenant de séries de données. La fragmentation qui en résulte entrave sérieusement la possibilité de réutiliser les données ou d'avoir un panorama global à travers les limites administratives ou les barrières du langage. ARIADNE, est un projet financé par l'Union européenne, intégrant une infrastructure ayant pour but de créer un réseau paneuropéen de données archéologiques. Standardisation de structures de données, intégration de séries de données et interopérabilité sont les objectifs prioritaires du projet, accompagnés d'une série d'outils à la recherche de la connaissance de base, à la découverte des sources, à l'accès des données et de leur visualisation efficace. L'approche du projet dans le sens d'une centralisation favorise la responsabilité de la communauté de la recherche archéologique.

9 | Découvrir la préhistoire immergée en Europe – historique scientifique, buts, méthodes, résultats et perspectives du réseau européen Splashcos

Hauke Jöns **(Session 3 Managing the sources of European history)**

Ces cinq dernières années l'Union européenne a fondé le réseau Splashcos qui a mis en lumière la jeune et récente discipline « Plate-forme continentale de la recherche préhistorique ». Celle-ci est fondée sur une approche de recherches interdisciplinaires comprenant des méthodes d'archéologie géophysique, géologique, océanographique qui demandent un solide attirail technique très développé ainsi que des chercheurs de haut niveau.
Les recherches réalisées jusqu'à présent se sont déjà servis de la connaissance disponible au sujet de la vie préhistorique, principalement concernant les conditions économiques et environnementales que ces communautés avaient à affronter. Dans bien des cas les excellentes conditions de conservation, dans un sédiment gorgé d'eau, d'objets quotidiens, d'outils et de constructions réalisés à partir de matières organiques ont même offert un aperçu complètement neuf de la vie préhistorique. Ces vestiges ensevelis et conservés dans les profondeurs de la mer européenne doivent être considérés comme d'immenses archives de l'histoire de l'humanité, du déplacement côtier et aussi du niveau de la mer.
Réussir à découvrir et à examiner ces archives constituera aussi un défi pour la recherche future et nécessitera une coopération interdisciplinaire entre toutes les communautés et compagnies maritimes actives. En outre, des équipes de chercheurs hautement et multi qualifiés seront nécessaires. Ils devront avoir un accès permanent à l'équipement technique et aux données qui sont essentielles pour sauvegarder, examiner et rechercher ces sites et paysages ainsi que de promouvoir et de mettre en évidence les résultats obtenus.

10 | Comment devrions-nous gérer les sources archéologiques en Pologne ?

Paulina Florjanowicz

La gestion efficace des sources archéologiques est une question bien présente dans le débat depuis plus d'un siècle, depuis que l'archéologie est devenue une

discipline scientifique à part entière. Que peut-on faire afin de transmettre aux futures générations l'essentiel des connaissances sur notre passé commun?
Les actions les plus importantes qu'il faut entreprendre ou intensifier aujourd'hui, dans l'objectif de mieux gérer notre patrimoine archéologique, sont les suivantes :

- L'archéologie ne consiste pas uniquement en travaux de terrain qui, en réalité, se situent au tout début d'un long processus de recherche. L'adoption de ce principe permettra dans la pratique de rendre plus opérant le système de financement de la recherche, conformément à l'esprit de la convention de La Valette.
- Assurer un plus large accès aux résultats de recherches : l'introduction immédiate de nouvelles données dans le circuit scientifique facilitera toutes sortes d'études de synthèse.
- Rendre explicites les mesures d'application concernant la délivrance des permis de recherche et le règlement financier des travaux, rendre plus efficaces le contrôle et l'exécution de la loi par les services de la conservation du patrimoine.
- Afin d'assurer la haute qualité et la compatibilité des résultats de recherches, il est nécessaire d'élaborer des standards de documentation de terrain et de fouilles, en faisant appel à des techniques numériques.
- Il est indispensable de créer au niveau national et en consultation avec tous les acteurs concernés une stratégie de stockage et de conservation du matériel archéologique.
- L'archéologie n'est pas uniquement destinée aux spécialistes en la matière. Un large accès aux résultats des recherches archéologiques réservé à tous les publics ainsi que l'interprétation claire et rigoureuse de ces données sont des conditions sine qua non pour la préservation des programmes et des cadres juridiques de la protection du patrimoine archéologique.

Break-out session reports

Students and recent archaeology graduates at one of the break-out sessions discuss the themes and issues they feel are important for the future of archaeological heritage management in Europe.

Break-out session 1 | The spirit of the Faro Convention: embedding archaeology in society

Group 1
Chair: *Ben de Vries*
Minutes: *Karla de Roest*

As all members of the group agreed on the need to embed heritage and/or archaeology in society, this subject was not debated. Instead, the discussion dealt with the question of how do we know what the public wants. The overall feeling was that 'Faro doesn't mean forgetting about Malta'.

After all the statements were placed on the board, the chair proposed naming the three themes data, sharing and visualisation. Since the discussion tended to revolve around these three themes, assigning the statements was then quite straightforward. The group agreed on the themes and together placed the last 'floating' Post-its in one of them (see list below).

To answer the question about public expectations (what do they want?), it was felt that we need to get our facts straight on this topic. To appeal to a broader public, archaeologists need to know what the public is interested in. Or in other words: how can archaeologists see their profession through the eyes of outsiders? What are the effects of yet another 'open day' or 'dig-along day' on site? Does this really help to embed archaeology in society? The field needs to find instruments to measure the effects of these initiatives. This doesn't mean, however, that we should in the meantime stop trying to embed our profession in society.

The question was then raised as to whether this broader public should include everyone in society (e.g. through education at schools), or just those members of the public who are already interested in heritage. How do we want to embed our knowledge in society and who do we need to share it with? If we wish to target a large audience, it was argued, we should tap into the fact that everyone is interested in archaeology (it's exciting, the 'Indiana Jones effect'). If we do so, however, we somehow have to find a compromise between academia and public interest. What do we want the public to see of our research? How much do we want to 'dumb down' our research for the sake of reaching out to the general public? The overall feeling during this discussion is that we have to come up with something more than or different from the 'standard' end reports that archaeological excavations tend to lead to.

To make the public more aware and to be able to share our knowledge, professionals (archaeologists, heritage managers, etc.) should make an effort to visualise their work. They need to step down from the abstract level to a form of sharing or publication that the general public can understand. One suggestion was to show that archaeology can be a 'real science', something that many people are fascinated by. Another suggestion was to focus on feelings of identity and locality, presenting our results as lieux de mémoire, placed within the landscape/environment.

List of themes and statements

1. Data

- We have to come up with new and interesting scientific results and methods.
- Do we really know what society wants from archaeology?
- Find an answer to why we want archaeological heritage to be protected.
- How do we go from dissemination/information to dialogue?
- What are the effects of the approaches we have tried up until now?
- Digital information gathering: collecting information or other concerns from the public in general, inviting them to suggest the heritage inventory, as happens with immaterial heritage.
- Dissemination of results, not the projects themselves.
- Put more effort into investigating/analysing why the public/society should be interested in archaeology.

2. Sharing

- Heritage for building local identities. Participating and budgeting, NGOs and local authorities.
- Schools: importance of education.
- Ask society what they want to know, learn (more) about their neighbourhood.
- Participation means decisions?
- Can we really draw a line between professional and amateur archaeology (not from a technical point of view)? If so, where is this line? Which archaeological fields/items (archaeological heritage) are reserved for professionals?
- As a first approach, do we want a mass approach to embed the public/society in archaeology or a quality approach that society can also participate in?
- Can we persuade society that archaeology also belongs to them? Is there a real need for this? If so, how can we do it most effectively/quickly?
- Granting virtually open access to archaeological sites and monuments as part of the environment.
- Who is our focus for 'embedding' – those already attracted, or everyone? (the majority couldn't care less).
- How do we find a compromise/balance between the scientific interests of archaeologists and society's interests?
- Public awareness: inviting people to participate: taking a day's excavation results to shop owners and the public so that they know what is being discovered. Tourist purpose (historical routes/guides, offered in digital form) >> knowledge and protection/conservation.
- Long-term strategy: teaching children about archaeology. History is found in all school curricula (from secondary school onwards). Is archaeology?
- Redefine 'professional standard': professional behaviour is not professional if it excludes people.
- Don't put your faith in the government (that's too easy).
- The public: fences vs active participation in archaeological excavations. Is there a middle way?

3. Visualisation

- What is the product of archaeology for society?
- Storytelling! Made possible through archaeological marketing.
- We need sites of remembrance – lieux de mémoire.
- Change our approach to the popular presentation of results.
- Archaeology is very difficult to understand for non-archaeologists.
- Make visualisations of archaeological knowledge: make it possible to have a relationship with archaeology.
- We need archaeologists who view archaeology through the eyes of others. But is that possible?
- Always think: who might be interested? (Many people are interested in history!)
- 'Research' as the product ('dare to choose') isn't enough.
- Think digital (if you can't be found on the internet, you don't exist).
- Make use of the 'Indiana Jones effect'.

Group 2
Chair: *Adrian Olivier*
Minutes: *Cees van Rooijen*

The chair started with clear instructions about what was expected of the participants, after which they started filling in the yellow Post-it notes. Apart from a few asides, only the scribbling of pencils on paper could be heard for the next five minutes.

Each person then had to present their statements and stick the notes on the blackboard. Adrian summarised the key points and classified the notes into several clusters.

Three main clusters emerged:

1. People's participation in archaeology
2. Education and giving the results back to society (using modern methods)
3. Taking society's challenges as a starting point for archaeological work

The discussion that followed was along the lines of what was presented on the notes. The overall conclusion was that the Malta, Faro and other conventions have already included these points. The problem seems to be how to get things going and achieve real change, instead of just talking about it.

List of themes and statements

1. People's participation in archaeology

- Crowdsourcing as a way to make citizens work actively with archaeologists.
- Restore the breach between professional archaeologists and amateurs/avocational archaeologists.
- Fieldwork (landscape survey) in co-operation with societies that are interested in local history.
- Better ways of involving people.
- Promoting public participation in archaeological activities.
- Always involve the local population, but don't abandon academic standards.
- Interaction between public and professionals – how can this be achieved? Making archaeology more attractive, better marketing for younger generation (e.g. application of IT).
- Combine best practices outside archaeology to enlarge commitment to our heritage.
- Listen to people other than archaeologists before you act/write/organise an exhibition, etc.
- Raising awareness of local communities about their heritage. Local authorities should be the first to protect and preserve.
- A better selection of excavations requiring professional knowledge and ones that can be done by volunteers.
- The title should be 'Embedding archaeologies in societies (cultural, economic, etc.). Greater account should be taken of differences. There is no such thing as an overall solution.

2. Education and giving the results back to society (using modern methods)

Education and storytelling

- Archaeology gives us experiences that we need today and in the future.
- 'Investment'. Involving children in archaeology and local history in the field (it's exciting!) and in the classroom. See Young Archaeologists' Club.
- Promoting archaeology in education.
- Social archaeology (stories). Choose a focus for the subject and use it as an example to explain historical processes.
- Better storytelling. We archaeologists are often poor storytellers – we place too much emphasis on scientific stories.
- Explain the research aims more clearly to the public for places where authorities say they have to excavate.

Giving results back to society and using media/social media/digital technologies

- Results of archaeological research have to be synthesised and communicated to the general public.
- New ways and methods for disseminating ideas to the community (e.g. media, YouTube).
- All data has to be easily accessible for everyone.
- Become more inspired by new technologies to do our storytelling. Work with creative industries and open up your data: release it so others can use it.
- Facilitate theme parks, experimental archaeology, computer games/multimedia.
- 'Pay back' – extracting publicly accessible and attractive stories from developer-funded archaeology to demonstrate the value of their investment.
- Inform the public from the beginning.
- Society is changing rapidly – can the 'embedding' of archaeology cope with this speed? (internet, mobile, social networks, etc.)
- 'Ownership' – making archaeological/heritage inventories publicly accessible (intellectually and digitally), place-/landscape-based and permeable/interactive.
- Engagement/accessibility – always talk with the public in mind. This doesn't mean 'dumbing down'.

Attitude/Role of archaeologists

- Embedding society in archaeology. Archaeology as education and knowledge of the past.
- Pride in what we do so that we can persuade and share with others.
- Respect ourselves as scientists and archaeology as a scientific subject (dig-along day).
- It is already embedded. It is only archaeologists who think it isn't: 'Society doesn't understand us'.
- A great challenge would be to embed society in archaeologists.
- What does the public pay us for? Management is not the same as ownership.
- Embedding archaeology in society (research and management). It is not the sole property of academics.
- Managing archaeological sites must be part of the future generation. This requires more attention.

3. Taking society's challenges as a starting point for archaeological work

- Heritage should interact with society's challenges (spatial, economic, social, cultural).
- Heritage in society (spectrum: risk< – >identity).
- 'Meaningful' compliance: risk, focus on deliverables, honesty with ourselves and with stakeholders, responsibilities to public, tax-payer criteria.
- Don't ignore developments in society, but take advantage of them. Dare to challenge today!
- Look for relevance for society (e.g. heritage and water).
- Documenting the rapidly changing environment and people's attitudes. Considering and understanding the whole process (perception). Acceleration happens in every field – know how to keep up.
- Archaeology as a way to economic prosperity. Long-term economic benefits.

Preservation of archaeological heritage

- Preservation of archaeological sites not only for scientific reasons, but also because it is our heritage.
- Archaeological monuments have other values besides scientific (e.g. sustainability).
- We have to preserve archaeology for the future and the present, for scientific reasons and for the public.

Group 3
Chair: *Barney Sloane*
Minutes: *Djurra Scharff*

The group was asked to put forward their views, within the context of the theme, on points that should be on the agenda for making a difference in archaeological heritage management. The goal of the session was to find out which three themes the group wished to present in the plenary discussion.

After participants had written down statements on Post-it notes, they were asked to give a short explanation of their three points. The chair and secretary kept track of the different themes and wrote down seven overarching themes on flip sheets. Participants were then invited to stick their Post-its to the themes that matched the statement.

The participants' explanations and the following discussions centred around the seven subthemes. Two clear lines of reasoning emerged: one involving improving or increasing engagement and communication with the public and other stakeholders, and the other that we should be realistic about the public's possible level of interest and participation and that we should build our self-confidence.

After all the Post-its had been discussed and stuck to the sheets, the group chose three of the seven themes for presentation in the closing plenary discussion. The first theme chosen was 'Dialogue: understand what people want', meaning that we should canvas what the public wants to know or do. This involves not only 'sending' information, but specifically also includes listening and engaging in dialogue. The second was 'Realise the benefits for society'. This includes the idea that archaeology can offer benefits for society in the context of, say, social integration and sustainable development. The group agreed that archaeologists need to get better at formulating and discussing archaeology's benefits and values for society. The third theme chosen by the group was 'Explain archaeology and its benefits to developers and policymakers'. The group agreed on the need for a realistic and confident attitude, while at the same time pursuing ideals such as improving communication skills, engaging in dialogue, realising the benefits for society, embedding archaeology in education and conducting audience research.

List of themes and statements

1. Dialogue: understand what people want

- What products are people interested in? Investigate how they would like to become involved or acquire knowledge. Find out about the public's demands and interests.
- Understand what the public wants and be willing to accept this. The public may want monuments preserved, even if archaeologists don't.
- Try to understand what society wants from archaeology and find out how to survey this.

2. Realise potential benefits for society

- Archaeology and a sustainable society. Archaeological results/research show other ways of living. This is important in discussions about the future.
- Use archaeology as a tool for integration and socialisation.
- Pay more attention to public benefit when training students.
- Integrate heritage (archaeology) into everyday life. It is part of a whole system (social, political, economic).
- Get better at formulating and discussing the values and benefits of archaeology for society – in humanist terms.
- Focus on showing the cultural embeddedness of economics, natural science and technology – even in our society. Connecting the past and present is partly the job of archaeologists.
- Bring hope by showing other ways of living and thinking. Transforming the past into the present place.

3. Explain archaeology and its benefits to developers and policymakers

- Developers and corporate social responsibility. The impact of archaeology extends far beyond its findings; there are also benefits for developers and policymakers. New techniques, local engagement, training. Invest in analysing the benefits.
- Archaeology and spatial planning. How can we incorporate archaeological knowledge from excavations into planning or building? Archaeological place creation (buildings, parks, etc.).
- Make it clearer to developers how we make our selections and what the added value of research is. Developers can be important ambassadors.
- The focus should go back to the European level.
- Archaeology has a much better image among the public than it does among public authorities or planning managers. We need to fill the gap so that archaeology becomes a 'normal' activity.

Encourage local participation

- Share the fun of archaeological research with the local audience; invite them to participate. 'It's not just for archaeologists'.
- Organise dig-along projects.
- Grant direct access to the material. Archaeology (as a process) is boring, but the material is interesting.
- Voluntary excavations assisted by experts: lifelong learning, involve children as well as mentors, ensure safety and standards; investment schemes and human resources.

Change language and communication

- Dialogue: what does the other person think? We should listen instead of just talking.
- Social media. Busy people should be able to get feeds on archaeological activity. Work towards greater investment.
- Stress the economic value of heritage. We should speak the 'language of contractors'.
- Learn the language of 'non-archaeologists' and adapt our language for better comprehension.
- Improve publications aimed at the public.
- Archaeologists should change their communication (make it simpler) in their contact with the public.

Get archaeology into education (primary and secondary education)

- Achieve more collaboration with social sciences (in research).
- Education: make a link with history at primary school.
- Education: teach pupils to value their past and encourage an interest in their past.

Be realistic and confident

- Promote a better public understanding of archaeology, but be realistic about this.
- We should be realistic and relevant.
- Build self-confidence among archaeologists; beware of too much introspection and self-doubt.

Group 4
Chair: *Hans Mestdagh*
Minutes: *Marjo Schlaman*

This session began by reconsidering the position of archaeologists themselves. This was discussed in two ways: the role archaeologists create for themselves and the image they are confronted with. Participants highlighted three decisive factors in archaeologists' interactions with society: problems concerning the position of professionals in the public debate, an archaeologist's responsibilities towards the public, and in particular, taking yourself seriously. Self-awareness, self-development and the archaeologist's mindset were thus raised as key factors in professional education and development. In short, a conscious attitude towards heritage needs to be taught.

A second point of discussion was the importance of evaluating archaeology by and for the public, by giving meaning to public participation. For example, the value of amateur archaeologists could be embedded in improved quality standards and the experience of taking part in archaeology could be more highly valued and encouraged. This can create active participation whereby archaeology becomes a public identity resource.

A third theme was the idea that embedding archaeology in society can ensure solutions to societal problems because heritage concerns everyone. However, archaeology needs to be valued for its own sake and not as part of other disciplines or spatial planning. There needs to be more discussion about who decides how much money is spent and on which project. Is it the government or the audience? The public and archaeologists need to be educated to make the right choices, which brings us back to the first point of discussion.

Participants in the session identified three main themes for the agenda. These are: 'attitude', with subthemes 'attitude of mind' and 'attitude of action'; 'need for participation', with subthemes 'whose need for participation?' and 'inclusion'; and lastly, 'mainstreaming', with subthemes 'spatial planning and policy', 'education' (connected to the first theme) and 'the role of the past in the present'.

List of themes and statements

1. Attitude

Attitude of mind

- Image.
- Benefit <-> profit. Specific <-> general.
- Archaeology is fun!
- Develop archaeologists and their skills to go beyond the mechanics of excavation, recording and archiving. The professional norm should be to include effective outreach and participation by and for others.
- Make archaeologists understand why this (the theme of the session) is an issue; let them be involved in the academic sphere, as acting archaeologists or heritage managers.
- Increased self-awareness; humility (realism?) about our place in heritage, archaeology, landscape.
- What can society do for archaeology? (1) Emancipation of the profession; caring for the archaeologist as a worker.
- What can society do for archaeology? (2) Use the transnational report on professional archaeologists in Europe to improve the sector (Discovering the Archaeologists of Europe 2014).

Attitude of action

- Better cooperation within the heritage sector, joint actions rather than showcasing our own field.
- Ethical code of cooperation between professionals and the public.
- A greater connection with the intangibility of all heritage (doing archaeology/being an archaeologist involves more than just scientific rigour, data).
- Archaeology as a source of freedom.
- The value of archaeological heritage?
- Preservation and understanding (in a wider sense).
- Archaeology as an environmental resource.

2. Need for participation

Whose need for participation?
- Make participation meaningful. Participatory knowledge creation (by society). Go beyond 'them' and 'us'.
- Actively involve society in heritage.
- Participation and involvement (danger of professionalisation). Unserved audience <-> militants.
- How can we marry the needs of the local community with those of the archaeological/heritage community? e.g. the local community wants to remove water supply pipes in the historical town centre but they and politicians don't pay for archaeology. No money, no time?
- Re-evaluate the ways in which society can make an active contribution to heritage.
- Will it ever be possible to define a clear connection between archaeology, archaeologists and wider society (What/who is society? Are archaeologists separate from society?).
- Archaeology as a way to understand our identity.
- Professional standards: how can such standards be adopted across both professional and amateur groups (create wider involvement without compromising standards).

Inclusion
- What can archaeology do for society? Social cohesion, contributing to present-day culture, stimulation, experience.

3. Mainstreaming

Spatial planning and policy
- Responsibility of the government/legislature?
- Policy mainstreaming.
- Withdraw from the process of spatial planning. Not just spatial planning. Developers ≠ society
- Help them to understand our messages.
- Different approach to decision makers/politicians = don't just emphasise professional arguments
- Incorporate slow science in contract archaeology.

Education
- Education. Embedding archaeology in the curriculum.
- Harmonisation of archaeological education in the EU.

The role of the past in the present
- Past and present.
- Involve society + the public.
- The definition of heritage or archaeological community. A single individual or just a few people can represent the aims of a community. Who should we deal with in such cases? Local community vs idea community.

Student group
Chair: *Lara Elemans*
Minutes: *Charlotte de Hoogd*

The main theme was 'The spirit of the Faro Convention'. The three most important themes we concluded our break-out session with are described below.

The first theme was the need to integrate archaeology. There needs to be an interdisciplinary approach and a broadening of focus to include the education system and NGOs.

The second theme was the need to change the archaeological profession. We should change the definition and attitude of archaeology and focus on creating a new archaeological framework.

The final theme involved dealing with the public. We need to create a better relationship and understanding with them. We have to define who they are and what they want, keeping in mind the question of who dictates. There has to be public awareness and involvement, but we mustn't lose our professional scientific input as archaeologists. We can reach out to the public and involve them more through social media, TV programmes, etc.

List of themes and statements

1. Need to integrate archaeology

- Put more effort into educational awareness.
- Promote interdisciplinary education. Archaeology should be better integrated into heritage studies.
- Archaeology should be given a more important role in history education in primary and secondary school. If they know of its existence from a young age, they might value it more, and actually accept it as a scientific study.
- Don't just talk about interdisciplinary research, do it!
- The central governments should raise awareness, promote the Faro Convention, especially among NGOs.
- Involve more NGOs in popularising cultural/archaeological heritage.
- Involve school children in excavation, as in summer camps.
- There is a need for a legal framework at a national level. Faro should be the point of departure for the new (Dutch) heritage law.

2. Need to change the archaeological profession

- Work upwards from the base. Before we can embed archaeology into society, we need to be a professional field, which we currently are not. We need a European standard defining 'archaeologist'. Pay higher wages and end the disparities between the sexes (DISCO project).
- How can we improve transnational knowledge if archaeology and archaeologists are defined differently.
- To build a future you first need a solid foundation. The work is not yet fully professionalised, especially when you consider the position of archaeologists (DISCO project).
- Embedding archaeology in society. Archaeologists need to change their attitude to the public. They should clearly define their profession and its goals in a way that allows them to interact with society without fear of losing their academic social role (when others can just do the same and interpret with the same potential). Archaeologists lack confidence – not a well-organised profession. Potential activities include: open days, interactive museum exhibitions, websites/social media to which members of the community can contribute, volunteer projects, and training at school level. Raise public awareness and interest in the science of archaeology so that the public can judge and assess archaeological findings such as plant seeds and spindles instead of elaborate artefacts. Activities are happening, people are getting involved, but what's missing are ways to expand the archaeological profession and be open to a new pool of interpretations.
- Decide what constitutes good archaeology!
- Beginning with ourselves, how can we make heritage valuable to ourselves?

3. How to deal with the public

- How can we make monuments more visible to the public? How can we incorporate them in everyday life?
- Making the connection between the landscape and how it is experienced now, and how it was experienced in earlier times.
- Don't assume that we know our public.
- If we want to do what the public wants, there need to be better studies of public opinion.
- What do we show the public? Is what we show to society relevant to their interests? Is there a common heritage or a collective approach? We should encourage engagement.
- Make popular reality shows about archaeology.
- Archaeology's exposure in the media is what will determine public interest.
- The finds and interests of amateur archaeologists should be taken more into account, inclusion in archaeological databases.
- The Netherlands hasn't signed the Faro Convention, so how can we possibly put it on the national political agenda? Should we be convincing politicians to sign it?
- We need to be aware of the knowledge we generate and the message it contains. What is our role as archaeologists, especially if we want the public to participate?
- It is important to think about levels of public participation and involvement.
- Can social media play a part in reaching more young people and boosting their interest in archaeology?
- 'It's just something to do rather than something I want to do'. Value – importance of heritage for younger generations. Engagement is long-lasting.
- Community archaeology is important but to what extent can archaeologists depend on volunteers?
- Promote best practices in the spirit of the convention.

Group 1
Chair: *Willem Willems*
Minutes: *Lara Elemans*

The theme for the break-out session was 'Dare to choose'. Many subjects were discussed, and the first of the three key themes was: What is our basic point of departure when making choices? We have to realise that whatever we choose, we are making a choice now. We are relying on the situation as it is today, and we need to be aware of this fact. Choosing what should be excavated depends on our knowledge, but there are gaps in this knowledge. And what message are we trying to deliver to future generations through excavations? Can we know what future generations will need?

The second theme was: How can we make choices? The discussion covered two points. First, choices are always being made, you have a vision of where you start and the excavation is a process involving lots of choices. Second, what approaches can be used and how can we choose what to excavate if we don't know what we have? Should an inventory be made of the archaeological potential? Also, when we make choices we have to bear in mind our storage capacity; we can't store everything. Why excavate if we throw it away afterwards? Management should include the 'afterlife'.

Our third theme was: Who should choose? The community needs to be involved in making choices, but the question is how can we do that, what should the community's role be? Perhaps local authorities should be more involved. Society also needs proper delivery. Content should be returned to society, and of course developers, through proper publication and dissemination.

List of themes and statements

1. What is our basic point of departure when making choices?

- Never believe you are excavating everything!
- Choosing what should be excavated depends on our knowledge, but there are gaps in this knowledge that can influence our choices.
- What message are we trying to deliver through excavation to future generations?
- How can we know what future generations will need?
- Heritage is for those that value heritage, now and in the future.

2. How can we make choices?

- It's not about 'scale'. It's about how we explore the research questions we have when starting the excavations and that arise during excavations.
- Questioning the written report as the end product.
- Inventories of archeological potential. How can we choose what we excavate if we don't know what we have. 'Known potential' versus 'unknown potential' (this is not no potential).
- How much should we excavate? What period?
- Choices should relate to what we keep forever (storage issue).
- Vision (positive).
- Setting up criteria is not the way to go. We need to find a 'model' for how to re-establish a site's values.
- Have available what we already know so that we can make choices.
- Excavating a site is a journey/process involving many choices.
- Consider the costs of your choices (added value).
- Why should we 'select'? Financial problem, re-interpretation must be possible. Why excavate if we throw it away afterwards'; management must include the 'afterlife'. If you have a selection procedure, then describe it, keep track of it.
- Make a good inventory of what is known/unknown in the archaeological landscape.

3. Who should choose?

- Society needs delivery. Content should be returned to society, and of course developers, through proper publication, proper dissemination, more concentration on the dissemination of information.
- Greater participation by society in decisions about preserving archaeological sites.
- Public engagement involves choosing and valuing.
- Is commercial archaeology that bad? Ensuring critical and strict criteria when choosing team experts and register methodology is the key to objective data. Rise of new technology can also produce a good register, with proper inspections and surveillance from state authorities.
- Who should choose?
- Are scientific methods always best? Can we include the social sciences?
- Who should choose the sites? Archaeologists alone or together with other groups in society? Are we ready to transfer selection rights to society, for example the local community?
- If archaeologists don't make choices, choices will be made for them.
- Selection by local authorities ensures that it is not only the scientific agenda that decides.
- 'Feel good' archaeology and local patriotism are legitimate reasons for non-scientific selection.

Other statements

- We may dare to choose only if archaeology is and remains an important priority for national agencies.
- In the relationship between politics and developers, money interests affect the political vision.
- The European financial crisis will have a negative impact on already excavated sites.
- There needs to be discussion between universities and archaeologists about research results.

Group 2

Chair: *Roel Lauwerier*
Minutes: *Esther Christis*

Three main themes came from the break-out session on the topic 'Dare to choose'. The first was responsibility towards our sources, the archaeological record. The bias that comes with deciding on the importance of sites and material beforehand was stressed. As yet there are no reliable methods to make such selections and we have a responsibility to future generations. It is better to make a choice when confronted with the archaeological record than dismiss it in advance. It was also pointed out that archaeologists always make choices as part of their scientific work and we need to be aware of the responsibility that comes with making these choices. The importance of a framework was also raised.

One question raised was 'Who are we doing it for?' This led to the second theme: the importance of combining academic issues with social benefits and needs. These two values should be taken as a starting point for research in order to do justice to all heritage layers and stakeholders.

The third theme was the need for collaboration between all stakeholders, such as consultants, local authorities and academics.

List of themes and statements

1. Responsibility towards sources

- The selection of archaeological monuments to be respected in planning processes should actually be done.
- Make the selection before the rescue excavation (to excavate or not). Do we know any reliable methods? (No)
- Selecting monuments to be preserved in situ – is this always possible before an excavation?
- We need to be cautious about dismissing material as not significant. Being cautious and conservative is sometimes the brave thing to do.
- We need to dare to argue for the long-term nature of archaeological research. It may take time for significance to become clear.
- Choice/selection: it is part of our daily work. But we must be aware of our great responsibility towards future generations.
- Don't establish criteria and evaluate monuments in advance (before development plans). Do so when they are threatened by construction, etc.
- Don't dare to choose because we don't know today what will be considered important tomorrow. All layers are important.

2. Combining academic issues and social benefits

- Start with the scientific/academic questions and the social needs/benefits. Then combine them with the monument's potential.
- Who are we doing it for? One person's mundane is another's important site. Local contexts. Local community interest.
- Keep all heritage users and stakeholders in mind and make choices on the basis of all these values.
- Tell stories better. Will that affect the selection process? Answer research questions.
- Even for watching-brief work, we need to point out the research aim. We have to be able to say what we are looking/investing for.
- It sometimes seems that heritage management is a step ahead of academic archaeology.

3. Collaboration

- If shown to exist, we may have to dare to confront the academic bias against rescue archaeology.
- Collaboration between academic consultants + national authorities for understanding.
- Network of academics, heritage management + commercial archaeology has to be established at the local/regional level.

Discussion on frameworks

- Dare to choose. Yes, when it comes to sampling and academic investigation, no for excavations.
- Excavation methods have to be adapted to scientific questions; there is no single technique for every kind of site.

The need to choose

- The belief in total documentation is dangerous. There are always choices being made.
- We are not independent of the economic cycle. In very specific threatened areas like the brown coal mining in the Rhineland, we are losing approximately 400 ha annually. Only 5% is being researched through rescue excavation. We therefore need a scientific approach to choosing.
- Dare to not choose between quantity and quality.
- We have to constantly test our system of choosing and be wary of hobby horses. If you are in charge of decision-making, there is a risk that you will give preference to special periods or types of sites.

Are we scientists or just technicians?

- Archaeologically assisted destruction.
- Digging holes in the past or planning archaeology.
- Can we do more with less? Application of scientific techniques. Better understanding of site taphonomy.
- Targeted research appropriate to context and local interest.

Other statements

- Informing and educating industrial companies.
- Special archaeological education of the local people (village/municipality).
- Consider some isolated finds + sources of raw material + in situ archaeological sites as one big archaeological site/complex in the region.
- Be kinder across sectors. Most of us are doing our best in the profession.

Group 3
Chair: *Jos Bazelmans*
Minutes: *Charlotte de Hoogd*

The main theme of this break-out session was Dare to Choose. The session was a start of a great discussion, but there was no real consensus on the conclusions.

First of all, it is important to think about how you phrase the question. Is it really about making choices or is it a discussion about the need for criteria? It needs to be more of a decision-making process in which we evaluate and redesign. Second, there needs to be greater focus on how we conduct research. Which sites do we choose and how do we excavate and preserve them? We should also bear in mind the post-excavation stage and the question of the relevance of depots versus quality research. The next issue is the design of the decision-making process. It is relevant at different levels (local, regional, national, European, world/humankind). We should be explicit about our decision-making and be aware of all kinds of bias. Our final conclusion is that thinking about making choices is thinking about archaeology and the best practice in our field – not just for future generations but for the here and now.

List of themes and statements

1. The need for criteria

- How do we define objective choices?
- Who is qualified/has the mandate to make choices?
- First define your goals (what do we want?).
- Why are we so afraid of choosing?
- How much choice should be exercised on site? Where and when to be selective.
- Criteria for choosing: cannot be solely academic/scientific, serendipity, where does the interest lie?
- Choice is obligatory in any research, including of course archaeological research. Make conscious choices. Reflect on what to do and what not to do.
- The terms of the choice are often: social/economic sustainability, intellectual capacity to process the data collected and communicate the results to society (education); difficult to decide what would be useful for the future.

2. How we research (including pre- and post-excavation)

- Integrated projects with regard to research and preservation.
- Let's not quit Valletta. Excavate what is endangered, using scientific research only in exceptional cases.
- Choosing between sites distorts the picture of the past.
- Contextualisation and synthesis, periodic updates on the state of knowledge and review.
- Publication of reports after the project is completed.
- The archive problem: we need very robust policies for selection/retention/dispersal. How much reinterpretation can we do anyway?
- Flanders' new cultural heritage legislation stipulates an archaeological solidarity fund, making choosing a real option.
- It is more complicated: the possibility to choose exists – not only in relation to which sites to rescue, but also through analytical methods to apply to data, how scientific it should be, can research data define?
- Judging the value of a site before excavation is tantamount to guesswork.
- Our choices must be based on a proper evaluation of our knowledge and a definition of the impending questions.
- We need to understand the 'typical' as much as, or more than, the 'special', both for protection and exploitation for evidential value.

3. Levels and biases of the decision-making process

- Adapt and evolve: decision-making, preservation through education, reflexive.
- Challenge orthodoxies: a finite, non-renewable resource. Preservation by broadening perspectives, accepting other values, context, political/economic realities.
- An independent agency that can make the decision and argue it as a knowledge question, as well as set the standard for the excavation.
- The local community can make the choice of what they do if people are interested.
- 3 levels of choosing/valuation: European, national, local.
- Is it about effect and efficiency? Is the ideal world a world without choices? Are choices money-related?
- How do we set the parameters of choice? Can they be set, if so by whom and for whom? Sites, monuments, records, artefacts, samples.
- What we know about the resource is biased through past academic predictions. Do we therefore always know how to choose? Developer-funded archaeology shows how wrong previous academic models were.
- Choices are already made, but now by contractors, developers and private individuals.

The need to think about archaeology and its best practice

- Preserving a resource for the future, not simply a choice to dig and record or not dig and let go.
- Be realistic, don't increase bureaucracy.
- Learn how to not excavate and not destroy.
- Archaeology as the management of cultural heritage and cultural tourism.

Group 4
Chair: *Bert Groenewoudt*
Minutes: *Karla de Roest*

The overall feeling in this session (Dare to choose) was that the subject was perhaps the largest challenge, not the 'daring' itself. It was formulated quite broadly, there being many topics that could fall under its umbrella. As a result, the discussion took many directions. The most frequent topics were the quality of archaeological work itself (how and what do we want to research?), how we present the results and to whom, and legal aspects. The list of topics below is somewhat arbitrary, however. It could just as easily have comprised at least six topics (quality, framework, integration, selection, consequences, post-excavation phase).

The group members agreed that, whatever the topic, the consequence of choices made should be taken into account. We have to know what the impact will be, especially in the long term. For example, when choosing what to dig or publish (and therefore what not to), the consequences need to be thought through in advance, from the start of the excavation to the final result. Which criteria should our choices be based on? And how do we evaluate them?

To facilitate our research, we need standardisation, in both a practical and legal sense. This needs to be extended to past excavations. If we want a good dataset to help us with our choices, we must first turn to old unpublished excavations. Our dataset must be brought up to date before we can justify our choices.

This still leaves the question of who chooses? The professional or the public, or perhaps choices should be more closely linked to legislation? The discussion group frequently mentioned the need for a broader view. The group opted for an integrated approach: inviting and educating the public to create support on the one hand, and extending our research across national borders on the other. We must explain and negotiate our selection criteria in a scientific and socially accepted way.

List of themes and statements

1. Open up boundaries between public < > scholars and in Europe

- Results/Interpretation: why do we dig? How do we explain it to the public (or politicians) if all we get are catalogues of finds and cultural layers?
- Negotiate and break down walls (between private and public).
- Collect data to write history, not just local research.
- Different sites/excavations, different target groups (international researchers, local schools, etc.).
- Get rid of our European boundaries in order to choose >> build a European knowledge basis.
- Educational and investigation traditions should be taken into account when making choices.

2. Research framework: standardisation

- Standards (contract, decipherable, specifications, enforcement). Demand the best and relax when required.
- Pre-selection elaboration of the professional (not just academic) background.
- 'Caveat selector' (selector beware). Limitations of existing knowledge. Known vs unknown.
- Quality (of contexts).
- Despite massive input in archives we still don't have enough data for a lot of questions.
- Procurement rules – directive. Any quality design system must be workable and legal.
- Mechanisms for ensuring appropriate content of fieldwork specifications.
- Could we standardise site selection?
- Importance of adapting method of investigation to sites; not choosing one site over another.
- Criteria for assessing significance of sites need to be developed.
- When do we have 'enough' data?
- Content of selection methodology.
- Publish the old excavations before new ones.

3. Quality (upholding, safeguarding) and consequences of selection

- Impact of selection: how do we handle information loss?
- You are always choosing. Pre-understanding, research perspectives are important: you find what you're looking for.
- Selection by whom? (academic, heritage management, legislation, local community, etc)
- Who could give us the authorisation to choose?
- Do we really know the consequences of our choices?
- How can we choose if we don't know what we'll find?
- How can we really evaluate the unseen?
- Research/interpretation has to be included.
- Post-excavation as part of preservation <> legislative thinking.
- Choosing involves taking risks. How do we determine what risks are acceptable, and who decides?

Student group
Chair: *Suzanne Vonk*
Minutes: *Anne van den Heuvel*

After a short introduction to the theme *Dare to choose* the students' statements were put up on the board. The first few focused on the actual interpretation of legislation relating to fieldwork, looking at expanding expertise in the field through the use of specialists in, for instance, geology or botany. It was felt that data should be translatable into knowledge if produced more in tune with the needs of specialists involved in fieldwork. Although there was general consensus on this, people felt that the personal biases of specialists should not be underestimated when it came to interpreting data. This would also require a set of basic rules and quality controls, which are not yet fully achieved through self-regulation in the form of the Dutch Archaeology Quality Standard (KNA). The government should be responsible for quality control.

The discussion then shifted towards legislative matters. It was stated that money saved by governments not performing their own excavations but having the commercial market do it for them should be returned to the scientific field. It was also felt that the quality of archaeological research would be improved by more legislation and less separation between the commercial and scientific parts of the sector. As well as improving quality, this would allow more scope for protecting monuments for future generations. People felt strongly that we need to remind ourselves that we don't excavate simply to see the past, but to also keep it intact for future research.

Finally, the discussion switched to public aspects. A comment that the Dutch public didn't see archaeology in the landscape as clearly as in, say, Ireland, led the discussion to the role of archaeologists in educating and raising the interest of the general public. However, the students felt that we have to remember that the government's role in boosting public interest lies mostly in the area of legislation, which brought them back to their previous topic.

There were several separate statements outside the themes, but there were three main conclusions/ recommendations.

List of themes and statements

1. Define a basic set of rules to eliminate conflicting interests between commercial and scientific archaeology

- Archaeology is an interdisciplinary, thus complex, science. Excavation strategies should reflect this.
- PVEs and PVAs have to be better at an early stage of research to increase our knowledge.
- Minimal science-based norms should be defined in commercial excavations: pollen sampling, paleo-environmental sampling, stratigraphic research, mapping in the city plan in the context of research.
- Act rather than discuss: set up rules, regulations and standards; discussion can come later > allow room for mistakes!
- Define scientific value.
- Define good archaeology and aim to eliminate differences between commercial and scientific archaeology**.**

2. Decide who gets to make the distinction between the value of scientific and commercial archaeology

- Each society gets the archaeological team it deserves.
- The public does not view archaeology as a science at all.
- Education has to focus more on archaeology rather than history and nation-building.
- A scientific framework is only possible through government policy.
- Is it the developer or archaeologist who sets the rules? Public vs private benefit. What can you learn from the public?
- How do we know what sites are truly important? What is important to us now may be very different from what is important for future generations.
- Should we pick sites that exemplify a certain type, like ticking them off on a checklist?
- If we make the move towards in situ preservation instead of excavation, what responsibilities do we incur? Monitoring, lack of visibility, etc.
- Archaeologists can't clearly decide what is more important or not as mentalities and attitudes to material change. Things must therefore be preserved and conserved as best as possible for any future investigation.
- Selection: what exactly is important to archaeologists and what is important to developers? Knowledge of what is more important?
- In relation to the selection procedure, archaeologists should have in mind existing antiquities or the possibility of finding antiquities before excavating or agreeing to development-led plans.
- How can we decide beforehand to dismiss a site, when new insights might be gained from it? You never know what you'll find, but if you don't look for the unexpected, you'll never find it.
- Whose choice?
- The 'free' market of the commercial archaeological sector should be limited.

3. Create conservation norms to preserve archaeology as best we can, with our current vision, to allow future generations access to the heritage we now preserve in situ

- The archaeological product should be measurable and re-interpretable. Data should be translatable into knowledge that is relevant to society.
- The choices made by our colleagues of 50-100 years ago, or even earlier or later, are much regretted now. We can't know what our future colleagues will want to find out. So how can we choose what to excavate and what not to excavate, since if we don't, the knowledge will be lost forever.
- It is difficult to set up a European kind of public archaeology, since every country has a different starting point when it comes to public involvement and the ease with which this can be done.
- Money saved from excavations (because paid for by developers) should be invested in researching the excavated material.
- In cases where remains can't stay in situ because of construction work (but this should be considered beforehand), archaeologists and developers should breathe life into the remains by including them in the plan.

Break-out session 3 | Managing the sources of European history

Group 1
Chair: *Barney Sloane*
Minutes: *Karin Scharringhausen*

The top three themes addressed were:

1. Collaboration
2. Accessibility of data and knowledge
3. Protocols and standards for data management

Chair Barney Sloane professionally guided the group members through the break-out session. The procedure adopted and possibly the fact that this was the last session of the symposium led almost naturally to three themes and all members were able to assign their Post-its to one of them. As a result the discussion was confined to the participants' presentation of the three issues.

During the presentations of the statements, several aspects were repeatedly highlighted that weren't explicitly mentioned on the Post-its:

- A lot is happening, but people are working alongside rather than with one another
- The role of social media
- Communication with the public
- Usability of the information to the public

The chair summarised the results of the break-out session. There was no discussion.

During the closing plenary session, the chair's presentation contained some points that help describe the spirit of the group (no answers as yet):

- How shall we tackle industry collaboration?
- How shall we interface, when every user has different requirements of shared data on a large scale?
- Do we communicate with the outside world based on secondary data (we agreed about not using primary research data) or does it need further processing?

List of themes and statements

1. Collaboration

- Archaeologists should be more involved in EU projects like Europeana to tell stories.
- European digital data resources are essential in the long term => Encourage EU countries to join or contribute data (professional digital networks/archives).
- One European EU directive (guideline) binding for all states.
- One European research agenda.
- Synthesis – archaeology is research. And synthesis happens at all levels, from site (features) to global history. Recognise this in project research plans.
- Networking platform to prepare common visions.
- Collaboration is more than exchanging ideas – one goal.
- Should we cooperate with developers and industries to access their environmental dataset?
- Persuade government to improve data synthesis. Collaboration on data synthesis – fund it!
- Core principles of EU directives => focused on social, economic and environmental issues ≠ history or heritage
- Justification/reason for doing the work that we do – value for money – this data is the atomistic unit demonstrating the value of expenditures on collections?

2. Accessibility of data and knowledge

- One benchmarking of (archaeological) heritage management.
  - Legislation
  - Organisation
- Make archaeological heritage visible for society. Bring it closer with easy-to-use technical tools (also at landscape level).
- Data relating to archaeological heritage management should also be visible for academics and society.
- Work with emerging data technologies to understand new ways of gleaning knowledge from massive datasets.
- Harvest of Valletta: finding out what's missing in Valletta => filling the gaps (accessibility).
- Storage conditions for material/finds => curation/conservation of material enables/disables the information and their re-use to produce knowledge. Interoperability between material data and digital data.
- Producing information/data – concentrate more effort on enabling archaeologists to produce information. A resource to make other forums of information dissemination.
- We need free access to state-funded or EU-funded datasets (maps of all kinds, LiDAR etc.).
- Invest in social media to raise public awareness and support – find out what is missing in Valletta, bring it up to date.
- Concentrate on archaeology and on only one type of resource – archaeological data from excavations. Data doesn't belong to the producer. It should be made available as quickly as possible.
- Make emerging data-mining technology work for archaeology to help access grey literature. e.g. we can increase our knowledge by using intelligent crawlers (searching for indicators, not words).
- What's out there now? List our sources/datasets.
  - Grey literature (excavation reports, etc.)
  - C14 dates, dendro dating, etc.
  - Cultural heritage assessments
  - Environmental samples
  - Books

3. Protocols and standards for data

- We need meta-databases and integration of new data into existing systems.
- Integrated datasets.
- Definition of sources:
  - Digital sources – data
  - Human resources – interpretation
  - Meaning: don't forget the person
- Solve the language confusion (e.g. bell beaker, klokbeker, glockenbechor, campiforme, etc.) by digital means.
- Create digital data platforms or networks:
  - Collaboration between ≠ experts
  - Not only interoperability
  - Standardisation
  - Uniformity
  - What kind of information, because if we don't give feedback to society it is harder to manage and protect
- To be made usable for society, archaeological data needs minimum processing.
- Sharing data on a large scale requires reflection on the type and level of data.
- e.g. ARIADNE – work to ensure that datasets are integrated – new datasets planned with this in mind.
- How will the system work? Keep it simple => user-friendly and achievable.
- What will the output be?
  - Credible
  - Reliable
  - Authentic
  - Honest

Group 2
Chair: *Paulina Florjanowicz*
Minutes: *Gerda de Bruijn*

There were 6 participants in the group. They wrote down their statements enthusiastically and the discussion went very smoothly thanks to Paulina Florjanowicz' efficient chairing. There was only one less positive point – the participants were suffering from intellectual exhaustion after two days of intense discussion.

The group agreed to discuss all types of sources, not just digital sources, but also other relevant archaeological sources. The subjects that were mentioned in the discussion: to what extent is standardisation possible?; how can information be accessed?; the importance of working together; and 3D depots.

The discussion resulted in three main themes:

1. Public access using all possible means, including digital technology. We need public access to archaeological resources, so that the public is informed. Ignorance breeds ignorance.
2. Standards are needed at metadata level in management, not in terms of research. There is a need for more cooperation at a European level and European programmes. Standards are okay for heritage management but you can't standardise archaeological research. There is also a need for a common glossary.
3. From data to knowledge. There is a way from data to knowledge and conclusions. Data doesn't only come in digital form, remember traditional documentation. In archaeology, don't forget the original sources, material objects, sites and how to deal with them, as well as what was excavated but never researched and published. We have to re-excavate and encourage syntheses.

Extra theme: There is European heritage outside Europe, left by emigrants, colonialism, trade. In other words, sources of European history can also be found outside Europe and should not be forgotten.

List of themes and statements

1. Public access

- Agree on a single host portal, 'one stop shop'.
- Be realistic in project aims.
- How to make sources reach the public.
- Virtual museums, education, popularisation (school children).
- Management of digital information for social websites.
- Use the digital media to make the results/interpretation available to the public. In a broad sense – web-based viewer.
- Archaeologists can't keep the results to themselves – ignorance promotes ignorance.

2. Standardisation

- Standardisation as a bias – To what extent/level is standardisation possible?
- Common glossary to make sense of our terminology.
- Connect/link different databases (heritage management, research, museum, management).
- Properly describe items that we choose not to deposit and clearly state the principles underpinning our choices.
- Digital database of all archaeological material in 3D (different resolutions) + few original objects.
- There is a need for more European programmes in order to manage cultural heritage sources.
- Collaboration on management: networking is important in managing sources. A need for dialogue and interaction between more European programmes.

3. From data to knowledge

- Data versus knowledge? It has to be interpreted to get the real meaning.
- Interdisciplinary and cross-sector approach, not pure data.
- We need to see management of sources in the long term, not just to create immediate benefits. Encourage the re-use or re-researching of items deposited in museums.
- Focus on what is already excavated, research, store, conserve and make syntheses.
- We mustn't forget that original or primary sources are themselves monuments, landscapes and objects. Presumption in favour of preservation in situ.
- Remember the value of paper records: don't forget to preserve the paper archive!

And don't forget

- There are some important sources outside Europe. Managing European heritage also means managing the European heritage outside Europe. For example, from trade and colonialism, emigration.

Group 3
Chair: *Jan van 't Hof*
Minutes: *Anne van den Heuvel*

After a brief introduction this small international group quickly decided that the topic of discussion was information, both information gathering and information sharing. There was consensus about the scientific benefit of creating shared databases. However, it was also clear that data itself presents problems, for what do we really share – raw data or interpretations? And how do we create viable databases with information usable for all, since this would require European legislation. The main problem stated was the ownership of not just the data, but also of the materials themselves.

Another problem addressed was the gap between available data and the uses for the public and government. The questions asked were not confined to who should organise and manage the data, but included the usefulness of a database open to all citizens of Europe. The quality of the data would vary if no general standard was adopted.

Lastly, participants felt that there were some gaps that require bridging. For instance, between archaeology and the public, open data and closed data. The discussion moved to working out who should take the lead in bridging these gaps. The conclusion was quite simple: the EAC and the European Union should be more involved in creating international standards and rules, which will facilitate not only data exchange, but also international excavations or excavations on borders.

List of themes and statements

1. What aspects are involved in creating a database?

- Learn from developers, set goals together, overcome legal issues.
- Requirements and procedures differ per country. Are standards needed?
- Regional/state requirements, national/international/scientific needs.
- 'Make them long for the sea': a love of archaeology and heritage.
- Maintaining archaeological data for a long time.

2. Who would we build this database for and who would get to use it?

- How can we bridge the gap between the heritage sector and archaeology?
- Coordinating organisations?
- Through school curricula.
- Open data approach.
- Storage and repositories, rules of access.
- Standards and guidelines.

3. How much of our data can we legally share/do we wish to share?

- Council of Europe/EU as executor.
- Open access to archaeological data is not really possible due to widespread ownership?
- Sources of European history and archaeological sources are monuments and data – they should be managed together.
- Connect data information and knowledge in a digital world.
- European research agenda?
- Sharing knowledge. European project rather than European meta-database.
- Open access to data – to what extent?
- Do we want to share? Are we even obliged to share? Who owns data?
- Create access points to official pools of archaeological data.
- Create digital repositories and online presentation of reports, documentation and scientific study results.

Group 4
Chair: *Birgitta Johansen*
Minutes: *Suzanne Vonk*

The main themes were (1) free access to common data, (2) serving the public (and data users), and (3) connect/compare/big picture/synthesis. Additional themes were sustainability, standardisation and ethics.

Most participants raised the subject of free access to common data. It was felt that archaeology should serve society. However, we mustn't forget that European archaeology also exists outside Europe and free access doesn't have the same positive connotations in some countries as it does in Europe. A subtheme concerned the need to develop our professional ethos. Archaeologists have a history of thinking that the data belongs to them. It is not always seen as something communal that should be shared, at least not until it has been analysed and published, which can take many years.

The second theme was how to serve the public. Data needs to be interpreted. Archaeologists are not the best when it comes to disseminating information. There needs to be professional development, a publication vehicle that is not dependent on universities. In other words, more focus on synthesis and creative industry. A subtheme concerned the use and misuse of archaeological data and interpretations. Archaeologists need to extend their professional role to advanced communication with the public and strategies for dealing with potential misuse.

The third theme was about getting the bigger picture. There is a need for synthesis programmes. The subtheme was that archaeology would benefit from more links and comparisons through the development of networks.

Participants also raised two themes that intersected with the others. Firstly, sustainability. How many European programmes are there? Are they sufficiently interconnected and do they know enough about one another? Probably not. And secondly: always be self-critical. The dissemination of big data demands standardisation practices. However, standardisation is a culturally embedded practice linked to modern industrialised society and mass production. If we use a contemporary practice to interpret and understand premodern societies, will we then be able to grasp the otherness of that society? And do we need professional ethics for how to handle different, contemporary societal settings?

List of themes and statements

1. Free access to common data

- Free access to all data for the wider public.
- Archaeological data is one part of archaeological heritage, not private property.
- Or is this a utopian view if there is no funding for digital networks at the local level?
- Are we focusing too much on conventional publication as the final product?
- What about the archive?
- Better online dissemination?
- More accessible material: education, exhibitions, accessible publication/paper online.
- Agreed common standards.

2. Serving the public (and data users)

- Understand the implications for research + management.
- Improve the extent of participation (tensions).
  - Protect data: not just digital
  - Creating web-based viewer: reports, books, articles, popular science
- Dissemination: newsletter, web magazine.
- Develop public access, interactivity.
- All products of preventive archaeology should be available in digital form, including books, articles, popular books/leaflets (and of course reprints).
- Data export: integrate in other disciplines; societal needs: but no control (relinquish).
- Use data for crossovers: heritage and creative industries, economy, innovation.

3. Connect, compare, big picture, synthesis

- Bringing information together in one database gives us a broad picture and makes it easy to understand our true history.
- Digitisation of archaeological maps.
- Data usability: integration, synthesis, broaden our horizons.
- We shouldn't be dependent on the interests of universities. Other stakeholders have a duty to synthesise.
- What is the purpose of publication? What/Who does it serve? Are there alternatives?

Student group
Chair: *Djurra Scharff*
Minutes: *Esther Christis*

It's important to have the widest possible access to information. This means that databases should be multilingual, or at least in English and the local language in which the research was conducted. Attention should be paid to data ownership and the complications this can entail. There are differences in legislation regarding who is allowed to access and provide data. This may require guidelines at the European level. The public potential of databases also needs to be explored.

Digital databases should be exploited to their full potential. We have to realise that data doesn't equate to knowledge; it can only reach its full potential if it is actually used, which requires quality control. Data input has to be done with care. Enthusiastic people are needed to constantly update the databases. If we want to collaborate and provide access now and in the future, we need to look at the methodological bias between databases and find ways to resolve it.

The last important theme was the need for standardisation. This is essential in order to share data and knowledge. We also need to think about ethics. What do we want to share? What research agenda do we want and what topics should be on the agenda?

List of themes and statements

1. Access to information, no barriers

- Who owns the data?
- Share info, digital maps, availability, time period. Accessibility.
- How dependent are we on enthusiastic people? What is the long-term prospect for digital sites and tools?
- More transnational collaboration is needed.
- How can we work together to deal with differences in legislation?
- Language-friendly equals wider audience.
- All publications and reports should be produced in English.
- The present political borders should be 'deleted' in research topics.
- Two databases: one for scientists and one for community use.

2. Importance of using/exploiting digital databases to their full potential and the importance of quality controls to be able to do so

- Branding archaeology.
- The danger of a database. Catalogues of digital data. Synthesis?
- Only an interdisciplinary approach provides research data of value.
- Data is not yet knowledge.
- There is currently too much emphasis on the actual digging and preserving and gaining of facts, and far too little on interpretation and gaining of knowledge. We can find facts but not stories.
- Can different methodological datasets be used together?
- European-wide research is only possible with comparable datasets. Information is useless unless it's entered carefully into a database. Wrong input can make the information inaccessible.

3. The issue of standardisation: ethics. Do we want this?

- International agendas in small subfields should be agreed and then followed at a national level.
- European standards: do we really want them?
- Screening of information in database.
- Digital: what do we want to know? What do we want to tell?
- Collective representation of data and differences in data interpretations? How does that work when you access data?
- What are we as archaeologists 'allowed' to share? What is our role when selecting what should be shared? Do we set the standard for what we share with the public?
- Access to museum and artifact storage depots.
- We need standardisation. Accept that you have to put aside your ego for the greater good.

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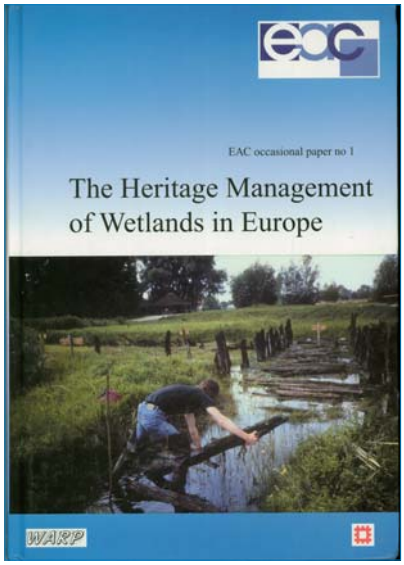
EAC Occasional Paper No. 1

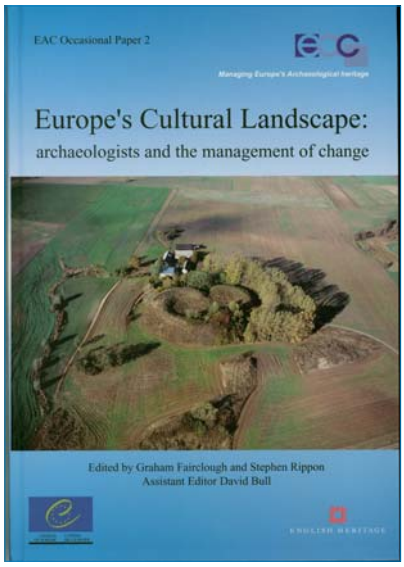


The Heritage Management of Wetlands in Europe

Edited by Byrony Coles and Adrian Olivier

In November 1999, at the inaugural meeting of the Europae Archaeologiae Consilium, a symposium was held on the Archaeological Heritage Management of Wetlands in Europe. In the discussion, delegates emphasized the urgent need to forge much closer links with nature conservation interests, and especially with the international Ramsar Convention on Wetlands. This volume brings the two aspects together through papers on concepts and legislation relating to archaeology and nature conservation in Wetlands, and with papers presenting regional reviews, case studies and related topics. The volume concludes with an overview and recommendations for future action, and a response by the EAC setting out a broad strategy for the heritage management of wetlands in Europe.

EAC Occasional Paper No. 2

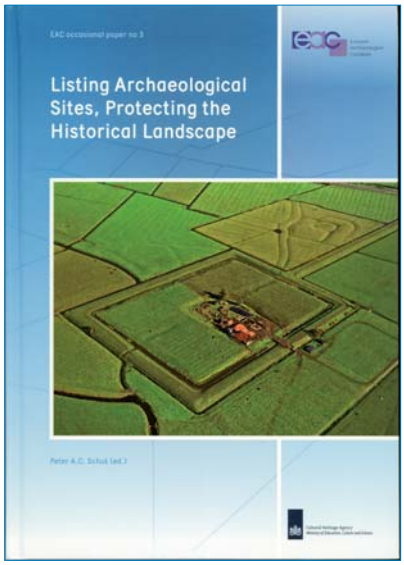


Europe's Cultural Landscape: archaeologists and the management of change

Edited by Graham Fairclough and Stephen Rippon

The second Europae Archaeologiae Consilium Symposium (March 2001, Strasbourg) was devoted to landscape management in recognition of the new European Landscape Convention (Council of Europe, 2000). Arising from the Symposium, this book highlights the important archaeological and historical depth of the European landscape sometimes overlooked by decision-makers in comparison to ecological and aesthetic aspects. It describes opportunities and obstacles that affect the landscape's sustainable management, and shows how heritage managers can support the Convention by helping to understand and promote landscape as a core element of Europe's common heritage. A key message is that archaeologists need to take account of the growing democratic interest in the landscape, and to work alongside other disciplines in pan-European landscape projects.

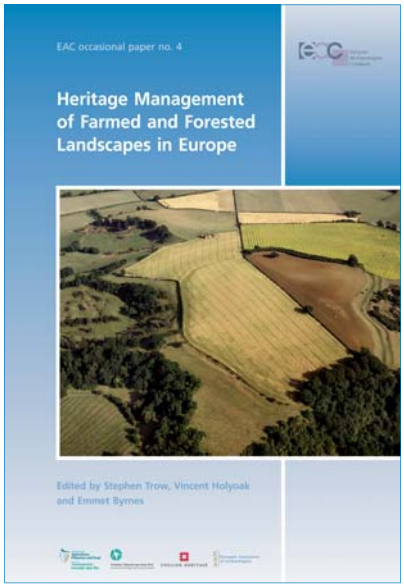
EAC Occasional Paper No. 3



Listing Archaeological Sites, Protecting the Historical Landscape

Edited by Peter A. C. Schut

In March 2008 the Ninth Symposium of the Europae Archaeologiae Consilium was held in Tàrgoviste, Romania, and was devoted to the topic of the listing of archaeological sites and its role in protecting the archaeological landscape. This collection of papers presents an overview of the developments, emphases and current approaches to the topic in the different participating European countries. Keywords are legislation, GIS, implementation and historical landscape. Implementation is illustrated by some examples which show how listing can be used to protect valuable cultural landscapes.

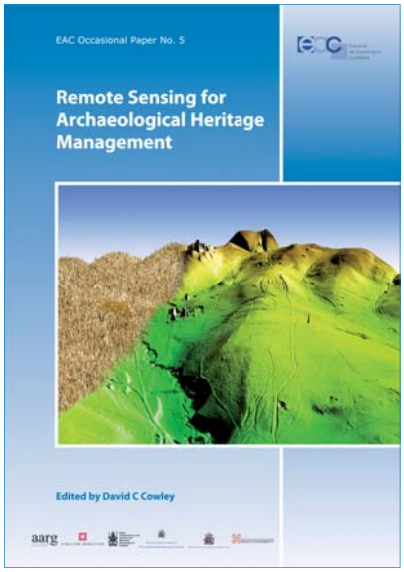


EAC Occasional Paper No. 4

Heritage Management of Farmed and Forested Landscapes in Europe

Edited by Stephen Trow, Vincent Holyoak and Emmet Byrnes

Some 40 per cent of Europe is farmed and 47 per cent forested. The future of the majority of Europe's archaeological sites therefore depends on rural land uses that lie outside the spatial planning and development control systems of its various nation states. This volume, produced by the European Association of Archaeologists (EAA) and Europae Archaeologiae Consilium (EAC) Joint Working Group on Farming, Forestry and Rural Land Management, examines the challenges posed by agriculture, forestry and other rural land uses in terms of the long-term conservation of Europe's archaeological sites and the management of its historic landscapes. Profusely illustrated and with contributions from no fewer than 13 different European countries, the volume will be essential reading for anyone concerned with contemporary heritage management, policy-making and legislation.

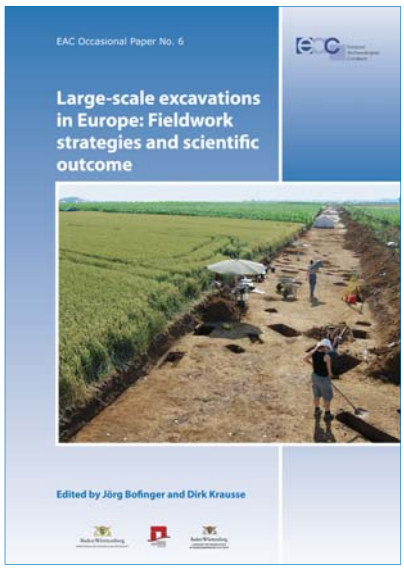


EAC Occasional Paper No. 5

Remote Sensing for Archaeological Heritage Management

Edited by David C Cowley

Remote sensing is one of the main foundations of archaeological data, underpinning knowledge and understanding of the historic environment. The volume, arising from a symposium organised by the Europae Archaeologiae Consilium (EAC) and the Aerial Archaeology Research Group (AARG), provides up to date expert statements on the methodologies, achievements and potential of remote sensing with a particular focus on archaeological heritage management. Well-established approaches and techniques are set alongside new technologies and data-sources, with discussion covering relative merits and applicability, and the need for integrated approaches to understanding and managing the landscape.



EAC Occasional Paper No. 6

Large-scale excavations in Europe: Fieldwork strategies and scientific outcome

Edited by Jörg Bofinger and Dirk Krausse

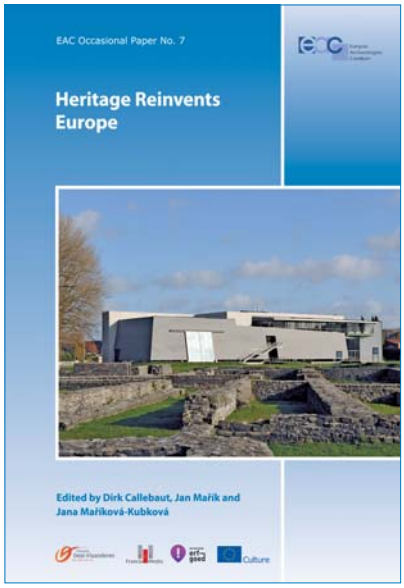
During the last decades, the number of large-scale excavations has increased significantly. This kind of fieldwork offers not only new data, finds and additional archaeological sites, but also gives new insights into the interpretation of archaeological landscapes as a whole. New patterns concerning human "offsite activities", e.g. field systems, or types of sites which were previously underrepresented, can only be detected by large-scale excavations. Linear projects especially, such as pipelines and motorways, offer the possibility to extrapolate and propose models of land use and environment on the regional and macro-regional scale.

EAC Occasional Paper No. 7

Heritage Reinvents Europe

Edited by Dirk Callebaut, Jan Mařík and Jana Maříková-Kubková

Unity in Diversity, the motto of the European Union, has, since World War II, seldom been as relevant as it is today. In these difficult economic times Europe is more and more confronted with the phenomenon that citizens openly stand up for the defence of their national and regional interests. This has put enormous pressure on the process of European integration and the concept of a shared European identity based on the cultures of individual EU member states. Thus, understanding the diversity of European cultural heritage and its presentation to the broadest audience represents a challenge that can be answered by diversified group of scientists, including archaeologists, historians, culturologists, museologists etc.
By choosing "Heritage reinvents Europe" as the theme for the 12th EAC colloquium that was held between the 17th–19th March 2011, in the Provincial Heritage Centre in Ename, Belgium, the board of the Europae Archaeologiae Consilium made its contribution to the understanding of the key concept of a shared European identity.

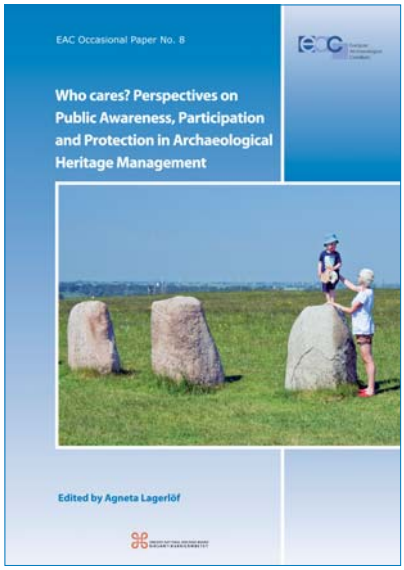


EAC Occasional Paper No. 8

Who cares? Perspectives on Public Awareness, Participation and Protection in Archaeological Heritage Management

Edited by Agneta Lagerlöf

The increasing numbers of reports on tampering with ancient monuments and archaeological materials may reflect more acts of plunder. But it could also reflect a higher incidence of reporting of such acts to competent authorities or a combination of them both. A third solution is of course that acts of plunder are currently deemed more newsworthy than before in our part of the world. And if this is the case, we must ask why has this become important now, and also, how does this influence our understanding of what is happening? The complexity of this problem and the ethical issues it raises require us to examine our view of the archaeological source material and archaeology as a profession in relation to society at large. An international conference took place in Paris 2012 with participants from different European countries. The purpose of the conference was to discuss the kind of measures that need to be taken and what the societal consequences of these may be.

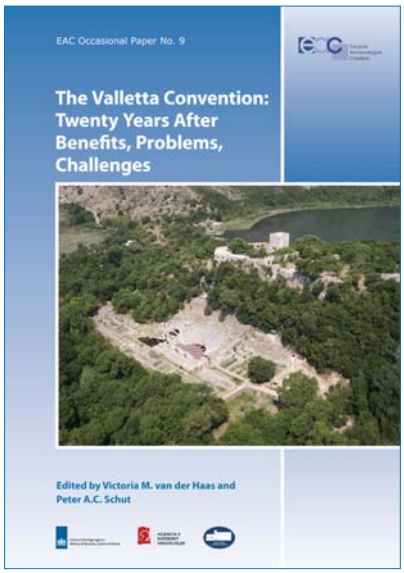


EAC Occasional Paper No. 9

The Valletta Convention: Twenty Years After – Benefits, Problems, Challenges

Edited by Victoria M. van der Haas and Peter A.C. Schut

The Valletta Convention (1992) was the result of a process which started with the Convention of London (1969) where the foundation for contemporary archaeological preservation was laid. The inclusion of archaeology in the process of spatial planning was one of the most important milestones. In most European countries it meant a strong growth of archaeological research, and now, in 2014, we can say that Valletta has become visible in all parts of archaeology. Not only are new residential quarters, industrial and infrastructural works archaeologically investigated, also within the field of public information and cultural tourism there are important achievements. The implications for education are great. In this publication the main topics are addressed. Not only the successes, but also the challenges and possible solutions are addressed. Due to articles written by experts from different parts of Europe, this publication provides the reader with a good view of the state of affairs in various countries.



Setting the Agenda: Giving New Meaning to the European Archaeological Heritage

Edited by Peter A.C. Schut, Djurra Scharff and Leonard C. de Wit

More than two decades after the signing of the Valletta Convention the time is ripe to draw up a new agenda for how Europe should manage its archaeological heritage. With this purpose in mind, the EAC organised two symposiums that were attended by heritage managers from 25 European countries. At the first symposium in Saranda, Albania, we looked back at twenty years of 'Valletta', identifying its benefits, problems and challenges. The results of these discussions can be found in EAC Occasional Paper No. 9.

The second symposium was held in Amersfoort, the Netherlands, and took the form of a working conference. The results are published in this volume, which largely comprises the Amersfoort Agenda for managing the archaeological heritage in Europe. This agenda ties in with the ideas of the Council of Europe's Faro Convention on the Value of Cultural Heritage for Society (2005). A link is also made with the ideas of the European Union, as expressed in the Conclusions on Cultural Heritage adopted by the Council of the European Union (2014) and a Communication adopted by the European Commission (2014). The zeitgeist calls for an acknowledgement of the multiple values of archaeological heritage for society and recognises the potential role of archaeological heritage in sustainable development.

The Amersfoort Agenda has three themes: 1. Embedding archaeology in society, 2. Dare to choose, and 3. Managing the sources of European history. The various articles in this book are organised under these themes, which they explore in greater depth. Reports of the break-out sessions have also been included so that readers can follow the discussions that have led to the Amersfoort Agenda.

EAC Occasional Paper No. 10

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