



Predrag Novaković, Milan Horňák, Maria Pia Guermandi,  
Harald Stäuble, Pascal Depaepe & Jean-Paul Demoule (eds.)

# Recent Developments in Preventive Archaeology in Europe

Proceedings of the 22<sup>nd</sup> EAA Meeting in Vilnius, 2016

Univerza v Ljubljani  
Filozofska fakulteta



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*Editors/Uredniki:* Predrag Novaković, Milan Horňák, Maria Pia Guermandi, Harald Stäuble, Pascal Depaepe & Jean-Paul Demoule

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## Preface

*Predrag Novaković*

The texts collected in the monograph are refined versions of the papers presented at the 22<sup>nd</sup> Annual Meeting of the European Association of Archaeologists in Vilnius, 31<sup>st</sup> of August – 4<sup>th</sup> of September, 2016, in three sessions focused on various aspects of preventive archaeology: (TH2-07) *25 years later: Changes and conjunctures in preventive (development-led) archaeology in former 'Eastern' Europe*; (TH2-10) *After 1990: a turning point in the guiding principles of rescue excavations and its impact on scientific research*; (TH2-19) *Preventive Archaeology, Scientific Research and Economic Development*. The very fact that the EAA's Scientific Committee accepted three sessions focused on preventive archaeology and that 44 papers and 3 posters were presented by authors from 22 countries, clearly speaks for the paramount importance of the preventive archaeology not only in heritage protection sector, but for the archaeological discipline in general.

In the last two decades, after the adoption of the La Valletta Convention, the structure of the archaeological practice changed substantially all over Europe. Regardless of the fact that the implementation of the Convention varies considerably from one country to another, common to all countries is a great increase in a number of preventive research and archaeologists involved. Compared to the period of some three decades ago, this increase is of several orders of magnitude. Hardly anyone could predict such progress in archaeology in the 1980s.

The development of actual preventive archaeology – the term itself has not been always translated in national legislations in its original meaning in referential language of the Council of Europe (i.e. French) – is a process which started in 1992, but it was actually after the year 2000 when most of the European countries were able to accommodate their legislation and practice. The archaeological professional

community is very sensitive about this development, and discussions on various aspects of preventive archaeology, ranging from conceptual issues to practical results and achievements are constant. At almost equal intervals, since 2007, three monographs were published with the aim to document the state of art of preventive archaeology in different countries and reflect some urgent issues at the European level (Bozóki-Ernyey 2007; Schlanger and Aitchison 2010; Guermandi and Rossenbach 2013), and our monograph follows this path.

Though all European countries protect cultural heritage by law, the interpretations of statutory protection and the necessity for preventive archaeology is interpreted very widely and differently. Here, one should not ignore the fact, that in almost half of Europe, the introduction of La Valletta-based preventive archaeology went parallel with the process of democratization, denationalization, and privatisation, and establishment of the free market economy, while the other half was increasingly adopting political and economic doctrines which constantly challenge the 'conservation' doctrine of the La Valletta Convention and some of its major achievements, as the inclusion of archaeology into spatial planning process and the polluter pays principle in the first place. The transformation of archaeology from almost purely academic discipline to a discipline with increasing and statutory participation in everyday spatial planning and development inevitably requires new financial and other resources than ever before. Thus, it should come as no surprise that the other parties (developers or investors) question the value of heritage and relevance of preventive archaeology, and will continue questioning this. Moreover, a major increase and change of financial flow directed towards preventive works in many countries has created distress for traditional institutions and organizations working in archaeology, new conditions have led to the creation of new forms of organization, redistribution of responsibilities and tasks, and practice. Consequently, preventive archaeology is not only about heritage, but also the people who work in its protection and management, and about the discipline of archaeology and knowledge of the past. For accomplishing its role, preventive archaeology can not let the progress of one of its aspects take place at the expense of the others.

This monograph illustrates well heterogeneous situation in Europe. However, such heterogeneity points to one important aspect of preventive archaeology: it is a field of conflict of interests, negotiations and debate between various stakeholders, archaeological and other. The papers presented here are to be considered primarily as aimed at the further discussion. Some present individual national systems and frameworks for preventive archaeology, whilst others give more personal views and experiences that may shed a different light to the achievements of preventive archaeology and its everyday practice. Some papers reflect the progress of preventive archaeology and its practices. All of them are equally valuable for the discussion

since preventive archaeology is an 'open' field, which requires our constant reflexion and attention. Without this, it is all too easy to slide back to the conditions of some three decades ago.

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## Preventive Archaeology: Scientific Research or Commercial Activity?

Jean-Paul Demoule

### *Abstract*

*Private commercial archaeology has developed considerably in Europe over the last three decades, due to European Union regulations concerning the free market economy and competition. Nevertheless, there were never any political debates in the EU about the necessity, or not, of privatization of the public services. Furthermore, the application of economic competition to preventive archaeology is based on a misunderstanding: economic competition is supposed to protect the consumer, but developers are not consumers of archaeological research. They have no direct interest in the results of this research, and their only concern is for their land to be released as quickly as possible and at the least cost. For this reason, since the 2008 economic crisis, one observes in many European countries a drop in the quality of commercial excavations, as well as a reduction in their cost. This situation endangers not only the quality of archaeological research but also the working conditions of employees. Thus there are still a certain number of major problems that require solving for the future of preventive archaeology in Europe.*

**Keywords:** *preventive archaeology, commercial archaeology, state, legislation, cooperation, preservation*

### *Résumé*

*L'archéologie commerciale privée s'est considérablement développée en Europe dans les trois dernières décennies, en principe à cause des règles de l'Union européenne concernant la libre concurrence. Néanmoins, il n'y a jamais eu dans l'Union européenne de débats politiques sur la nécessité de privatiser les services publics. En outre, l'application de la concurrence économique pour l'archéologie préventive repose sur une confusion. En effet, si la concurrence économique est supposée protéger le consommateur, les aménageurs ne sont pas des consommateurs de recherche archéologique : ils ne sont pas directement intéressés aux résultats de la recherche archéologique, mais seulement à ce que leur terrain soit rapidement libéré. C'est pourquoi, depuis la crise économique de 2008, on constate une nette baisse de qualité des fouilles commerciales, en même temps qu'une baisse des prix des entreprises privées, ce qui met en danger aussi bien la qualité de la recherche scientifique que la qualité des conditions de travail des employés. Un certain nombre de problèmes importants continuent donc d'être posés pour l'avenir de l'archéologie préventive en Europe.*

## Two visions of the society

The introduction of preventive archaeology in a competitive market was initiated in Europe without real debate, some countries not being immediately affected, while others considered it as inevitable fate (Oebbecke 1998). However, discussion of the issue has gradually organized, especially across multiple European agencies or programs. Two conceptions compete, reflecting two visions of the State. For one, in the tradition of the Enlightenment and the French Revolution, the nation is a community of citizens, united by a common destiny, and which manages goods and services, among other elements. For the other conception, there is only a multitude of individuals-consumers, with no link one to the other, buying or not buying goods and services from producers in the competition. This conception is not very new, at least since Thomas Hobbes and “the war of all against all”, since Adams Smith and his “invisible hand” regulating the free market, and more recently since the social Darwinism and the economic school of Milton Friedman, for whom “the State is not the solution, but the problem”. This ideology, dominant in the Western Countries since the 1980’ and the governments of Margaret Thatcher and Ronald Reagan, was not able to avoid the present economic crisis, and the States (that is the taxes of the citizens) had to give a lot of money to save the private banks.

For partisans of private, commercial archaeology, developers are “clients”, and to whom they need to be as efficient as possible. As well, this is why preventive archaeology is often referred to as ‘developer-led Archaeology’ or ‘developer-funded archaeology’ - as if it were the developer who decided on the excavation, still a scientific decision. It created a kind of archaeology allowing for the unprecedented development of our knowledge, sometimes viewed in some countries as a *Gold Rush*. At the same time, in an attempt to regulate the market of archaeology, it was appropriate that archaeologists organize themselves in professional associations, along with the model of the *Register of Professional Archaeologists* in the United States. This is, in fact, the case in the United Kingdom with the *Chartered Institute for Archaeologists* (formerly the *Institute of Field Archaeology*). A “Code of Ethics” is supposed to define the rights and duties of these archaeologists, including respect for the basic rules of scientific research. But “ethics” has not always the same meaning in various countries, and not the same, for instance, in the Catholic, and in the Protestant countries, depending also on the rate of usual bribery! A public authority is also to define “standards” (see Willems & Brandt 2004) and exercise “quality control”. This is, however, made difficult by the fact that control of archaeological work *a posteriori* is hardly possible since the excavated site no longer exists. This overall vision thus underpins the organization of archaeology in a number of European countries, and it has been explicitly defended in various articles (e.g. Aitchinson 2009; Carver 2007; van den Dries 2011; Thomas 2002; Wheaton 2002, among others).

For those who oppose the development of private commercial archaeology, developers are not “clients”. They are companies whose projects are often designed to make money and who endanger the archaeological heritage of the citizens of a nation. This is why they must pay a tax, designed to help pay for the destruction and preserve part of the archaeological information. It is, therefore, the State - as an emanation of the community of citizens and not as an abstract entity - which must organize these preventive excavations through public research institutions responsible for defining national research programs and publishing the results of the excavations. Indeed, the development of preventive archaeology is due to the reinforcement of State legislation and has nothing to do with it being carried out by private companies. The *Codes of Ethics* have no binding value.

It should be remarked that there has never been anything in the nature of a public debate or consultation within the European Union regarding these two different economic and political ways. For instance, it is possible to imagine and bring into being a common European public service in such fields as railways, postal services or electricity provision - just as there now moves towards a common European airspace, or, more topically, a common banking supervisory mechanism. Such an approach was never really considered. In almost every field of economic and social life, the option of a generalized commercial competition was the one taken, as if as a matter of course.

### **Commercial competition in archaeology as a misunderstanding**

The notion of commercial competition in archaeology is based on a fundamental misunderstanding. In fact, developers do not want to buy the best archaeology possible but seek only the company that will release their land as soon as possible and at the least cost. If competition exists in the scientific field, it is not to produce the cheapest research possible, but the best research possible. And if private research exists in general, on the one hand, the quality of its production (a drug, an aircraft, a weapon, etc.) can be controlled *a posteriori*; on the other hand, private research tends to focus on more profitable products. This is why private pharmaceutical research, for example, focuses on the profitable diseases of rich countries - at the expense of unprofitable diseases in poor countries.

Note as well that the excavations of private companies are rarely published - if at all - and that, for example in the United States, the private archaeologists of Cultural Resource Management, which perhaps account for over half of the approximately 12,000 professional archaeologists in the country, very rarely attend scientific meetings such as the *Annual Meeting of the Society for American Archaeology*. One can also be surprised about the term “Professional archaeologists” that private archaeologists

give themselves - as if academic archaeologists were not “professionals”. Furthermore, the purely economic logic of private archaeological companies makes them sensitive to economic fluctuations. As such, hundreds of British archaeologists have lost their jobs due to the global financial crisis started in the fall of 2008, as have 80% of private, Irish archaeologists, and a significant number in Spain (Schlanger & Aitchinson 2010). In contrast, national public institutions allow for the practice of homogeneous scientific standards, for the study and publication of excavations, and offer a guarantee of employment. This is therefore why the model of private commercial archaeology has been criticized by a number of archaeologists (Cumberpatch & Blinkhorn 2001; Demoule 2002a; 2002b; 2011; Chadwick 2003; Kristiansen 2009; Schlanger & Salas Rosenbach 2010). In any case, it seems impossible to separate the real practices of archaeology from their ideological backgrounds (Pluciennik 2001; Hamilakis & Duke 2007; Bernbeck & McGuire 2010; Kolen 2010).

In France for instance (see also Salas-Rosenbach *this volume*), since the economic crisis, most of the private commercial companies have reduced their prices for 40% in average. This is, of course, damageable for the quality of the excavations, but also for the conditions of their employees. The control of the French Ministry of Culture is quite insufficient, because of the small number of its staff. There are known cases of private companies which, having won their contract by proposing lower prices, went to the developer to renegotiate and increase the price on the pretext that the diagnostic did not fully reveal the extent and complication of the surface to excavate. In other cases, some private companies simply ceased excavating as soon as their margin of revenues was reached, while others applied far more summary (and cheaper) methods than initially commissioned.

Note as well that the economic crisis since 2008, has shown the weaknesses of a model based solely on the market, and the need for State regulations. Moreover, some economists had already announced these weaknesses before the crisis (Stiglitz 2003), while, as early as 2004, some in the European Commission had become aware of the limits of the market for public services of general interest (Green Paper 2004), but without any real result. Ironically (or sadly), the main heralds of the “free market economy” in the former European Commission, the President and the Commissioner for Competition, had a strange destiny: the former became a member of the powerful Goldman Sachs Bank, the later, Neelie Kroes, was in fact secretly the director of a firm in a fiscal paradise (or “tax haven”) and works now for the Bank Merrill Lynch!

## **Tools for European coordination**

In recent years, several research programs funded by the *Council of Europe* and the European Union have focused on the organization of archaeology in Europe, and

preventive archaeology specifically. In this fashion, the *European Preventive Archaeology Project* (EPAC), supported by the Council of Europe and the EAA, was held in Vilnius in 2004, at the initiative of the *French National Institute for Preventive Archaeological Research* and the *Hungarian National Office of Cultural Heritage*, as representatives of the major European countries (Bozóki-Ernyey 2007). The project *Planarch* (<http://www.planarch.org/>) brings together English, Belgian and French archeologists on the planning of preventive excavation in development works (Ghenne 2007). The project *Discovering the Archaeologists of Europe* (<http://www.discovering-archaeologists.eu/>) in the framework of the European ‘Leonardo da Vinci’ education project, has undertaken a survey of archaeologists and their profiles in different European countries. The project *Archaeology in Contemporary Europe* (ACE: <http://www.ace-archaeology.eu/>), led by the *French National Institute for Preventive Archaeological Research*, brings together participants from around ten countries on preventive archaeology and the social function of archaeology. The Epoch project (European Network of Excellence on the Applications of Information and Communication Technology to Cultural Heritage) also contributed to preventive archaeology (D’Andrea & Guermandi 2008 ; cf. <http://www.epoch-net.org/>), as did several recent other meetings (D’Agata & Alaura 2008, Gras & Liverani 2011).

This now-nearly permanent European cooperation is all the more necessary since some countries are regularly tempted to reverse the gains of preventive archaeology, as was the case in France in 2003, and is currently the case in Hungary (Banffy & Raczky 2010; see also the papers of Bozóki-Ernyey and Czifra & Fábián, *this volume*).

We must nevertheless remember that Europe no doubt represents, with the United States and Japan (Okamura & Matsuda 2010), the regions of the world where preventive archaeology is the most developed. But entire continents (Messenger & Smith 2010), particularly Africa (Ould Mohammed Safe et al. 2008), in much of Asia, South America, and in New Guinea, etc., destruction without any real political rescue is multiplying.

## Assessment and prospects

For the last four decades, thanks to preventive archaeology and growing legislative protection, Europe has gone through an unprecedented explosion of knowledge about its own past. It is estimated that 90% of the excavations conducted in Europe fall within the framework of preventive archaeology – to the point that some countries, like the Netherlands, do not allow other forms of excavation since only the excavation of threatened sites seems a priority. This explosion of data has also revolutionized the very approach of archaeology; as it is no longer the study of isolated sites, but the

study of whole territories, which allow for excavation prior to major development projects and sometimes involve several hundred uninterrupted acres (Brun et al. 2006; Blancquaert et al. 2011). Due to the amount of data to be processed and the necessary rapidity of action, preventive archaeology has indeed revolutionized the methods of this science.

This abundance of data has made it possible to increase public awareness, both through exhibitions (for example: Menghin & Planck 2002) as through accessible publications which take stock of the recent discoveries in each country (Demoule 2012; Demoule & Stiegler 2008; Raczky, Anders & Kovacs 2004; Visy et al. 2003; Darvill & Russel 2002, etc.), or in connection with each major preventive operation (for example: Djurić & Prešeren 2003; Chlodnicki & Krzyzaniak 1998; Balint & Winkler 2007; Lagatie and Vanmoerkerke 2005; Vanmoerkerke & Burnouf 2006, etc.). The public interest is indeed what makes archaeology possible. (Holtorf 2005; Jameson 2008).

Nevertheless, a certain number of essential questions concerning preventive archaeology are still under debate:

- 1) Property and status of archaeological objects: Some countries, like Greece and Italy, most of the Central and Eastern European nations, and now France (since 2016), consider archaeological ground as national property. Others, such as England, consider that it belongs to the surface owner of the land (Carman 2005). Others still take an intermediate position: in the case of preventive excavations, half of the objects belong to the State, with the other half belonging to the owner of the land who has but one year to claim the objects. Uniformity of the EU legislation - if possible - seems paramount for the interests of the community and for archaeology.
- 2) The mode of discovery of archaeological sites: Some countries, like France or Germany, systematically carry out machine trenching on about 10% of the surface area of major development works prior to construction; others simply do an aerial or electrical survey and basic core-drilling. These latter methods, which are obviously preferred by developers, have seen improvements, but only lead to the discovery of smaller numbers of sites (Cowley 2011). It was demonstrated that, at least in France, five times more sites are discovered with real trenches, than with electrical survey.
- 3) Unsupervised destruction: Only rarely do we have accurate statistics on the areas affected each year by preventive excavations. The data for France (see [www.inrap.fr](http://www.inrap.fr)) suggest that, with approximately 600 km<sup>2</sup> of the surface area developed each year, only 15% are subject to archaeological surveys - of which only 20% are followed up by excavations. Such information is not available for other European countries, and this is one of the aims of the previously mentioned project

*Archaeology in Contemporary Europe*. The wetlands are particularly threatened (Coles & Olivier 2001). More worryingly still is the destruction caused by agricultural practices (Trow et al. 2010), which deeply turn over the soil with heavy machinery; such destruction is not subject to any supervision, whereas we have been able to estimate that, in the Netherlands, agricultural practices constitute 60% of the destruction of sites. Added to this is, finally, the damage of armed conflict: it is estimated that there are at least one million mines buried in the soil of former Yugoslavia from the wars of the 1990s.

- 4) The necessary level of preventive archaeology: What, ultimately, is the right level of archaeology in a country? There has been no public debate between the scientific, political and economic actors of any European country. The level depends on three factors: the scientific standards (increasingly demanding over the years), a country's wealth and, finally, the cultural demand of the public (indeed – it is the weakness of this demand which led to all of the immediate, post-war destruction). This level should also be defined with respect to national scientific programs (see below).
- 5) Looting and metal detectors: Another point of concern is the destruction caused by illegal excavations, including those due to metal detectors, for which countries such as Britain seem overly tolerant (Thomas & Stone 2009; Barford & Swift 2013 ; cf : <http://heritageaction.wordpress.com/>), and, more generally, all forms of looting and trafficking (Renfrew 2000; Brodie et al. 2001; Brodie & Renfrew 2005; Atwood 2004; Flutsch & Fontannaz 2010; Compagnon 2010).
- 6) Preservation “in situ”: Some developers offer to archaeologists to conserve the site without excavating it by, for example, building from concrete pillars or by covering the site with a thick backfill. Such provisions are not very convincing but have not been to date properly evaluated (see Lucas 2001; Willems 2009).
- 7) Storage and Archiving: The accumulation of excavations has caused great problems for storage of the objects, as well as archiving, especially as IT programs and hardware are constantly changing, making stored data quickly inaccessible (De Grooth & Stoepker 1997; Merriman and Swain 1999; Schlanger & Nordbladh 2010).
- 8) The issue of scientific publications: There is a serious deficit in publishing in archaeology, and certainly a much higher deficit in private commercial archaeology (Kristiansen 2009), and which also affects research excavation. This deficit has been regularly reported (Fagan 1995; Shanks 1996; University College Dublin 2006; Watkinson 2008; Cherry 2010, etc). It concerns both the monographs of sites as that of regional syntheses (e.g. Collart, et al. 2004) or national ones (e.g. Bradley 2007; Trier 2003). The issue of a lack of publication leads to the next point.

- 9) National scientific agendas and assessments: One of the disadvantages of commercial archaeology practiced by many private companies is the difficulty in establishing national scientific programs ('agendas'). Yet, these are essential for a comprehensive research policy, including justification for the interests of archaeology to policymakers.

Indeed, it is through its ability to produce compelling and useful knowledge for our thought and reflection on trajectories of the past – as well as the futures of human societies – that preventive archaeology can justify its existence and the efforts made for its being.

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## From Rescue to Preventive Archaeology: A Highly Challenging 25 Years in the Former Socialist Countries of Eastern Europe

*Predrag Novaković, Milan Horňák*

### **Abstract**

*Until the 1990s and the collapse of socialist/communist regimes in Eastern Europe, archaeological institutions and cultural heritage protection practices were fully in the hands of state bodies, which received funds from the state budget. The 'polluter pays' principle was only occasionally applied and was not normally aimed at providing complete coverage of the costs of archaeological protection. There were no clear and stable preventive strategies, since the role of archaeological protection services was mostly one of 'reacting' to newly discovered heritage rather than providing a presence in the initial phases of spatial planning and development. There were many reasons for this, not all of them the result of the fact that the ruling socialist regimes were highly centralised and bureaucratised; the prevailing culture, earlier traditions of state rule, and cultural attitudes towards the past and to heritage also played their part. In socialist countries, all elements of public life were subject to control and planning; and since culture and heritage were considered to have special value for society, they could not be left to operate autonomously. The political and economic changes after 1990 have had very different consequences in different countries in relation to the development of preventive archaeology, and even countries which shared similar or even identical systems of heritage protection organisation and practice (e.g. the former Yugoslavia or the Soviet Union) soon developed quite different systems, which ranged from 'very liberal' to 'fairly conservative'. In this respect, it is interesting to note that it was 'liberal' systems of heritage protection that adopted a greater number of preventive archaeology concepts, coupling them with the emergence of a private market in archaeological services, while countries with 'conservative' systems openly (or in a more disguised form) expressed opposition to preventive strategies, and particularly to the engagement of private archaeological enterprise. The two conjunctures – a more 'liberal' preventive heritage approach and the development of a private market in heritage services – are not necessarily directly correlated (e.g. as in preventive archaeology in France), but this correlation seems higher in the case of the former socialist countries of Eastern Europe. However, if one looks at the range of experiences over the last two decades, a further set of questions suggests itself: who participates in the preventive archaeology market as a private entrepreneur, what is their status and what is the extent of their participation? Are we talking about real entrepreneurs or*

*about public institutions in disguise? Does the dominant role of public institutions (e.g. INRAP in France) secure better quality and control? And what are, in the end, the benefits for heritage, for preventive archaeology professionals, for the public and for our knowledge of the past?*

**Keywords:** preventive archaeology, former socialist countries of Eastern Europe, archaeological services, Valletta Convention, rescue archaeology

### **Povzetek**

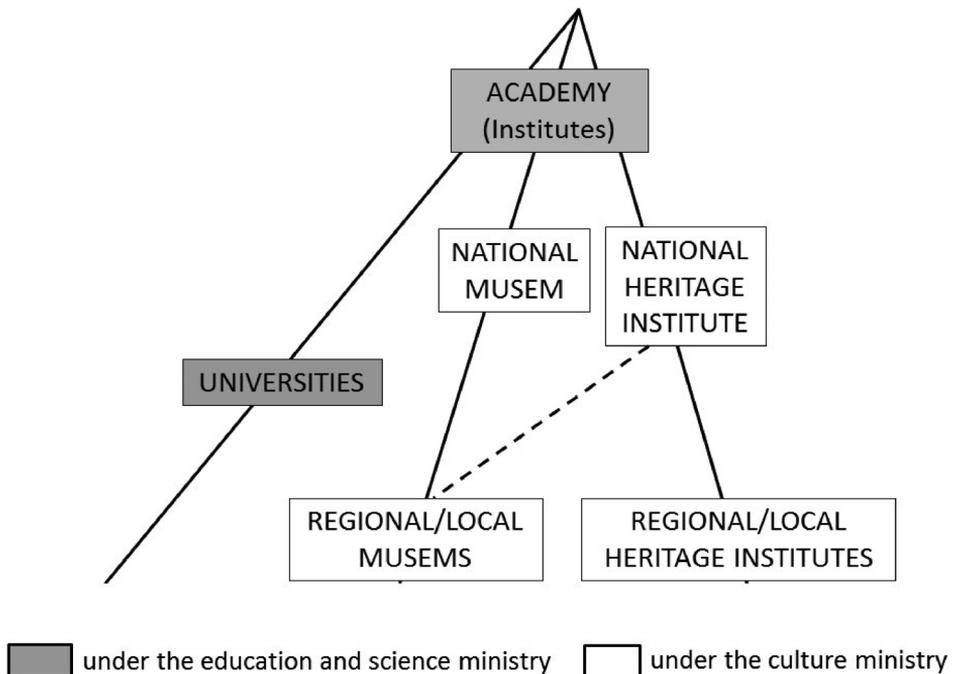
*Vse do začetka devetdesetih let prejšnjega stoletja in konca socialističnih oziroma komunističnih režimov v "vzhodnih" evropskih državah je bila dejavnost varovanja kulturne dediščine, vsa praksa in vse ustanove, v celoti v rokah državnih ustanov in teles, ki so morala v državnem proračunu načrtovati izdatke za izvajanje varstva dediščine. Načelo, da stroške varovanja plača 'onesnaževalec' (stran, ki ogroža dediščino), je bilo zelo redko v uporabi pa še takrat ni pokrivalo vseh stroškov arheološkega dela. Večji del prakse arheološke konservatorske službe je bila v glavnem razumljen kot reakcija na novo odkrite objekte dediščine, kajti jasnih in trdnih preventivnih strategij, ki bi bile del prostorskega planiranja, ni bilo. Razlogov za to je več in niso vsi izhajali iz centralizirane in birokratizirane narave socialističnih režimov, temveč tudi iz prevladujoče kulture administriranja in starejših tradicij upravljanja z državo. V socialističnih režimih so bili vsi elementi družbenega življenja podvrženi nadzoru in načrtovanju in ker sta bila kultura in dediščina razumljeni kot posebni vrednosti, se nista mogli bolj avtonomno organizacijsko razvijati. Politične in ekonomske spremembe, ki so nastale po l. 1990, so na področju varovanja kulturne dediščine imele različne posledice v različnih državah in celo državah, ki so imele skupne ali zelo podobne sisteme varovanja dediščine (npr. države nekdanje Jugoslavije ali Sovjetske zveze) so kmalu pričele razvijati zelo različne sisteme varstva, ki so varirali od zelo "liberalnih" do dokaj "konzervativnih". V tem kontekstu je zanimivo pripomniti, da so "liberalni" sistemi bili bolj odprti za koncepte sodobne preventivne arheologije in so dokaj hitro razvili tudi tržišče zasebnih arheoloških storitev, medtem ko so države, ki so ohranile "konzervativne sisteme" (tudi v bolj zakriti obliki) marsikdaj težko sprejemale preventivne strategije, predvsem pa sistemsko angažiranje zasebnih ponudnikov storitev na tem področju. Ti dve konjunkturi – "liberalnejši" sistem preventivnega varstva in razvoj zasebnega sektorja v dejavnostih varstva arheološke dediščine – nista nujno v neposredni korelaciji, o čemer pričča oorganizacija in praksa preventivne arheologije v Franciji, se pa zdi ta korelacija precej večja v nekdanjih "vzhodnih" državah. Če se ozremo na različne izkušnje preventivne arheologije v zadnjih dveh desetletjih, se moramo dotakniti še nekaterih drugih vprašanj: kdo, v kakšnem statusu in do katere stopnje, je udeležen na tržišču preventivne arheologije kot zasebnik; ali gre za pravo zasebno dejavnost ali pa za "zakrite" oblike delovanja javnih ustanov; ali prevladujoča vloga javnih ustanov (npr. INRAP v Franciji) jamči boljšo kvaliteto in nadzor nad preventivnimi raziskavami; in, navsezadnje, kaj je dodana vrednost preventivne arheologije za dediščino, za profesionalce v preventivni arheologiji in javnot, ter kakšen in kolikšen je bil prispevek preventivne arheologije za naše poznavanje preteklosti.*

In the three most frequently cited publications dealing with preventive archaeology in Europe (Ernyey-Bozók 2007; Schlanger & Aitchison 2010; Guermandi & Salas-Rossenbach 2013) only seven former socialist countries are represented (Poland, Hungary, Estonia, Romania, Slovenia, Czech Republic Russia). Not only that there are very few information on other 15 countries (all members of the Council of Europe), but also most of the existing information which came from the papers

presented at the EPAC meeting in Vilnius, 2004 (Ernyey-Bozóki 2007) need to be ajoined in order to explore and reflex the present state of preventive archaeology in former socialist countries.

Owing to their previously uncompetitive economies and outdated technological infrastructure, most former socialist countries of Eastern Europe still remain largely underdeveloped. Only a handful of Central European countries increased their GDP from 40 to 60% of the EU-15 average between 1990 and 2014, while others (Balkan countries and former Soviet republics) did not reduce the relative distance at all, with their GDP on average remaining at less than 15% of the EU-15 average. These figures should not be ignored when examining preventive archaeology in the former socialist countries of Eastern Europe. While it is true that the economics of preventive archaeology should primarily be observed within national economies, certain aspects also require consideration within an international context.

Prior to the 1990s, all heritage services in socialist Eastern Europe were the domain of public/state institutions, and the overall structure and practice of the discipline was dominated to a great extent by central academic institutions (see Fig. 1).



*Fig. 1. Standard model of the hierarchy of archaeological disciplines in the former socialist countries of Eastern Europe.*

National academic institutes were responsible for general strategic decisions and for developments and practices in scientific disciplines, archaeology included; these institutes were also the most well-resourced in terms of staff, equipment and funds. There was also another important issue, and one that is frequently overlooked elsewhere in Europe: that of the considerable restrictions placed on mobility. Here, it was the institutes' staff who had a much greater chance of obtaining permits to travel abroad and collaborate with their Western colleagues. This privilege was very rare for archaeologists working in regional or local institutions.

In general, it can be said that rescue archaeology served two main goals: a) to protect heritage and b) to serve scientific/academic archaeology by providing new data and, if necessary, assisting in major field projects. For decades it was the institutes that were normally in charge of the largest rescue projects, while local or regional heritage protection services assisted them with staff and infrastructure, and administrative support. This practice (one may also call it a system) to a large degree existed in all former socialist countries of Eastern Europe; moreover, this way of working persisted for decades, which means that it has continued to leave a strong mark on the understanding and practice of preventive archaeology even a quarter of a century after the arrival of political and social change. The view that preventive archaeology needs to serve academic goals and agendas, and that the leading academic institutions should have significant power in this field, is still a fairly current one. Some variations of this model did exist: in Hungary, for example, county museums were in charge of a great deal of rescue work, but always ceded a certain amount of control to the leading academic institutions when large sites were endangered.

However, one should also examine this fact from another perspective, that of funding. On the one hand, funding from national research schemes was in constant decline, particularly in the 1990s, and many large academic institutes and similar organisations had to compensate for the considerable loss of income in order to retain staff and keep projects running. Much of this compensation came from the more direct involvement of these institutes in preventive archaeology. Indeed, in some countries (Slovakia, Czech Republic, Bulgaria), these institutes are still listed as having a near-monopoly on running preventive projects, in agreement with the national heritage protection service.

However, not all post-socialist countries have followed this path in relation to preventive archaeology. While Slovenia and Croatia, for example, have retained national academic institutes as their paramount research organisations, these institutes have rarely, if at all, been engaged in directing preventive archaeology projects themselves; and in the Baltic countries, which lacked such institutes in the Soviet era, preventive archaeology has become the domain of the national heritage protection service with its own institutions. Special case is Hungary where county museums

for short period of time in the last ten years lost its traditional monopoly to national institutions aimed at preventive research but soon regained it (see more in papers of Czifra & Fábíán, and Ernyey-Bozóki *this volume*).

## La Valletta Convention

The adoption of the La Valletta Convention by the Council of Europe in 1992 coincided with the end of the socialist systems of Eastern Europe. Its ratification began in 1993, with most former socialist countries ratifying it over the following 10 to 15 years (for dates of adoption and ratification of the convention see Fig. 5 in Stäuble (2013).

It is difficult to discern any particular pattern regarding the time of adoption or ratification and, as will soon become clear, the effects of this Convention, and the development and practical implementation of preventive archaeology, have varied greatly from country to country (although this has been the case with all national archaeological heritage frameworks throughout Europe). Political and economic changes since 1990 have had very different consequences for preventive archaeology in different countries, and even countries which shared similar or even identical systems of heritage protection organisation and practice (e.g. the former Yugoslavia or the Soviet Union) soon developed quite different systems, which ranged from 'very liberal' to 'fairly conservative'.

Socialism (pre-La Valletta)	Capitalism (Post-La Valletta)
<b>LEGISLATION</b>	
Protection of archaeological heritage defined chiefly in conservation acts issued by the culture ministry	Protection of archaeological heritage also required in spatial planning acts as compulsory impact research (various national models)
<b>FUNDING</b>	
Public only (budgets)	Combined: 'polluter pays', public (to a lesser degree)
<b>ACTIVITIES</b>	
Rescue and salvage excavations (mostly)	Wider variety: testing, sampling, preventive excavations, salvage excavations (very rare)
<b>QUALITY CONTROL AND STANDARDS FOR PREVENTIVE ARCHAEOLOGY</b>	
'Standards' derived from academic practice, (frequently not explicit)	<ol style="list-style-type: none"> <li>1. Regulation and standards adopted for preventive archaeology; most detailed (Slovenia), less detailed and explicit (e.g. Slovakia, Czech Republic...)</li> <li>2. No standards, no new regulations (e.g. Serbia, Montenegro, Bosnia and Herzegovina)</li> </ol>

**PRACTITIONERS**

Public institutions only: Academy, Museums, Heritage services, Universities	<ol style="list-style-type: none"> <li>1. Only limited to public institutions (e.g. Serbia, Macedonia, Bosnia and Herzegovina, Montenegro...)</li> <li>2. Public institutions mostly (e.g. Hungary)</li> <li>3. Hybrid: private SMEs as subcontractors of public institutions (e.g. Czech Republic)</li> <li>4. Market: private SME and public inst. compete on equal basis (e.g. Slovenia, Croatia, Poland, Slovakia...)</li> </ol>
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*Fig. 2. Comparison of rescue and preventive archaeology.*

It is interesting to note that it was 'liberal' systems of heritage protection that adopted a greater number of preventive archaeology concepts, coupling them with the emergence of a private market in archaeological services, while countries with 'conservative' systems, openly or in a more disguised form, expressed opposition to a number of preventive strategies and forms of organisation (and particularly to the engagement of private enterprise), insisting that preventive archaeology had to remain largely the domain of public institutions.

These two conjunctures – the 'liberal' preventive heritage approach and the development of a free market in heritage services – are not necessarily directly correlated (e.g. as in preventive archaeology in France), but this correlation seems higher in the case of former 'Eastern' countries.

The economic conditions referred to at the beginning of this paper and recent crisis had an important effect on the development and practice of preventive archaeology. The reduction in national funds posed a considerable challenge to the entire infrastructure of the discipline (institutes, museums, universities, the public heritage service, etc.). The public sector, including the archaeological sector, was quite unprepared for the rapid privatisation and economic liberalisation being advocated by the newly elected governments and by the Western international economic and political powers. In these conditions, the perspectives for preventive archaeology would have been rather bleak without the Valletta Convention. While one can criticise it from many points of view today, for a great many former socialist countries the Convention has played a crucial role in developing preventive archaeology and introducing it into spatial planning, notwithstanding the fact that this process has been a fairly painstaking one.

National administrative traditions (or rather, attitudes towards the administration of cultural heritage and the practices associated with cultural heritage research and protection) have exerted a much stronger influence than one might have expected.

This is not only the result of 50 years of socialist administration, but is also associated with the general idea of the role of state in the countries concerned. With the exception of Russia, all other former socialist countries of Eastern Europe gained their independence at some point in the last 140 years (after the Berlin Congress in 1878 or after the First World War) and some much later, in the 1990s. Given the relatively short period of independence enjoyed by these countries and the fact that almost all of them were actually established after periods of war, the idea of the state as the paramount regulator (direct or indirect via national institutions) of all principal public and national assets, heritage included, remains very strong – hence the culture of administration in many countries is still associated with these assets.

### **Transition from rescue to preventive archaeology**

In Western as well as Eastern Europe, preventive archaeology, in the modern sense of the term, did not exist prior to the 1990s, with different forms and practices of rescue archaeology being much more common. If one compares Eastern and Western rescue archaeology prior to the 1990s, the major point of resemblance was the fact that they all lacked clear and comprehensive heritage protection systems and practices. Every country had legislation that clearly defined and protected cultural heritage, but none of them had effective mechanisms, criteria and tools for efficient heritage protection, including research into endangered sites. To many it seemed somewhat logical that we were dealing with ‘normal’ research, albeit in extraordinary conditions, and that practices developed at academic institutions could also serve to rescue endangered heritage.

There is one further aspect to be considered when discussing the former socialist countries: that of the system of property and of funding. Under socialism, heritage development and heritage protection were understood to be a public good, in the public interest or public ‘property’, and both were financed from public funds. However, clear distinctions were made between the two and this frequently put heritage in a paradoxical position. On the one hand, it was given prominence as evidence of important processes and events in the creation of the nation and in national emancipation (for example); on the other hand, communist ideology had a very selective attitude towards heritage, promoting processes of social and economic development, industrialisation, transformation from an agricultural to an industrial economy, the construction of large-scale infrastructure, and so on. Where there was a lack of clear strategy and priority in heritage protection, rescue archaeology was indeed a process of negotiation between stakeholders, frequently on a case-by-case basis. These negotiations were, in most cases, *ad hoc* and took place at all levels of administration and government, from national to local, depending on the scale and

importance of development and heritage. It would be wrong to think that there were no regulations within this process. Laws and other subsidiary instruments did exist, but they were rarely precise and executive in their powers; as such, they were subject to differing interpretations.

Funds for rescue works were exclusively public and, in most cases, it was up to the heritage protection institutes to secure them. The rationale behind this was simple: the state (or local state body) was simultaneously the developer and 'protector' of heritage, and so it was its job to secure the necessary funding. However, funding for protection (e.g. rescue excavations) did not come from the same funds as development. One rarely saw cases of developers funding (or at least part-funding) rescue archaeology. In the socialist system, this meant that the developer (a public organisation) was sometimes given additional (public) funds for rescue works directed by another public organisation. The only way to make this system work was through negotiation.

This system of rescue archaeology was clearly not very efficient. In spite of the long tradition of planned economy and development, it was very difficult to plan in advance the budget for rescuing hundreds of unexpected discoveries prior to and during construction work; moreover, these discoveries delayed construction and increased its cost. The outcome frequently came at the cost of archaeology, both heritage and practice: only limited rescue excavations were possible, emergency excavations during construction work were carried out very quickly, no restoration could be planned, etc. Archaeological staff were not really prepared and equipped for working in such circumstances.

To illustrate this, let us turn to a case from Slovenia. While, according to several criteria, this country was the most developed of all the former socialist countries of Eastern Europe, and has a rather efficient and modern system of preventive archaeology today, the situation 30 or so years ago did not differ much from that in other Eastern European countries.

Between 1985 and 1989 around 250 rescue excavations and projects were carried out – an average of 50 per year (Turk 1991: 7). Twenty-five years later (2010–2014) the number of preventive projects had increased tenfold, i.e. to around 2,500 projects of varying sizes per year. The difference is even larger when the excavated areas or the funds allocated to preventive research are taken into account. This huge increase is the direct result of the implementation of the Valletta Convention and its two major requirements: a) that preventive archaeology be integrated into spatial planning processes and b) that the 'polluter pays' principle be applied. I have no precise data for other countries but, by rule of thumb, one might expect an increase of at least 500% in most of the former socialist countries of Central Europe as a whole.

This change happened over the course of 10 to 15 years and has had considerable consequences for all aspects of archaeology and archaeological practice. However, not all the countries followed (or were in a position to follow) the Slovenian example.

The crucial point here is how preventive archaeological research is incorporated into spatial planning processes and, even more importantly, how this is implemented in practice. If prior evaluations of archaeological potential are only desk-based and not tested in the field, then a great deal of preventive archaeology's potential is lost. At this point, it is difficult to classify countries according to the degree to which archaeology participates in spatial planning. Some countries are definitely not very successful in this and, in my personal experience, countries like Serbia, Macedonia, Montenegro and Bosnia-Herzegovina are certainly among the least successful. The situation is much better in Central European countries such as Slovakia, the Czech Republic, Poland, Hungary, Croatia, and in the Baltic countries.

### **New subjects in preventive archaeology**

There is one very simple empirical tool for examining whether preventive archaeology is well integrated into spatial planning policy and processes: the number of archaeologists and other experts involved, and the types of economic and legal status held by entities professionally engaged in preventive archaeology.

Any substantial increase in the number of projects required during spatial and development planning has only been made possible through a corresponding increase in the number of practitioners and/or archaeological jobs (both, in public or private organisation). This effect can be seen throughout Europe and not only in the former socialist countries of Eastern Europe.

Another criterion (the types of economic/business participation in preventive archaeology) also shows a direct correlation between an increase in the involvement of preventive archaeology in the planning process and an increase in the heterogeneity of business arrangements. Empirical comparisons for the former socialist countries of Eastern Europe demonstrate that markets in preventive archaeological services are stronger or more developed in countries where adequate consideration is given to archaeological heritage in spatial planning. Of course, this should not be taken as a rule: INRAP in France and its system of preventive archaeology is clear exception, but here we are talking about a very different tradition of the state and of the administration of public assets to that present in most of the former socialist countries of Eastern Europe.

However, making preventive archaeological work subject to market forces and competition has a number of negative effects. Two closely connected effects are listed below:

- a) increased precarity and the widespread phenomenon of low-paid archaeological jobs in preventive projects. This should not be seen as the logical outcome of an increased number of archaeologists but of other factors, including, first and foremost, the uncontrolled liberalisation of the market in heritage services and a lack of regulation on fair competition;

- b) heritage as an ‘undesirable’ by-product of development. The general pressure to lower costs in all aspects of development also applies to preventive work, with developers opting to paying for the ‘cheapest archaeology’ rather than the ‘best possible archaeology’. Heritage is seen as an obstacle rather than an asset and, since it is legally protected, the attitude of the ‘lesser evil’ dominates.

### **Quality control, standards and good practice**

In order to improve this situation, one needs a state prepared to deploy its mechanisms of imposing regulations, responsibilities and sanctions. Preventive archaeology, by virtue of operating during the planning development phases, requires regulations and standards that are more detailed than those applied to rescue and salvage intervention. In other words, while rescue and salvage archaeology deals exclusively with self-evident sites or sites newly discovered by chance, preventive archaeology is first and foremost about the archaeological potential of areas and sites for which development plans have been drawn up. Evidence needs to be provided for the sites to a certain level of probability, and these sites also need to be accurately mapped; this is in order to prescribe further steps for their protection and, where necessary, provide the basis for excavation. In addition, preventive practice today includes several new methods and techniques of sampling and testing, which needed validation and acceptance before becoming widely used.

There is a further reason for more detailed quality control standards and procedures. Compared to the pre-La Valletta period, when there were very few (if any) explicit standards in rescue archaeology, the ‘standards’ that did exist were derived from academic field practice and there were only a limited number of organisations permitted to undertake rescue work, post-La Valletta has seen marked changes to the situation. The large increase in a number of preventive research projects has inevitably generated a demand for more archaeologists, who now appear in different forms of organisation and legal status. This large increase in the number of archaeologists engaged in preventive research necessitates the introduction of quality control and standards in order to secure the required level of research quality. This is currently not yet the case in many European countries – many of the former socialist countries of Eastern Europe included. While one might find documents designated as ‘standards’, most of them are very general and incapable of meeting the demand for efficient mechanisms capable of securing quality.

### **New technologies**

Accompanying the increase in the number of research projects is an increase in the development and implementation of new technologies in archaeological research,

with the most significant 'decentralisation' or 'democratisation' occurring in the last few decades. While the level of technology used in archaeological field research and analysis was relatively modest prior to the 1990s, particularly in research and rescue projects undertaken by regional and local organisations, the situation is very different today. It used to be the case that only the top academic institutes and national museums had access to costly technological equipment and analysis (although the general underdevelopment of many former socialist countries meant that even this level was frequently not comparable to that seen in the West). The situation is radically different today. Rapid development and the fall in the prices of computing technologies, IT and technologies for the automated recording of various types of data have made new technological tools accessible to virtually anyone. This has, of course, speeded up most aspects of fieldwork and recording. In many former socialist countries, the new technologies have been adopted and implemented more quickly by smaller private organisations than by the large institutes. In fact, new technology has not only equipped smaller enterprises; it has also boosted the creation of new specialised niches requiring the services of archaeologists and other experts.

### **Knowledge derived from preventive archaeology**

As this introductory paper draws to a close, I would like to focus on the question of the extent to which the efforts of preventive archaeology as a whole actually contribute to our knowledge of the past. If the question of the quality of preventive archaeology and the heritage it saves is necessary for understanding the relevance of archaeology to our society, the question of the extent to which preventive archaeology contributes to a knowledge of past is the flip side of the coin and actually addresses the issue of the coherence of the discipline of archaeology.

It is beyond doubt that the large increase in field projects across our countries, indeed all over Europe and the rest of the world, has led to an accumulation of large quantities of archaeological evidence – quantities that are probably higher by several orders of magnitude than 30 years ago. One also thinks of the large increase in a number of skilled professionals able to cope efficiently with complex field projects and sites – another fact that appears indisputable at first glance. However, evidence alone does not automatically mean new knowledge or even new heritage. Both need to be properly constructed and contextualised.

One can hardly escape the feeling that the potential of this mass of new evidence is far from being fully exploited – and the same applies to the potential generated by the large increase in the number of archaeologists. I agree that it is not easy to estimate the volume of new knowledge of the past produced by preventive archaeology

in the last three decades, or to say with certainty what kind of knowledge has been produced. Let us imagine instead what an increase of this scale would have meant for ancient history if, for example, 10,000 new fragments of ancient texts from the Mediterranean had been discovered in the same short space of time. The parallel is an exaggerated one, for sure, but it does clearly illustrate the problem. There are many cases where long linear projects, for example motorways, have radically changed regional chronologies and our knowledge of settlement patterns and past land use; there are also numerous cases where preventive projects have discovered completely unknown aspects of the archaeological past. We should not use this as the measure of success, but it does point to the way in which archaeological evidence and archaeological epistemology are different to historiography. In fact, historians too would need a century or more to properly analyse such massive quantities of new evidence.

Several authors have nevertheless observed that the quality of publications and reports does not match the potential of the excavated sites. A great deal of the data discovered ends in site reports and descriptive catalogues and is never studied in more detail. Moreover, the regulations, standards, manuals and similar documents regarding site reports and field-recording lead to the mass production of very simplified texts aimed at fulfilling the requirements of those very regulations. The pressure to conduct field research and produce a field report as quickly as possible undoubtedly reduces the creativity of archaeology, turning it into something of a conveyor-belt process. It is probably here that the coherence of the discipline of archaeology is in greatest danger – and here that we need to invest more effort in the future. We have to accept that the increase in preventive projects has led to archaeology becoming a heavily ‘data-driven’ discipline. This fact is still not fully recognised, but it does require very careful reflection. Thousands of cases of poor-quality and over-simplified interpretations, in the long run, undermine the role and relevance of archaeology in the public mind.

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## Preventive Archaeology, Scientific Research and Public Outreach: Some Non-politically Correct Thoughts

Pascal Depaepe

### **Abstract:**

*Since the Valletta Convention, the basis of almost all of the laws in European countries regarding preventive archaeology is the Polluter-pays principle. One major consequence has been an extraordinary increase of funds, in parallel with an identical increase in the number of archaeological operations. But there are also negative consequences: the struggle between archaeological companies, the role of the developers (who pay the excavation and so choose the operators), the public outreach as a goal instead of research. These aspects are examined here, in a non-politically correct way.*

**Keywords:** Preventive archaeology, Research, Public outreach, Developer

### **Résumé**

*Depuis l'adoption de la convention de Malte-La Valette le principe pollueur-payeur est adopté dans la plupart des pays européens pour le financement de l'archéologie préventive. Une des principales conséquences fut un accroissement considérable des fonds attribués à l'archéologie préventive ainsi qu'une forte augmentation des données scientifiques acquises. Mais il y a également des retombées négatives : la compétition entre les opérateurs en archéologie, le rôle des aménageurs (qui financent les opérations archéologiques et donc qui choisissent les opérateurs), et la communication vers le grand public comme but à la place de la recherche scientifique. Ces aspects sont examinés ici, dans une optique non-politiquement correcte.*

## The Legal framework of French preventive archaeology: a summary

Since 2001, French preventive archaeology is organized according to the European Convention of Valletta (see Collart 2012) for a complete history of the process; Catteđu, et al. 2012; Depaepe & Salas-Rossenbach 2013 concerning the role of INRAP).

The Law relating to preventive archaeology stresses the importance and specificity of this discipline, the goal of which is *“to ensure [...] the detection, the conservation or the safeguard through their scientific study of those elements of the archaeological heritage affected or likely to be affected by public or private works in the framework of urban and rural development”*. All of these measures have been synthesized in the French Heritage Code.

Three partners are involved in the process: the state, the developer and the archaeologists. The developer puts up the money for archaeology (it’s the “polluter-pays” principle); the state orders the archaeological evaluations and excavations and has control over them; the operator does the job.

There are two major phases (Fig. 1). The first phase involves an evaluation of the archaeological potential (called *“diagnostic”* -diagnosis- in French archaeological vocabulary). This phase can only be carried out by public services (INRAP or local authority services) and is paid for by a tax on each construction project. Local authority services must be licensed by the state after scientific appraisal by the National Council for Archaeological Research. The aims of the evaluation are to *“...detect, characterize, localize and date potential archaeological remains in the area scheduled for development.”*

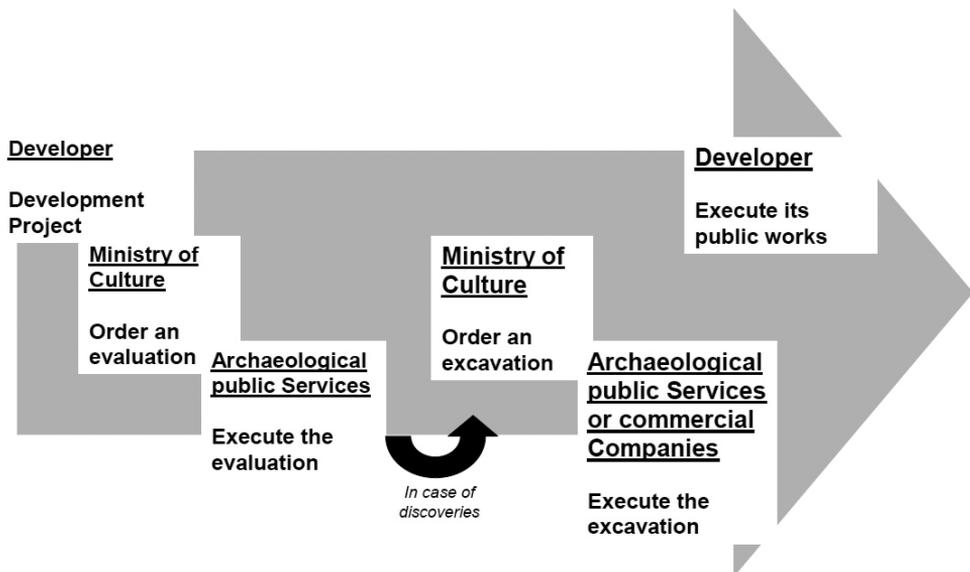


Fig. 1. Administrative Phases of French Preventive Archaeology.

The second one is, if a site is discovered, the excavation. It's directly paid for by the developer (according to the Polluter-pays principle) and can be carried out by public archaeology services or commercial companies under license (license on the basis of a scientific appraisal from the National Council for Archaeological Research).

The operations are assessed by six committees, the CIRA (Commission for archaeological research). These committees express opinions on the authorization requests of planned excavations and on the prescriptions within the framework of preventive archaeology. CIRA are necessarily seized, when an extension (extra time) of the duration of the operation is needed when deciding if specific measures for preservation are necessary during the course of operation and when decisions relative to above ground remains are made. In this context, at the end of the authorized or prescribed operation, they assess the scientific content of all site reports. (See website in the bibliography).

The law was recently changed in July 2016. This major change concerns the archaeological finds that become the property of the state. There are some other modifications regarding the local authorities' archaeology services.

However, some politicians think that public services are too expensive (and not only in the domain of archaeology!). In their opinion (this mainly concerns the right-wing politicians but not exclusively) the public sector should only carry out evaluations and excavations should be restricted to commercial companies. For most neo-liberals, all archaeology should be carried out by private companies. It's not a legal problem regarding competition and the free-market because the French Constitutional Council has admitted the possibility of a state monopoly in 2001 (see website in the bibliography). It's just ideology, with a lot of consequences.

## **Preventive Archaeology, Cultural Heritage, and Science**

In Europe, preventive archaeology is most certainly now the main source of archaeological data, about 90% in France, and each European country has a more or less strong legislation for archaeology and cultural heritage. But there are two components in archaeology: scientific research and cultural heritage.

In my opinion, these two components are very different. Indeed the purpose of scientific research is to study the story of mankind through its material productions. But the purpose of cultural heritage is to protect the archaeological record (its artifacts, monuments, and sites) and to transmit it to future generations. It's not the same thing.

Preventive archaeology is a link between these two components: its purpose is to rescue our cultural heritage by its study (scientific research), as archaeological sites are destroyed by development. So we must, as archaeologists working in preventive

archaeology, fulfill these two obligations: conservation and research. I think that the first one is relatively well managed. Our stores are full of artifacts, inventories, pictures, drawings, etc. But what about the research? The reality is that in most countries the research has not followed in the footsteps of the development of preventive archaeology. In many European countries, excavation reports are written to varying degrees of accomplishment, but so few are published. For example in Poland in 2009, 98% of the papers were published by public services of archaeology, and only 2% by private companies (Fig. 2). During the same year 2009, 5319 archaeological operation permits were issued in Poland (Filipowicz & Mickiewicz 2011).

The problem is that in most European countries, the laws regarding preventive archaeology do not require the scientific publication of the archaeological fieldwork. In most cases, there is neither time nor money for publishing. The gray literature is one of the main challenges of the archaeology of tomorrow. And another danger is the risk of the coexistence of two kinds of archaeology, without any bridges between them: a first one producing theories and models; a second one excavating but not publishing its findings.

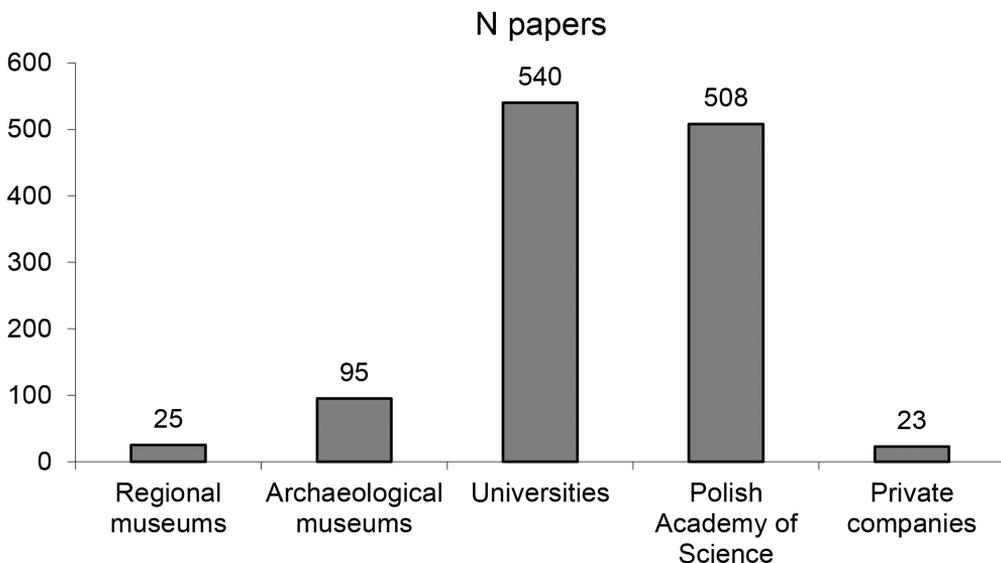


Fig. 2. Papers published in Poland in 2009 (after Filipowicz & Mickiewicz 2011).

### Malta principles and preventive archaeology

The origins of preventive archaeology are to be found in the post-war reconstruction of Europe, and during the phase of economic growth from the sixties to the eighties.

Many scandals (destructions of archaeological sites and ancient monuments) showed the need for a better protection of our buried heritage. One answer was the negotiation of the Valletta (or Malta) Convention in 1992, which is at the present time signed by 44 countries (Stäuble 2013). This convention describes a lot of principles including:

- The scientific significance of preventive archaeology
- The need of increasing the material resources for preventive archaeology

The Malta Convention completely changed the face of European archaeology by a huge increase of funds, archaeological operations, and archaeologists. For example, the number of archaeologists was less than 2000 in 1980 in the UK but went up to 6865 by August 2007 (Aitchinson 2010). The number of archaeological operations in Ireland was less than 400 in 1996 and more than 2000 in 2003 (Eogan 2010). It's the same situation in the Netherlands: less than 1000 operations in 2002, almost 4900 in 2008, just before the crisis (source: Rijksdienst Voor het Cultureel Erfgoed; website in the bibliography). In France, the number of the archaeological prescriptions (ordered by the state) grew to 4270 in 2002; only 1752 were counted in 2000, before the law regarding preventive archaeology (Collart 2012).

But this was the situation before the crisis!

## The economic crisis of 2008 and its effects on preventive archaeology

European preventive archaeology has been strongly affected by the crisis of 2008. The decrease in the number of developments has led to a collapse in preventive archaeology.

So the results have been:

- Collapse of operations due to a strong decrease of public works (by example -24% in France from 2006 to 2009 (Collart 2012))
- Ferocious competition between commercial archaeology companies
- More precarious jobs, competition between archaeologists not for scientific reasons but for salaries issues
- Collapse of jobs: e.g. in Ireland, "follow-up surveys by the Institute of Archaeologists of Ireland in 2008 and 2009 suggest that the reduction in excavation activity has led to a consequential reduction in employment levels in the private sector where employment fell by 80%" (after Eogan 2010, 20)
- Loss of knowledge because of the bankruptcy of private companies or poorly done excavations or unpublished results. E.g., in France the company "Archéoloire" bankrupted in 2014 left one excavation unfinished and at least 11 excavation reports unwritten.
- Salaries in archaeology are below average compared to other professions (Bitelli, et al., 2013) Fig. 3)



Fig. 3. Differences in salary between archaeologists and the average of salaries, in France and Italy (French sources INSEE and INRAP; Italian sources after Bitelli, et al., 2013).

So the economic crisis has demonstrated the weakness of the majority of the preventive archaeology systems. In fact, the countries or autonomous regions where the system is totally (e.g. Wallonia, (Depaepe, et al. 2015); Saxony) or partially public (France) have resisted better to the crisis.

### The polluter-pays principle and its consequences

In the majority of European countries, funds for preventive archaeology originate from the developers themselves: it's the Developer-pays principle.

It's not the main topic of this paper, but we can ask ourselves "Who really pays?" Indeed, as explained by J. Vanmoerkerke in France (paper presented at the EAA 2016 Vilnius session TH2-10), on small projects the cost of excavation is often supported by the landowner, not by the developer. Regarding motorways or railways, the cost of archaeology is included in the price of the tickets or tolls. And in the case of excavations supported by public authorities, it's the general public who pays, through their taxes.

As we have seen previously one of the major consequences of the Polluter-pays principle has been the important increase of funding in archaeology.

But the Polluter-pays principle could also be considered a great danger for preventive archaeology. In the majority of European countries, preventive archaeology

came from the cultural heritage world, not from the world of the scientific research. Indeed the aim of the archaeologists at the beginning of preventive archaeology was to make the public (and the politicians) aware of the problem of the destruction of archaeological sites. Their hidden agenda was to obtain the funds to be able to study the sites. One of the ways commonly used in France (and in other countries) was to alert the general public to these destructions using the media with the aim of putting pressure on the politicians. And as politicians are afraid of scandal, it has been the best way to create a new kind of archaeology introducing the Polluter-pays principle which has put a lot of money into the archaeological system. So the Polluter-pays principle has been an extraordinary asset in the development of preventive archaeology.

But one consequence of the polluter-pays principle is that the developer pays, so he orders the excavation. And the developer doesn't buy archaeology or knowledge of the past, he buys a piece of land to build a factory, or a road, or anything else... and preventive archaeology is the only economic activity where the client has no interest in buying the product. Archaeologists desperately try to convince developers and politicians of the importance of archaeology, by offering derivatives such as public outreach. Developers love public outreach because it's a very efficient way to interest the general public in something other than the development project itself (because people want to drive cars but they don't like to have a motorway built by their home). Politicians also love public outreach: it's faster than science (science is so slow!), it's perfect during electoral campaigning and more popular. It's happened sometimes that the same politician, who wanted to stop an archaeological project, opens the exhibition that stems from the same project.

So all agree that the pre-eminence given to public outreach was important during the birth of preventive archaeology, but can now be considered a sort of cancer. Indeed, the risk, underlined by some archaeologists, is to excavate primarily for public outreach (or just "*to fulfill legal and regulatory obligations*") (Hutchings & La Salle 2013; 2015), and only subsequently for the scientific community, whereas an archaeological site must first and foremost be excavated for scientific reasons. To be clear, it's not a criticism of the archaeologists, who are often passionate people, but their values are not always those of their employers.

The time has come to think about our real reasons for excavating.

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- <http://cultureelerfgoed.nl/>

## Enabling Archaeological Research within a Cultural Heritage Management Context: A View from the United States

*Michael Heilen, Richard Ciolek-Torello, Donn Grenda*

### ***Abstract***

*In the United States, preventive archaeology is governed largely by the National Historic Preservation Act, which requires federal agencies to identify and manage heritage resources within their jurisdiction and to consider heritage resources affected by an undertaking involving the federal government. A large industry has developed around the implementation of the Act. Thousands of preventive activities are performed each year, resulting in tremendous stores of data and, in some case, spectacular research findings. Yet, project planning and management is often reactive to development and efforts are focused on reducing costs within a competitive environment. While the industry faces many challenges, archaeological research has benefited in important ways from commercial archaeological work. There are a number of things that both the industry and individual commercial firms can do to improve research outcomes. In this paper, we highlight two regions in the United States where structured scientific research has been conducted within a commercial context and discuss ways in which individual companies and the industry can foster research to serve the discipline and public better.*

**Keywords:** *preventive archaeology, scientific research, coastal southern California, Papaguería*

## Introduction

In the United States, the primary legal driver behind heritage resource management is the National Historic Preservation Act (NHPA) of 1966. NHPA was created in response to rapid development in the United States in the two decades after World War II. Without appropriate legal protections, massive transportation, public works, and urban renewal projects and suburban sprawl was leading to widespread destruction of environmental and heritage resources. Although important heritage preservation laws had previously been passed, they were insufficient to protect the thousands of resources impacted by this development. To address this problem, NHPA requires that federal agencies take into account potential impacts to heritage resources that could occur as a result of a federal undertaking, such as infrastructure development or conducting military training exercises. Other federal laws (Table 1), as well as state laws and local ordinances, are likewise concerned with heritage preservation, but the large majority of cultural heritage management (CHM) in the United States is compelled by the NHPA.

<b>Regulation</b>	<b>Purpose</b>
<i>Antiquities Act of 1906</i>	the first Federal law to provide for the protection of ruins and objects of antiquity on federal lands
<i>Historic Sites Act of 1935</i>	established a national policy to identify and preserve historic sites, buildings, objects, and antiquities of national significance
<i>National Historic Preservation Act of 1966</i>	provided the basis for Federal heritage preservation programs and the CHM industry
<i>National Environmental Policy Act of 1969</i>	established national policy for productive harmony between Federal actions and the environment, including heritage resources
<i>Executive Order 11593, Protection and Enhancement of the Cultural Environment (1971)</i>	directed the federal government to provide leadership in preserving, restoring, and maintaining the historic and cultural environment
<i>Archaeological and Historic Preservation Act of 1974</i>	provided for the preservation of archaeological and historical information that could be lost due to federal undertakings
<i>Archaeological Resources Protection Act of 1979, as amended</i>	increased penalties for unauthorized excavation, collection, or damage of archaeological resources
<i>Native American Graves Protection and Repatriation Act of 1990</i>	protected human remains, funerary objects, sacred objects, and items of the cultural patrimony of indigenous peoples on Federal lands
<i>Executive Order 13006, Locating Federal Facilities on Historic Properties in Our Nation's Central Cities (1996)</i>	ordered the federal government to utilize and maintain historic properties and districts

Regulation	Purpose
<i>Executive Order 13007, Indian Sacred Sites (1996)</i>	required federal agencies to accommodate access to and ceremonial use of Native American sacred sites by native religious practitioners, and avoid adversely affecting the physical integrity of sacred sites
<i>Executive Order 13287, Preserve America (2003)</i>	directed Federal agencies to advance the protection, enhancement, and contemporary use of the historic properties under Federal control

Table 1. The United States Federal preservation laws and executive orders.

The NHPA declares that “[t]he spirit and direction of the Nation are founded upon and reflected in its historic heritage” and that this heritage “...should be preserved as a living part of our community life and development.” The Act compels federal agencies to identify heritage resources, evaluate their significance and integrity, and consult with stakeholders to decide how to treat important resources that may be impacted. Federal agencies are required by the NHPA to develop CHM programs that identify and manage resources within their jurisdiction and to assume responsibility for those resources. Further, the NHPA mandates that every state and territory have a state historic preservation officer (SHPO) that is responsible for ensuring that heritage preservation is carried out effectively in their state. SHPO duties include preparing and implementing a state-wide preservation plan, identifying and nominating properties to the National Register of Historic Places (NRHP), issuing permits for archaeological investigations, reviewing project plans and reports, maintaining an inventory of heritage resources, and advising and assisting Federal, state, and local government in matters of heritage preservation.

## The CHM Industry in the United States

A large industry has grown up in the United States around the implementation of these preservation laws. What began as small companies, museums, and universities doing salvage work (i.e., last-minute excavation with minimal research) evolved into an industry that employs roughly 10,000 people working for approximately 1,300 commercial firms (Grenda, et al. 2013). Large numbers of archaeologists also work for government agencies as well as in museums and universities. As of 2013, approximately 1,220 permanent staff were employed by the federal government as archaeologists.<sup>1</sup> Altschul & Patterson (2010) (see also Childs 2009) estimated that as of 2008,

1 <https://dougssarchaeology.wordpress.com/2014/01/07/how-many-archaeologists-are-employed-by-the-us-federal-government/>

State and Tribal Historic Preservation Offices employed 1,420 staff, approximately 850 of whom could be classified as archaeologists. If we include land planners, historians, architectural historians, and tribal liaisons, in addition to archaeologists, the total number of government employees working in CHM in the United States was 4,220 as of 2008.

The amount of work done by the CHM industry is staggering. Each year, an average of 30,000 field studies are conducted and millions of acres are surveyed for archaeological sites. An average of 2,000 data recoveries were sponsored by federal agencies per year between 1998 and 2012. The annual gross revenue for the industry is now estimated to be in the range of \$1 billion, a figure some 40 times larger than the amount of funding for academic research (Altschul & Patterson 2010; Grenda, et al. 2013; Altschul 2016). The fact is, most archaeological research in the United States is done within a CHM context.

Since the passage of the NHPA, over 140 million acres of land have been surveyed, vast numbers of heritage resources have been recorded and investigated, and tremendous amounts of data have been collected. As of 2015, some 90,000 historic properties have been listed in the National Register and more than 800,000 archaeological sites have been recorded. Regions and resources that had been difficult to access, were not as glamorous to study or were only studied piecemeal came to be more thoroughly investigated. Much of the work was accomplished by commercial firms hired to help government agencies and private developers fulfill their legal compliance requirements.

As a result of these efforts, important and surprising findings have challenged and changed our interpretations of the past and stimulated new insights, including those concerning the emergence of sedentism, agriculture, and complex societies; human-environment interactions and response to climate change; ethnogenesis and identity formation; colonial processes and impacts to Native society; the conditions and effects of slavery; and industrial development. As the industry has matured, methods and standards have generally improved in conducting and documenting archaeological activities and in developing and managing archaeological data and collections. Although there certainly is variation in the quality of research done in the CHM industry, there is a lot of good work being done.

## **Challenges Faced by the CHM Industry in the United States**

There is a wide variety of challenges faced by the CHM industry in the United States. Challenges are organized below into three main themes: laws and regulations; funding, staffing, and training; and the big picture.

## Laws and Regulations

Preservationists frequently need to combat attempts to weaken the law. For example, conservative legislators will often include provisions in bills that, if passed, would establish loopholes to minimize compliance requirements for special circumstances, such as border protection, rapid infrastructure development, or national security. The American Cultural Resources Association (ACRA) (the trade association for the US CHM industry), professional associations such as the Society for American Archaeology (SAA) and Society for Historical Archaeology (SHA), and preservation advocacy groups, like Preserve America, routinely lobby legislators to advocate for adequate regulation and funding and to prevent harmful measures from being passed. Another problem is that although existing preservation laws have compelled a great deal of archaeological research, these laws do not cover everything. For development projects on private land that do not involve federal funding or invoke federal, state, or local laws, archaeological work and consideration of heritage resources are not required and whatever efforts take place are left up to the developer.

## Staffing, Funding, and Training

Another problem is that the industry is underfunded and faces many staffing and training challenges. Government archaeologists who oversee and review the work often lack authority within their own agencies as well as adequate resources to fund CHM projects. Although SHPOs are charged with a wide range of duties needed to ensure that archaeology is done appropriately and well, SHPOs are notoriously underfunded. Like many government offices, SHPOs are stressed by both increasing workloads and diminishing resources to accomplish the work. While Congress long ago authorized up to \$150 million in annual funding for SHPOs, funding has never come close to the total that could be allotted and has instead remained low at around \$40 million per year.

Limited funding for CHM projects also affects the bottom line for the CHM companies that bid on projects. When project funding is low, companies compete with each other to win projects and lower costs. As a result, pay is low in comparison with other industries; it is difficult to maintain permanent staff, particularly specialists; and there is not enough money or time to do intensive or specialized analyses.

A disturbing trend is that the level of training and continued education does not always meet industry needs. While much archaeological work in the United States has shifted from an academic sphere to CHM, academic departments struggle to adapt education and training to meet this challenge. Students may now attain academic training designed specifically for work in the CHM industry but may lack graduate-level training in research methods and archaeological theory.

On the other hand, many graduate programs provide students with specialized and advanced training in academic archaeological research, but do not prepare students for work in the CHM industry in which many graduates will inevitably carry out their careers.

## The Big Picture

One of the biggest challenges is that a lot of CHM work in the United States is conducted with minimal attention to the big picture. What are we learning? What do all these data mean? How can we do things better? These are questions that are not asked often enough. Since the passage of the NHPA, most CHM work in the United States is conducted according to a site-by-site, project-by-project approach that is reactive to the development and often focuses effort on redundant sites that contribute little new information, while more important sites are incrementally destroyed through neglect and development. Consideration of heritage resources comes late in the planning process, limiting the potential for proactive, long-term preservation planning and structured scientific research. Further, while many data have been generated, data are often unstandardized, difficult to compare or access, and insufficiently integrated and harmonized in databases for regional analysis. Similarly, research findings are not published widely and the number of studies and projects is so large it is now impossible for any single individual to read and digest all that has been produced. Curation facilities, also, are no longer adequate for storing existing collections or accepting new ones.

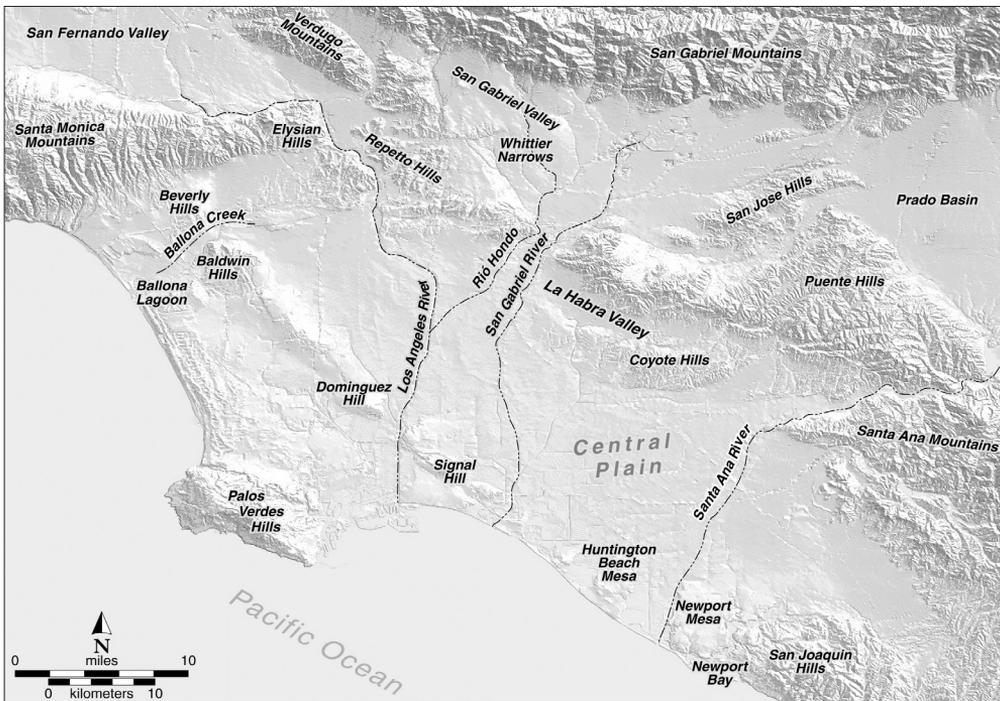
## Examples of Successful Archaeological Research within a Heritage Management Context

Despite the many challenges faced by CHM in the United States, it is worth noting how commercial archaeology has contributed to the archaeological research. Below, we briefly turn to two regions of the western United States where archaeological research has benefited largely as a result of work in CHM.

### Coastal Southern California Region

Beginning in the early 20<sup>th</sup> century, the Los Angeles basin became one of the most intensively developed regions of the United States (Fig. 1). Archaeological discoveries were made as the region was developed, but with the exception of a few salvage reports and surveys by amateurs and students, there was virtually no organized research conducted and almost nothing published. As late as the 1970s, the Gabrielino people

who inhabited this region remained “one of the most interesting—yet least known—of native California peoples” (Bean & Smith 1978:538). Earlier ethnohistoric studies led researchers to believe the Gabrielino were among the “wealthiest, most populous, and most powerful ethnic nationality in aboriginal southern California” next to their northern neighbors, the Chumash (Bean & Smith 1978:538). Yet, little was known about the prehistory of these people and their lifeways, and what was known was based primarily on comparison with the Chumash. Even the chronology was based largely on studies from surrounding regions and the ages of the few dated finds were grossly misinterpreted (Homburg, et al. 2014; Stoll, et al. 2003).



*Fig. 1. The Los Angeles Basin along the southern California coast.*

Beginning in the late 1980s, commercial archaeologists began working in the region on several large development projects. For the first time, regional research designs were developed and large, multi-site excavation projects were completed. These projects included archaeological excavations and analyses of material culture (Cleland, et al. 2007; Douglass, et al. 2005; Freeman & Van Horn 1987; Mason & Peterson 1994a; Vargas, et al. 2016), multidisciplinary studies of the changing coastal environment (Ciolek-Torello, et al. 2014; Homburg, et al. 2014), and detailed archival studies (Stoll, et al. 2009). These efforts led to an entirely new understanding of

mainland Gabrielino culture and its development that differed in major ways from the Chumash. It was previously believed the Gabrielino were a maritime adapted, complex society, living at high population densities. New research showed, however, that subsistence was focused on exploitation of coastal lagoons and surrounding terrestrial environments rather than a maritime adaptation and that settlements were large palimpsests of episodic and seasonal occupations that shifted in response to climatic conditions, rather than large, permanently occupied towns (Ciolek-Torello & Garraty 2016; Cleland, et al. 2007; Freeman & Van Horn 1987; Grenda & Ciolek-Torello 2015; Grenda, et al. 1998; Koerper, et al. 2002; Mason & Peterson 1994b; Reddy et al. 2016).

It was also discovered that Gabrielino culture was radically transformed after Spanish contact. New plant and animal resources were introduced that drastically altered subsistence patterns (Reddy, et al. 2016). Native economies and social organization were transformed by wage labor and new sources of wealth in the form of glass trade beads and mass-produced shell beads. Epidemics and population movements resulted in demographic upheavals and increased interaction among Gabrielino, the Chumash, and other native groups. It was these events that led to the emergence of the complex society documented by ethnohistorians rather than the pre-Colonial development postulated by previous investigators (Ciolek-Torello, et al. 2016).

## The Papaguería Region

Another region where archaeological research has benefited from CHM is the Papaguería region, a hot, arid, and remote region in the Southwestern United States (Fig. 2). Like coastal southern California, little academic research was carried out in the Papaguería region prior to commercial archaeology, other than a number of early pioneering efforts that established a basic outline of regional prehistory (Haury 1950; Hayden 1965, 1967; McGuire 1982). Several decades of intensive survey and a number of important excavations and specialized studies have led to a much richer and more detailed understanding of the region. Since much of the work has been conducted for Federal CHM programs that control large areas of land and several commercial firms have shared a long-term focus in studying the region, research questions and methods have been relatively consistent across many projects and comparable data have been integrated into resource management databases.

While there is much that still stands to be learned, and a need for more excavation and technological analysis, a variety of topics that have been the focus of research in the region have benefited from this commercial work. Importantly, several large synthetic works on the region have been published (Altschul & Rankin 2008; Heilen & Vanderpot 2013; McGuire & Schiffer 1982).

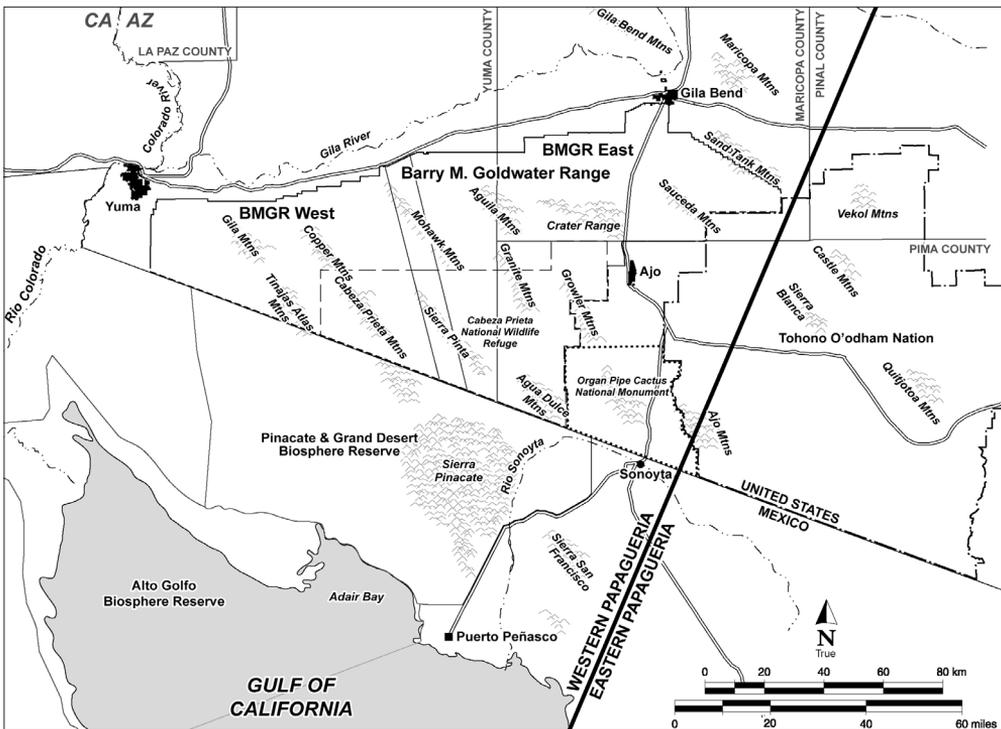


Fig. 2. The Papaguera region of the southwestern United States.

## 50 Years of CHM in the United States: Where do we stand?

In 1974, William Lipe published a landmark article—"A Conservation Model for Archaeology"—that provided a vision for how to do archaeology within a CHM framework. He emphasized that archaeology is a non-renewable resource and that salvage archaeology, which had become the focus of work undertaken in the decade immediately following the passage of the National Historic Preservation Act, should be a last resort. Lipe argued that archaeologists needed to involve the public through education and consultation; guide comprehensive planning efforts, and promote conservation through establishment of archaeological preserves and by taking responsibility for the entire resource base. In the more than forty years following Lipe's publication, we have amassed vast amounts of data, but synthetic research is lacking and we still do most work on a reactive, project-by-project basis. In revisiting Lipe's conservation model, Schlanger, et al. (2015:96) concluded that "*What we have not achieved is that integration of data collection, information management, site preservation, resource preservation, research, and planning for the long-term that was envisioned in*

*Lipe's 1974 model.*" We are now faced with two crises stemming from vast amounts of CHM work, but a lack of integrated, comprehensive, long-term planning: a "Curation Crisis" and a "Data Management Crisis" (Heilen & Altschul 2013; Childs 1995; SAA 2003; Schlanger, et al. 2015; Wilshusen, et al. 2016).

## What Can Commercial Firms do to Promote Research?

While commercial firms have a profit motive and are motivated to stay in business, most archaeologists work in the industry not simply to earn a wage, but to learn about the past and help preserve important heritage resources for current and future public benefit. Many employees in the CHM industry have a deep and abiding interest in archaeological research and advancing scientific knowledge. There are ways that individual companies can promote research. These involve:

- having a mission statement focused on research;
- maintaining high professional standards and developing leadership in research;
- knowing and cultivating staff skills and interests and investing in staff for the long term;
- pursuing and linking projects that can foster cumulative research;
- promoting active participation in professional organizations, workgroups, and conferences;
- finding ways to publish and disseminate findings more widely, including through blogs, public lectures, newsletters, and professional journals;
- working with academic departments and other companies;
- investing in data management systems that make work more efficient and enhance research outcomes;
- questioning and innovating methods and approaches; and,
- involving and serving the public whose taxpayer dollars fund the work.

## What can the CHM Industry do to Improve Preservation and Research Outcomes?

There are certainly a number of ways that the industry could achieve better preservation and research outcomes. For one, professional organizations like ACRA and the SAA can, and frequently do, combat attempts to weaken the law by lobbying legislators against attempts at deregulation and arguing for better funding and improved management practices. There is increasing recognition that, in complying with the law, we need to change our approach from a reactive, "just-in-time" approach to

a proactive, programmatic approach with long-term and regionally integrated preservation and research goals. Along these lines, the SAA has organized several task forces to identify best practices for agencies to follow (Doelle, et al. 2016; Green, et al. 2013; McManamon, et al. 2016; Wilshusen, et al. 2016).

We can make access to data more open and share findings in more widely accessible formats. To alleviate the gray literature problem, the SAA founded a new journal aimed primarily at innovations in CHM: *Advances in Archaeological Research*. We can integrate the many databases now in existence to make them more useful and relevant. Efforts are currently underway to improve state-wide heritage resource databases and integrate them into a national system.

The intent of the NHPA was to identify and preserve places of value; balance historic preservation with economic development; and share knowledge of heritage with the public in ways that benefit society. In complying with the law, impacts to heritage resources are avoided, where possible; when impacts are unavoidable, excavation and intensive documentation are standard mitigation measures. We can mitigate impacts in more creative ways to address major scientific challenges and better serve both the public and the discipline. Creative mitigation measures are allowed by law and include such efforts as synthesizing regional data, developing historic contexts, public outreach, specialized analyses, or investigating especially important or rare sites in place of commonplace ones. While federal agencies are starting to recognize the value of creative mitigation efforts in advancing archaeological research and better serving the public (see e.g., Schlanger et al. 2013), there is a lot more that can, and hopefully will, be done to promote structured scientific research.

A number of the major issues archaeologists in the United States face today involve the question: how do we use the many data collected over decades of CHM work to address major scientific challenges in archaeology? Kintigh, et al. (2013:1) recently conducted a study funded by the National Science Foundation to invest in “computational infrastructure that would transform archaeology’s ability to advance research on the field’s most compelling questions with an evidential base and inferential rigor that have heretofore been impossible.” Stemming from this effort, a large group of archaeologists has identified 25 of the field’s greatest scientific challenges and has published the results in the *Proceeding of the National Academy of Sciences* and *American Antiquity*. These include questions of emergence, complexity, demography, mobility, identity, resilience, and human–environment interactions.

To do this, leaders in the field are working to develop a National Center for Archaeological Synthesis. In 1995, ecologists formed the National Center for Ecological Analysis and Synthesis (NCEAS) in Santa Barbara, California that has since become highly successful in addressing grand challenges in ecology. We have high hopes that a National Center for Archaeological Synthesis will leverage archaeological data and

research findings developed over decades of both academic and commercial work to make structured scientific research more successful and relevant.

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## 25 Years of Development-led Archaeology in England: Strengths, Weaknesses, Opportunities and Threats

*Steve Trow*

### ***Abstract***

*After more than 25 years of development-led archaeology formalised in government policy, England may be better placed than most to reflect on the resultant legacy. The paper examines the advantages and disadvantages of the UK's particular approach to commercial archaeology from the perspective of Historic England, as a statutory advisor on the historic environment. It highlights the major increase in resources that commercial archaeology has delivered for the discipline and the way that a new generation of synthetic projects is delivering radical new historical narratives. Progress is also noted in terms of the profession's self-regulation of standards. The paper notes that the UK's approach is one which has evolved to operate within one of the most liberalised economies in Europe and one which must now respond to a strong governmental focus on deregulation and reduction in public expenditure. Particular concerns are identified where the commercial market still requires support from the public sector. The paper suggests that reflections on 'ideal' approaches for the conduct of archaeology may be less useful than planning for systems that will be resilient to future change.*

**Keywords:** *archaeological heritage management; commercial archaeology; development-led archaeology; preventative archaeology; archaeological research.*

In November 2015 a large group of archaeologists met in Parliament to celebrate the 25th anniversary of the publication in England of *Planning Policy Guidance Note 16: Archaeology and Planning* (or PPG 16). Normally the release of a piece of ostensibly low-key spatial planning guidance would be a routine event and its anniversary would never be thought worthy of commemoration. However, PPG 16 was to have profound effects on the way archaeologists worked in England and, later, in the UK as a whole. It has also subsequently influenced thinking in many other countries.

Prior to 1990, some enlightened developers were willing to bear the costs of mitigating the archaeological impacts of their projects voluntarily: the majority were not. A handful of local authorities were attempting to apply archaeological requirements to planning conditions: most were not. As a result, only a fraction of the hundreds of archaeological sites threatened by development each year were the subject of rescue excavation. The single biggest funder of this work was the state, initially in the form of our environment ministry and, later, through its agency, English Heritage. Funding was always inadequate to address the scale of the threat and archaeologists were acutely aware of the large numbers of unrecorded losses taking place (see, e.g., Wainwright 2000 for an authoritative account of the situation).

From 1990, PPG 16 required developers to assess the archaeological impacts of their projects as part of the process of obtaining planning consent and, on the basis of advice from local authority archaeologists, either protect the most important threatened remains or bear the reasonable costs of recording them. As the quid pro quo for providing the funding for archaeological fieldwork, developers were allowed to exercise choice in the selection of an archaeological contractor to undertake the work on their behalf. These changes were an important step in the genesis of what has variously been called commercial, developer-funded, development-led, or preventive archaeology<sup>1</sup>. They rapidly transformed the way archaeologists in the UK<sup>2</sup> carried out their work and, in doing so, introduced many changes that were beneficial, some that were problematic and others whose impacts were not fully appreciated at the time.

After 25 years of operating this approach, professional archaeologists in England are well placed to reflect on both its strengths and its weaknesses and to consider both threats and opportunities.

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1 The term 'preventive archaeology' is not used widely in the UK but our 'development-led' or 'planning-led' archaeology is the equivalent, allowing a range of responses from the in situ preservation of archaeological remains to their archaeological recording, with options informed by the significance of the remains.

2 The development-led approach was formally adopted in England in 1990, in Wales in 1991, in Scotland in 1994 and in Northern Ireland in 1999.

## Resources

The most obvious benefit of England's development-led approach has been in terms of the increased availability of resources. If the level of state funding immediately prior to the publication of PPG 16 is recalculated at today's values, it would now be worth around 17 million Euros annually. In contrast, our latest estimates (for 2013-14) suggest that in-year developer funding for archaeology in the UK (the great majority of which is spent in England) is now running at over 180 million Euros (Historic England 2016, page 7). At the very least, therefore, developer funding has resulted in something approaching a ten-fold real-terms increase in the resources available to England's archaeologists.

Of course, money isn't the principal concern *per se* – but it does stand as a broad proxy for the large number of archaeological sites that archaeologists have been enabled to investigate. Based on a recent survey and overview undertaken by Bournemouth University and funded by Historic England (Darvill *et al* forthcoming), it can be calculated that, since 1990, more than 75,000 archaeological interventions have been instigated as a result of the requirements of our planning system. These



*Fig. 1. Without the availability of developer funding, many thousands of important archaeological sites in England would have been destroyed without record over the last twenty-five years. Mass grave of decapitated Viking men found on the Weymouth Relief Road. © Oxford Archaeology.*

interventions range from large-scale area excavations down to small-scale trial excavations and watching briefs. Taken together, this represents an enormous body of new archaeological evidence, most of which would have been destroyed without record had it not been for the availability of developer funding.

Another important benefit of the growth of developer funding was that it gradually permitted the redeployment of state monies to address threats to the archaeological resource other than those caused by the construction industry, such as intensive agriculture, coastal erosion and the desiccation of wetlands. Taken together (or even individually) the destructive potential of processes should always have been a major concern for archaeologists but they were not seen as particular priorities for funding (see, for example, Trow 2010, page 130-131, on agriculture).

## Understanding

Had this paper been written five years ago, the lack of large-scale synthesis of the outputs from commercial archaeology would have been a major concern, notwithstanding the early lead provided by the work of Richard Bradley (Bradley 2006; 2007). Now, however, as a result of a new generation of major synthetic projects, undertaken by university-based academics and funded by the UK's or European research councils, we are seeing a real step-change in the understanding emerging from this body of archaeological recording. Examples of these projects include; *The Rural Settlement of Roman Britain* (University of Reading)<sup>3</sup>; *Fields of Britannia* (University of Exeter)<sup>4</sup>; *British and Irish Prehistory in their European Context* (Universities of Leicester and Reading<sup>5</sup>); *People and Places in the Anglo-Saxon Landscape* (University of Oxford)<sup>6</sup>; and (based on those records already incorporated in local inventories) *English Landscapes and Identities* (University of Oxford)<sup>7</sup>.

These projects are confirming the cumulative value of large numbers of interventions at a variety of scales and demonstrating how commercial work is exploring previously neglected landscapes and site types. They are also illustrating how the commercially-generated record is far more comprehensive and representative of the archaeological resource when compared with the results of research-led fieldwork, notwithstanding its own biases (see Bradley, *et al.* 2016, 26-27, 329-330). Important

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3 See <http://www.reading.ac.uk/archaeology/research/roman-rural-settlement/>.

4 See [http://humanities.exeter.ac.uk/archaeology/research/projects/title\\_84580\\_en.html](http://humanities.exeter.ac.uk/archaeology/research/projects/title_84580_en.html).

5 See Bradley, *et al.* 2016.

6 See Blair (forthcoming).

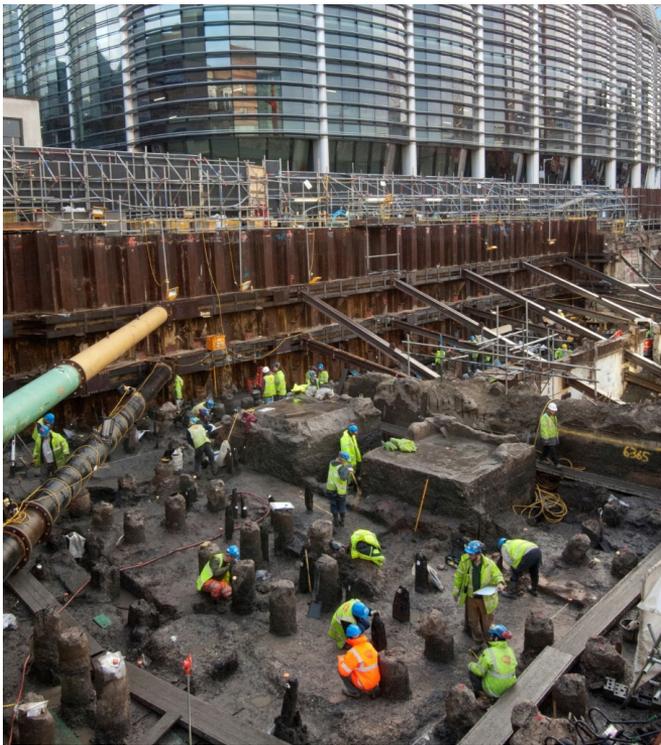
7 See <https://englaid.com/>.

new historical narratives are emerging from this enhanced knowledge base. As a result of the *Rural Settlement of Roman Britain* (which synthesized the results of more than 2,500 Romano-British excavations) and the *Fields of Britannia* projects, for example, Britain now has a good claim to be the best studied province in the Roman Empire.

This is only the beginning. Most of the potential of developer-funded work still remains to be tapped and its analysis is already providing a constructive critique of our fieldwork methodologies, which has the potential to change the way we undertake future archaeological investigation

### Professionalism and critical mass

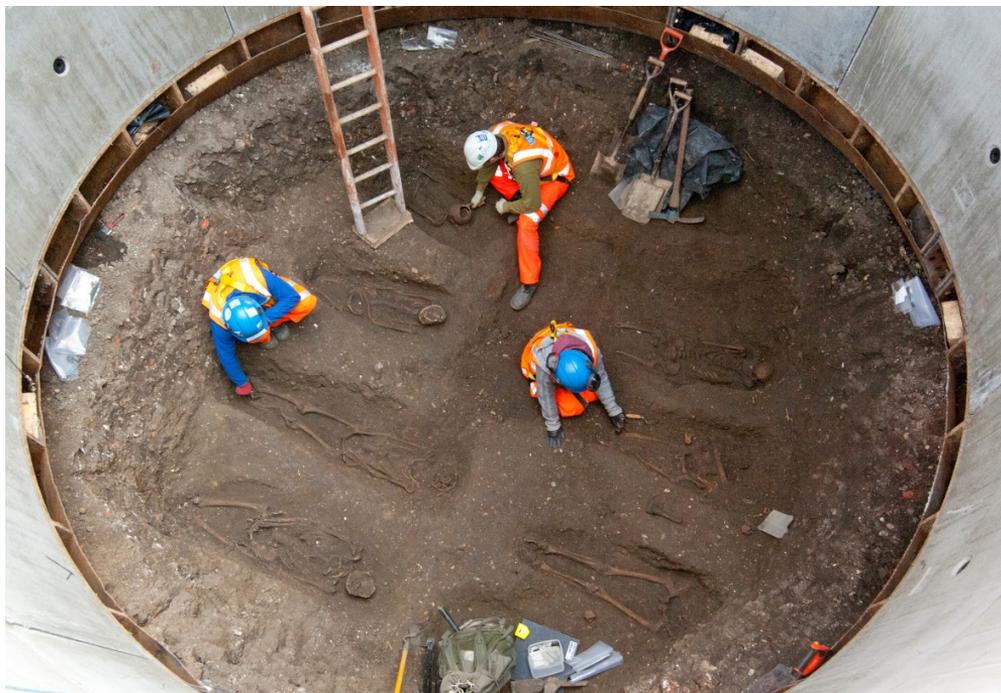
A major benefit accruing to our discipline as a result of development-led archaeology has been the significant growth in the scale of our field archaeological workforce and the perception of archaeology as a profession.



*Fig. 2. Excavations at Bloomberg Place in 2013 illustrate the scale and complexity of some development-led archaeology projects. This three acre site in the heart of the Roman city of London required the excavation of seven metres of stratigraphy and complex waterlogged deposits. © MOLA.*

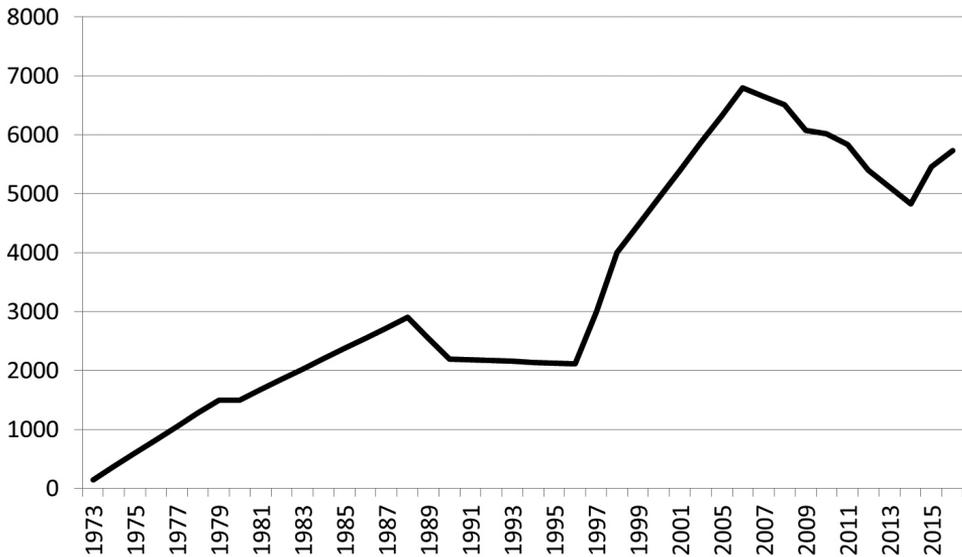
There are now very many more professional archaeologists operating in the UK than there were prior to the publication of PPG 16, providing our profession with vital critical mass. The UK's most recent employment survey (Landward Research forthcoming 2016) estimates a total archaeology-related workforce in March 2015 of 5,736 of which an estimated 3,844 were engaged in commercial archaeological practices. Recent calculations based on the UK Government's published proposals for new infrastructure suggest that we may now face a shortfall of 880 to 1,900 archaeologists annually over the next four to five years (Historic England 2016).

While such fluctuations in the workforce may be regrettable at a personal level and can cause short-term skills shortages, it should also be noted that even at its nadir in 2012, the UK's commercial sector maintained a core of more than 2,800 active commercial archaeologists, ensuring a significant degree of resilience and continuity within the sector<sup>8</sup>.



*Fig. 3. Commercial archaeological practices operating in England have been the source of considerable methodological, technical and conceptual innovation in archaeological fieldwork. Graves of Black Death victims found deep in a shaft dug for London's Crossrail project. © Crossrail.*

<sup>8</sup> It should be noted that, as 7% of archaeologists working in the UK at the height of the market (during 2007-8) were from overseas (Landward Research 2013), suggesting that a significant future challenge to our commercial workforce could be impediments to the free movement of archaeological professionals resulting from the UK's stated intention to leave the European Union.



*Fig. 4. Estimated numbers of professional archaeologists working in the UK (After Landward Research 2013, figure 1, page 21, Landward Research 2015, page 15 and Landward Research forthcoming 2016, page 15 interpreted by the author).*

## Weaknesses and threats

It is no exaggeration to describe the cumulative effects of commercial archaeology in England as a revolution. Nor is it unrealistic to conclude that, to date, their implications have been largely beneficial to the conduct of our discipline. When Historic England marked the 25th anniversary of PPG 16, therefore, we did so by releasing a digital publication (Historic England 2015) that rehearsed and celebrated the gains PPG 16 and its successors had delivered, squarely aimed at developers, planners, and the interested public.

Notwithstanding this upbeat assessment, we cannot deny that archaeology in England faces some significant challenges at the moment and we are by no means complacent about the future. Our principal concerns are intended changes to our national spatial planning policies and the erosion of our system of local authority archaeological advisers. Also of concern, but of a lower order, are issues around professional standards; the accessibility of the records for commercial fieldwork; and our ability to curate the enormous body of archaeological archives that this work is creating.

## Changes to England's planning system and advisory services

Currently, our most pressing concern arises from a near-continuous series of government initiatives to liberalise England's spatial planning system, with the intention of promoting economic growth. At the time of writing, it is difficult to predict the implications of the latest round of changes. While our archaeological system is not the intended target of these changes, we are concerned that it may become unintended 'collateral damage'. As the UK has not translated the Valetta convention into statute - only into national policy and practice - we have no statutory 'safety net' should that policy and practice be changed.

A second key concern is the impact that reductions in public expenditure are having on our local authority advisory services. Although our market in commercial archaeological services is thriving (and has demonstrated that it can weather even severe economic shocks), its success depends on a network of publicly funded curatorial (or advisory) archaeologists based in our local authorities. These colleagues manage our Historic Environment Records (local inventories); ensure the archaeological implications of development are recognised in both the strategic planning and development control processes; help to negotiate appropriate briefs for and written schemes of investigations for compensatory fieldwork; and monitor the academic and



*Fig. 5. Most commercial archaeological practices operating in England are delivering their work to high professional and academic standards. Excavation of the internationally important waterlogged late Bronze Age settlement at Must Farm, Cambridgeshire. © Cambridge Archaeological Unit.*

methodological quality of fieldwork, analysis and publication. In short, they are the lynchpin of the system.

Nationally there are just over 270 full-time archaeologists advising local planning authorities (Historic England *et al* 2016), but the number has dropped by a third, since its peak in 2006, reflecting cuts to local expenditure. Projected social service demands on local authority funding suggest this erosion is likely to continue.

## Standards, publications and archives

Standards in fieldwork, analysis and publication could obviously be regarded as a potential challenge in a system where developers are allowed to choose their own archaeological contractors and where there is no centralised system of permits or licensing for fieldwork. Historic England is certainly not complacent about the standards of archaeological work, recognising that some fieldwork, analysis and publication carried out in England may be inadequate. Nevertheless, we consider that the great majority of work is delivered to high or acceptable standards and that some of the most innovative work (intellectually and methodologically) is undertaken by our commercial sector<sup>9</sup>. In addition, many developers now wish to routinely work with archaeological practices of proven quality, notwithstanding cost differentials, in the way that they work with other professions. So, while we might be superficially attracted by the centralised systems of excavation licensing operated by some countries, as a belt-and-braces way of enforcing standards, we are not convinced that such a system is always best placed to encourage innovation and creativity and could even run the danger of infantilising our archaeological operators.

The professionalism of most of our archaeological practices can be exemplified by reference to the track-record of one of the larger commercial archaeological practices operating in England. Not only does Oxford Archaeology operate high fieldwork standards, it also has an impressive rate of project completion and publication. Since 1999, for example, Oxford Archaeology has published over 200 excavation reports, ranging from monographs to journal papers, and has deposited over 1000 archaeological archives (Personal communication: Anne Dodd, Post-Excavation Manager Oxford Archaeology). While Oxford Archaeology's record is certainly exemplary in terms of English archaeology, it is not isolated.

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9 Examples to illustrate this include the very recently concluded excavations of the waterlogged late Bronze Age settlement at Must Farm, Cambridgeshire: the technically demanding archaeological recording required by the current Crossrail project in London; and the innovative archaeological recording delivered by a joint venture between two commercial practices ahead of the construction of Heathrow Airport's terminal 5.

Reference to Oxford Archaeology's record in publication and archiving does flag up two other current challenges for archaeologists working in England. Firstly, the need to ensure that the mass of archaeological 'grey literature' publications generated by commercial fieldwork is retrievable and accessible to researchers; secondly, to ensure that archaeological archives can be deposited in appropriately accredited museums.

In the past, one weakness in the English development-led system has certainly been a lack of control over the resultant mass of grey-literature reports. Historic England, working with others, has sought to address this by funding periodic retrospective surveys of these reports through Bournemouth University's Archaeological Investigations Project<sup>10</sup>; by sponsoring an on-line index for archaeological investigations (OASIS)<sup>11</sup>; and by facilitating an on-line national grey literature library managed by the Archaeological Data Service of the University of York<sup>12</sup>. This is still a work in progress and Historic England no longer sees post-hoc pursuit of other organisation's grey literature as one of its responsibilities. Instead, as part of a current review of information flows within heritage-related disciplines, we aim to move to a system where appropriate professional standards require archaeological practices to make their grey-literature and other reference information available on-line in real-time<sup>13</sup>.

Finally, we should acknowledge that a combination of the sheer scale of the archives being generated by the large number of development-led archaeological interventions over the last quarter century, coupled with reductions in local authority spending, are also posing significant challenges in terms of museum storage. This has resulted in a diminishing number of museums willing or able to accept the digital, documentary and artefactual records of archaeological interventions, and significant backlogs held by archaeological practitioners which they cannot deposit. While targeted strategic investment in purpose-built stores would help to address the challenge, this is unlikely to be considered favourably by the government unless archaeologists also reassess current approaches to selection and retention of their material. Our current practices have changed little in the last 25 years and are ill-suited to the explosion in commercial fieldwork that we have witnessed. They now seem ripe for technical, philosophical and ethical reconsideration.

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10 See <https://csweb.bournemouth.ac.uk/aip/aipintro.htm> for information about these surveys, which also sought to characterise wider trends within the discipline.

11 See <http://oasis.ac.uk/pages/wiki/Main>.

12 See <http://archaeologydataservice.ac.uk/archives/view/greylit/>.

13 See <https://historicengland.org.uk/research/support-and-collaboration/heritage-information-access-strategy/>.

## Conclusion

After 25 years of development-led archaeology formalised in our spatial planning policy, archaeologists in England may be better placed than most to reflect on the resultant legacy. Inevitably, there is much for the profession to celebrate and there is also a great deal for it still to attend to. It would be presumptuous to argue that our system is the best way to operate but most would agree that it has brought considerably more benefits than problems to the conduct of our discipline. After initial teething problems, our commercial archaeological sector is now mature, has shown itself able to withstand the major economic shock that followed the financial crash of 2007-8 and it is currently in another phase of expansion. Its achievements have been considerable. It has accomplished the investigation of many thousands of threatened sites which would otherwise have been lost without record and it is now generating radically new historical narratives at the national and regional level, overturning past assumptions based on research-led fieldwork. It has been innovative in its methods and has established itself as a business-like profession in the eyes of both government and the construction industry.

The liberal approach adopted in England, without the strong central system of licensing that characterises the approach in some other European countries, has certainly contributed to previous problems with information flows and some challenges in terms of professional standards. These are, however, being resolved and the majority of our archaeological practices achieve professional standards that equal, or possibly exceed, those operating in the countries with more centralised approaches. Historic England regards the setting and oversight of national standards for professionals working in historic environment related disciplines to be a matter for professional institutions, rather than government. So much will depend on the future effectiveness of those professional institutions, particularly the Chartered Institute for Archaeologists<sup>14</sup>.

There are also areas of real concern, not least the future prospect for two key areas where the effectiveness of the market remains reliant on public funding - local authority planning advisory services and museum services - and the possibility that our approach of the last quarter-century will be seriously impacted by further waves of deregulation.

While the international exchange of information about approaches to the conduct of archaeology - such as that exemplified by this volume - is always helpful, we must remember that archaeologists work within differing social, economic and political frameworks that they can do little to influence, individually or even collectively. The approach to commercial archaeology adopted in the UK Archaeology is

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14 See <http://www.archaeologists.net/>.

one which has evolved to operate within one of the most liberalised economies in Europe: and one which, because of the UK's high national debt-to-GDP ratio, must now respond to strong governmental focus on deregulation and reduction in public expenditure. The duty of the UK's archaeologists is to make the best arrangements they can, within that framework, for the care, understanding and public enjoyment of their nation's inherited archaeological resource.

While critics of the UK's system (for example Demoule 2010 and Schlanger 2016) should be listened to respectfully, their arguments often seem disconnected from realpolitik and they have failed to articulate why archaeologists, alone, should expect to be insulated from the economic vagaries that affect all other professions. There are few countries in Europe that are immune to the challenges faced by the UK. As European archaeologists, therefore, we may well be advised not to think not about whose national arrangements work 'best', but rather to concentrate on those approaches we can adopt that will be the most defensible, sustainable and resilient in what is a rapidly changing and uncertain world.

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## Identifying research aims at the earliest stage of large development plans, archaeological curation in England

*Tim Allen*

### ***Abstract***

*In the England (and much of the UK) there is a general separation of function between those providing archaeological advice to a public authority and those actually carrying out the archaeological work itself. All costs of assessing and mitigating the impact of development are generally born by the developer. A developer may employ heritage consultants to provide analysis and argument on their behalf, and much useful investigation and assessment takes place prior to application for consent. The archaeological curator has to critically examine material presented by the developer, engage in dialogue with the developer's archaeological advisors and make a justified case to the local or national government decision maker for assessments and mitigations they consider necessary. It is crucial therefore that curators; (Local Government Archaeological Officers and Inspectors of Ancient Monuments) ensure from an early stage that key research questions and methodologies are deployed. The earlier that broad scale research or investigation issues are recognised and introduced, the greater the opportunity is for them to be reflected in planning, conservation and scientific research outcomes.*

**Keywords:** *Development-lead Archaeology, Preventative Archaeology, Commercial Archaeology, Research Frameworks, Environmental Impact Assessment*

## Development-led archaeology in the England

Across Europe there is a significant variation in how archaeological work is overseen and funded in how necessary development led / preventive archaeology is embedded in systems of development management and infrastructure planning (see Bozóki-Ernyey K. 2007; D'Andrea & Guermandi 2008; Demoule 2007; Kristiansen 2009; Schlanger & Aitchison 2010; Schlanger & Salas-Rossenbach 2010). It is clear that the principles set out in the 1992 Valletta European Convention on the Protection of the Archaeological Heritage (Revised) are deliverable through a broad range of possible solutions in national jurisdictions; any assessment of their relative merits must however ultimately focus on the public interest outcomes achieved in the specific social, economic and political context in which it operates.

Public interest can be articulated as lying in the conservation of the significance of heritage assets and the historic landscape in a manner proportionate to their importance and the wider needs of society. Where significance is to be lost, the public interest lies in the best record and scientific understandings that can reasonably be made (proportionate to the importance of what is lost). In this context the word *significance* is applied to those *values* (English Heritage 2008; Priede 2009) for a heritage asset which make it special or interesting or as defined in the National Planning Policy Framework:

*Significance (for heritage policy)*

*The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. (Department for Local Government and Communities 2012).*

The 'polluter pays' principle has since the introduction of Planning Policy Guidance Note 16 (Office of the Deputy Prime Minister 1990) and its successors Planning Policy Statement 5 (Communities and Local Government 2010) and latterly the NPPF (op. cit.) provided in England a positive economic pressure to minimise archaeological impact (thus underpinning the approach of assessment, minimisation and mitigation in Environmental Impact Assessment (Town and Country Planning (Environmental Impact Assessment) Regulations 2011 as amended) and hence cost, this supports heritage impact as a criteria in options appraisal for routes and designs because the cost of mitigating the archaeological impact falls on the specific project causing the impact, rather than being generalised across all development (as in a taxation funded archaeological model for preventative archaeology).

## Heritage Assets in the English planning and consent systems

Great weight is applied to the conservation of significance in the cases of buildings, landscapes and monuments subject to statutory designations and undesignated archaeological sites demonstrably of national importance in the NPPF (op. cit.). In these cases, public interests are prioritised over purely private benefits. Specific designation-based regulatory regimes (Listed Buildings, Scheduled Monuments, Areas of Archaeological Importance (in certain cities) and Protected Wrecks) are applied in addition to planning consent (Historic England 2016a). Specific criteria are applied within the main planning processes for these assets (and also for Conservation Areas, Registered Parks and Battlefields). The integration of heritage assets into the new design and a sympathetic approach to their conservation can offer many benefits to new developments adding economic value and richness to their project.

### Assessment and investigation - Consents and Controls

Key to all development-led / preventative archaeology is a clear understanding of the likely archaeological significance of the development site and its environs and the impact of the proposed project on significance via physical fabric or setting. This is central to both the information requirements in the National Planning Policy Framework (op. cit.) and the Environmental Impact Assessment regulations (op. cit.) which bring the EIA directive into UK legislation. The other principal decision frameworks relevant to archaeological matters (Development Consent Orders and Scheduled Monument Consent), require a similar emphasis on understanding the significance (Planning Inspectorate 2016 and Department for Culture Media and Sport 2013).

In the English planning system (NPPF op. cit.) heritage assets are a material consideration in the planning process. The National Planning Policy Framework (introduced Spring 2012) (supported by the March 2014 Planning Practice Guide) paragraph 128 of the NPPF states:

*In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum, the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.*

That requirement on the developer side for adequacy of information and assessment is mirrored for the decision maker in the next paragraph of the NPPF (op. cit. Para. 129) in terms of the decision maker's understanding and efforts in coming to a safe planning decision.

*Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.*

The setting of Heritage Assets is as set out above a substantive issue in understanding the impact of new development. Historic England (2015) has published on behalf of the heritage sector Historic Environment Good Practice Note 3, this and previous guidance on the subject issued in 2012 and has created a much more effect framework for analysis and professional discourse than existed formerly.

The other paragraph of the National Planning Policy Framework which deserves quotation in this context is NPPF (op. cit.) Para.141 which sets out clearly the need for appropriate mitigation of archaeological impacts and specifically that require that developers should advance understanding of the assets to be lost. This is important because to record and advance understanding requires research objectives.

*Local planning authorities should make information about the significance of the historic environment gathered as part of plan-making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.*

*Copies of evidence should be deposited with the relevant Historic Environment Record, and any archives with a local museum or other public depository.*

## Archaeological Roles

Since in the UK systems the developer is usually the client for archaeological assessment and mitigation work this might be assumed to tend (on the basis of maximisation

of profit) towards the lowest level of investigation, assessment and mitigation. This risk is offset by the role of the archaeological curator who provides independent and critical analysis of what is required (in terms of evidence, analysis and mitigation). The ultimate responsibility and accountability for ensuring a sound planning outcome remain always with the decision maker (in local or national government). Systems for individual and organisational accreditation, with standards and guidance from the Chartered Institute for Archaeologists (CIFA 2016) also make the system more robust. We construct ourselves in the profession as curators through practice, and the narratives we create about our role (Bourdieu 1990). For us to reconcile what we think we are doing, with the outcomes of our work as we and others experience them, we need clear understandings of how the system we operate and reproduce is structured.

The separate Scheduled Monument Consent system for works on protected archaeological sites (which is operated by Historic England (2016c) on behalf of the Secretary of State for Culture Media and Sport (DCMS 2013)). Advice must be sought by planning authorities and the Secretary of State from Historic England and the National Amenity Societies (DCLG 2015) on certain consent applications. The National Amenity Societies (Historic England 2016d) provide both specialist expertise and a breadth of perspective. Additional independent specialist advice from academic institutions, researchers and consultants can also be sought by curators and decision makers where this input is necessary.

Common access to the results of previous studies and investigations (as a baseline to site and setting assessment) is crucial to the functioning of the system. The principal location is the County or Unitary Authority Historic Environment Record (HER), alongside at a national level the National Record of the Historic Environment (NRHE). The National Heritage List for England (NHLE) covers statutory information for designated heritage assets. Signposting of previous mainly commercial interventions is provided through OASIS – soon to be re-launched as Herald (Archaeological Data Service 2016a). This is particularly important in a system with many different bodies undertaking investigations so that new work can readily benefit from the results of nearby or related investigation carried out by others.

Responsible developers understand that the benefits to the quality of the development and their reputation which accrue from engaging early with heritage issues. Early engagement is also vital to controlling financial and timetabling uncertainty that can result from leaving archaeological matters till later in the process (after design and costs have become more fixed). Unforeseen discoveries can still arise but this risk can normally be well managed through staged assessment and field evaluation. In truly exceptional circumstances such as the Bronze Age discoveries at Must Farm, by Cambridge Archaeological Unit, some public funding via Historic England may be found towards the additional expense of unexpected discoveries of the highest

importance. Such requests for assistance can normally only be considered where the process of evaluation, assessment and mitigation had been robustly applied with all reasonable efforts and funds, before and after consent was granted.

The funding and support of both basic research and period / subject based synthesis (Trow *this volume*) by Historic England (formerly English Heritage) and the production of published advice and research agenda by HE and the wider sector is crucial to ensuring that latest scientific and intellectual approaches are applied in commercial work and that research questions are at the heart of archaeological work. The direct relationship between development and the archaeological work done should not result in a formulaic process for the controlled and systematic removal of material. The focus of the work is the proper understanding of the significance of a site and the likely impact of the development (so that the decision maker can understand the planning balance) and should consent be granted the recovery of the public interest in the minimisation of loss of significance and the maximisation of understanding of the past through scientific archaeological investigation and analysis. Whilst it not reasonable in the UK systems to make a developer pay for research unrelated to their development, it is clear that the public interest protected through the planning system lies in the conservation and scientific understanding of the past not a merely the processing of remains into records.

The development of national and regional research assessments, agenda and strategies (e.g. in England 'Regional Research Frameworks', Historic England 2016b) has sought to ground archaeological practice in an explicitly aims and objectives based approach. For archaeological assessment and mitigation to produce meaningful results it must work iteratively, we need therefore to formulate initial questions from the first sight of a project. Archaeological curators are mostly public employees working for local and national governments, agencies and institutions; they have limited time and relationship capital to spend.

'Development led' (preventative) archaeology is still regularly contrasted to 'research archaeology'. In the UK the former is done largely by commercial organisations (contractors), the latter mainly by universities and community groups with public or charitable funds. This use of language belies however a considerable shift in intent over recent years, from both archaeological curators and contractors, and considerable crossover with many contractors undertaking both commercial and not for profit projects.

## **Curatorial Advice - Early Engagement**

For curatorial advice to be effective it needs to be timely and defensible. Governments and planning applicants are focused on the delivery of economic growth and the

advancing of specific development projects. As (for the most part) direct employees of public bodies curators are expected to engage constructively with developers and their representatives. This does not mean that one should ignore potential impacts and risks to the historic environment but it does mean that one should engage in an open and positive dialogue that helps the applicant to understand what information and understand is required and how their scheme might best minimise negative and maximise positive impacts on the historic environment. Sometimes this can mean highlighting positive opportunities in a development or key risks in terms of the costs or uncertainties in mitigating a heritage impact. On the rare occasions when there is an evident substantial practical or public policy obstacle to the delivery of a scheme it is also important (and fair) to make this clear as early as possible. This both gives the applicant the chance to shift their investment of time and resources in other directions and maximises the opportunity to explore other options and solutions. A developer may not always head the advice given but it is a much more defensible position for a curator to have mentioned at the earliest stage an issue which they characterise as material to the granting or refusal of development consent.

In an environment where it is the specific developer of a project who must fund required archaeological works the need for a robust, concise and defensible basis to curatorial advice is obvious, as this is open to challenge by the developer's archaeological advisors. Securely grounding ones' advice in professional judgement the specifics of site conditions and comparable material and locations is crucial. However, in a system where the necessity or efficacy of proposed investigatory methodologies is open to challenge, the role of published advice, guidance and standards that sets up common ground and a defined space for reasonable professional disagreement also of key importance.

To influence outcomes, key research questions must be identified early in the process (especially concerning the absence of knowledge). If an impact on the significance of a heritage asset is to be mitigated or eliminated (or a planning outcome influenced) both the affected historic asset's significance and the impact must be understood. Focused research is required to understand these issues, their gravity and what might be done, and it is rarely tenable to raise them late in project options and design process. This initial view of a project should not pre-speak an evidence-based and iterative approach but is crucial to support a robust Environmental Impact Assessment (EIA) which avoids a reductive and generic approach.

## **Getting the right assessment in place**

Best advice given at the EIA Scoping stage is the foundation of a reasonable and evidenced based approach based upon research. This supports both the public interest

in understanding of our past and in allowing the design process to minimise harm. Archaeological assessment and mitigation requires a research-based approach from day one, for better or worse we never have as little information or as much potential influence as we do at that first point.

For example, written collegiately with curators, academics and contractors the Research Agenda and Strategy for the East Midlands (where I work) was published in (Knight, D., Vyner, B. & Allen, C. 2012) and is applicable to all archaeological work in the region. That is not to say it proscribes other lines of research in any way but it offers a point of reference which is grounded in a Resource Assessment and Research Agenda 2006 (Cooper 2006). In curatorial terms, it offers a reasonable set of issues and questions which one could expect (where relevant) to be applied in the archaeological assessment and mitigation of development in the region. Over time the publication will naturally age and become more distant from current understanding and the results of recent fieldwork, therefore it is subject to an on-going process of review through web based updating and comment (Archaeological Data Service 2016b).

The East Midlands contains significant riverine systems and areas of former wetland. Geo-archaeological approaches to the assessment and understanding of wet and riverine deposits are therefore prominent in the regional research strategy. Quarrying operations present on-going needs for effective and consistent archaeological assessment and mitigation (e.g. Knight, & Spence 2013). On-going Historic England and partners' investment in the analysis of palaeo-channels on the Witham, Trent and Derwent valleys (through air photographic analysis and Lidar) provides a basis for curators and consultants to consistently assess site potential and the past and future landscape context (e.g. Crutchley 2006; Howard & Knight 2016).

The publication by Historic England of detailed technical advice (available on its website) supports both good current scientific practice and the more healthy operation of the market in archaeological services. Curators are able to refer to agreed methodological approaches which leads to better assessment and greater acceptance on the part of developers. Contractors should be able to draw up appropriate site-specific methodologies and prepare tenders with a degree of confidence that they will not be undercut by work that treats the material in a more cursory and cheaper manner.

Structured approaches to the understanding of development sites with complex geo-archaeological make-up are particularly important if areas of sensitivity, importance and mitigation are to be found (at a stage where this can be reflected in for instance quarry or housing layout or linear infrastructure routes). At the time of writing Historic England is about to publish advice on the assessment and preservation of wet remains and is supporting research led by Dr Chris Carey of the University of Brighton to develop national published advice on deposit modelling for archaeological projects. The prioritisation of specific published advice comes from the on-going

dialogue between HE Local Government Archaeologists, academic researchers and the commercial archaeological sector, in which the needs of all parties for reference points and agreed approaches are identified.

In work currently underway in the East Midlands illustrates the importance of early engagement between curators and large scale development. The Triton Knoll Electrical Connection (by RWE with Royal Haskoning, RSK, Headland and Allen Archaeology) was recently granted a Development Consent Order for a below ground cable project to bring wind energy from off-shore turbines. In early stages of project planning for the 60km on-shore section, desktop survey and analysis of Lidar data informed the avoidance of features with evidently high archaeological importance, as part of the submission for consent an outline scheme of archaeological investigation was provided on the basis of detailed discussion with curators. This has provided a degree of certainty as to the level of staged archaeological investigation which will be applied and the palette of techniques to mitigate impacts. In particular, a scheme wise approach to a landscape of complex alluvial and marine sediments is in place.

At the former Rugby Radio Station a twin scheme of urban extension and rail freight terminal is underway under separate Nationally Significant Infrastructure and local authority consents. Coordinated case handing from an early pre-application stage allowed the significance of the site's preserved landscape of open field farming (ridge and furrow) to be appreciated and common ground to be established between parties. Post-consent this has led to innovative analytical work now underway both in terms of the phasing and structure of the landscape and the fine grained understanding of the formation of field strips. This was only possible through a process of dialogue between curators at Historic England and Northamptonshire and Warwickshire Councils and the consultants and contractors for the developers CGMS, Oxford and Cotswold Archaeology.

The suburb of Little Chester in Derby has required a scheme of flood defence to protect lives and property from increasing dynamic weather events. Early in project planning and discussions between curators and the Environment Agency it became apparent that significant intrusive works were going to be required through the Roman fort which partly underlies the modern settlement. Whilst the fort itself was subject to additional protection as a scheduled monument it was suspected that the protected area did not capture the full extent of nationally important remains. A staged programme of the archaeological investigation was set in place with work by Oxford Archaeology and Trent and Peak Archaeology which minimised impact and also meant that the archaeological work could be practically achieved which would address substantive research questions about the site. Mitigation work in advance of construction is currently underway by Trent and Peak Archaeology reflexively using the results investigation to finesse the line of the flood defence. This has allowed the

engineering interventions to not only be minimal but also archaeologically meaningful. The archaeological work is delivering for the first time in a site previously subject to numerous interventions a clear sequence and layout for defences and occupation tied to an environmental sampling strategy in which specific research questions are addressed and the results of rapid assessment feedback into excavation.

## Conclusion

How can archaeological curators and contractors integrate research into large-scale development projects and avoid slipping into mechanical processes which simply translate and transform remains to archive? The answer lies, as explored above, in the early identification of the potential significance of a development site and the techniques of investigation and assessment required to effectively characterise this. Period and regionally based research frameworks and synthesis, current accessible local and national datasets and the results of mapping projects and specific technical research are all crucial. Timing remains of the greatest importance in bringing these resources to bear on a particular project. The UK systems largely separate the function of curatorial advice from that of archaeological fieldwork. In this model research priorities need to be identified as early as possible, ideally at pre-application / EIA scoping stage for them to be translated into tangible outcomes of heritage conservation or scientific research.

Without being able to tell to ourselves the story of our role in the archaeological research process we can neither defend our position nor critically assess our success.

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## Trends in Scandinavian Cultural Heritage Management in the 2000s

*Håkon Glørstad*

### ***Abstract***

*Since the 1990s Scandinavian countries have been adjusting the way they manage their cultural heritage and development-led archaeology. They align it based on the nations' political beliefs, as well as pan-European legislation. Out of the Scandinavian countries Sweden has implemented the most radical and modernistic reforms. Although it is unclear whether these reforms have been entirely successful, many Scandinavian countries continue to introduce change. This paper addresses some of the new trends, and analyses their effect on Scandinavian archaeology as a scientific discipline. Theoretical trends that undermine the importance of humans usually enhance the role political directives play in shaping Scandinavian archaeology. Archaeological engagement with politics on a national level is of major importance for the future of European Archaeology.*

**Keywords:** *Scandinavian archaeology, cultural heritage management, development-led archaeology, privatisation of archaeology*

## The Honourable Tradition of Heritage Management Under Pressure

One of the remarkable aspects of early Scandinavian archaeology was its strong legislation for protecting archaeological monuments and objects to ensure they would be available for research at museums and universities (Trøim 1999). Cultural heritage management was primarily a tool for archaeology as a scientific discipline and not as a political domain.

In the last decades of the twentieth century cultural heritage management in Scandinavian countries has increasingly come under political control (Andersson, et al. 2010). Heritage as a source for public experience, recreation and identity has gained more importance over heritage as a source of research material. Heritage management is commonly considered as a means to increase economic growth and the quality of public life or as a cultural framework for other societal activities.

Another common tendency is the expanding divide between archaeological research and public management of heritage resources (Kallhovd 2006).

Scandinavian countries have all faced variable developments. Sweden, with its seemingly most progressive state organization, privatized archaeological excavations and made development-led archaeology subject to competitive tendering (SOU 2005: 80). In Norway and Denmark public museums are still mostly conducting the development-led excavations inside their defined museum districts or public administrative borders.

## Increasing Political Division and Control

Changes in heritage management and development-led archaeology have continued throughout the twenty-first century. There are two factors of crucial importance in this transformation. The first one is the conscious de-nationalization of Scandinavian archaeology. Both scholars and politicians have contributed to this actively. Throughout their research scholars of archaeology have emphasized concepts of diversity, shifting ethnic identities, plurality, and the importance of interregional developments. Publication strategies at universities and museums favour international journals as opposed to local journals and books in Scandinavian languages, which leads to the growth of international perspectives and agendas. Furthermore, they have formed a critical attitude toward the political use of archaeological research in national or colonial projects (Gustafsson & Karlsson 2011). Nationalistic archaeology is no longer considered as an acceptable research strategy.

At the same time, however, politicians have worked eagerly to incorporate archaeology and cultural heritage into local identity. Selected sites and monuments

have been chosen as scenes or tools for creating identity and social cohesion. Local museums and initiatives have been prioritized over national undertakings. The European Union has contributed positively to this trend in several ways: financially and ideologically it has done so by shifting focus from the national to the international. To some degree it has also contributed to a homogenized heritage legislation based on pan-European legislation (e.g. the Valetta Treaty from 1992). National solutions are currently not as attractive as European solutions.

The second important factor is how politics have increasingly influenced the academic environment, and particularly the academic interest in cultural heritage management, as well as the scientific potential of development-led archaeology. Legislation in Scandinavian countries obliges the developer to pay for the expenses connected to rescue archaeological abuse this institute. A common solution has been to make a clear division between research and management, as well to turn over development-led archaeology to political control.

### **Decision-making Institutions in Scandinavian Heritage Management**

Scandinavian countries have appointed the decision-making process regarding heritage management to various organizations. In Sweden the County administration referred to as *Länsstyrelsen* (County Governor) is the local state authority that manages decision-making regarding development-led archaeology. In Denmark *Slots-og Kulturstyrelsen* (The Agency of Culture and Palaces) has the same function, and in Norway the task is delegated to *Riksantikvaren* (Directorate for Cultural Heritage).

There are, however, small yet important differences between these organizations. The *Länsstyrelsen* in Sweden is a de-centralized government organ. This means local political concerns are often at stake, which contributes to the de-nationalization of Swedish archaeology. The value of local investigated heritage is given priority. Excavations in Sweden are carried out by local museums, privatised firms, and by a newly created excavation unit from the national museum in Stockholm. The different organisations all compete for excavation assignments. Some of the private firms and the excavating unit of the national museum compete for assignments throughout the country. Most units, however, operate on a local scale. The national museum, which is directly financed by the Ministry of Culture, has a privileged position concerning finds of national importance. The majority of finds from excavations performed by local museums and firms are however not considered as heritage of national importance.

In Denmark, The Agency of Culture and Palaces is a national directorate under the Ministry of Culture, which ensures cultural heritage management remains in line with national standards and views. Local museums are responsible for effectuating

the decisions of the directorate concerning development-led excavations. Danish museums are only considered *state-recognized museums* if they live up to certain quality requirements. These include the state of collections and exhibitions, as well as whether or not they can match sufficient research standards. The requirements are partially funded by the local municipality and partially by the Ministry of Culture. Having dual patrons, they often find themselves struggling between delivering a national standard or going against the local authorities, as well as how to remain loyal to their local patrons. It is often the local municipality that funds most of the basic activity museums execute. The presence of 27 state-recognized archaeological museums leads to a rather decentralised structure. This generates local variations within the framework of the national standard, specifically in terms of excavation, and management and research focus. The National Museum of Denmark is funded directly by the state and is considered the parent museum. It often takes in the most precious finds with significance that is above-regional. It also takes in all notable detector finds and coins that are considered of national value (*Danefæ*).

In Norway, The Directorate for Cultural Heritage is placed under the Ministry of Climate and Environment. There are five university museums in five museum districts, which are responsible for development-led excavations. In addition, the excavations in medieval towns are temporarily delegated to the Norwegian Institute of Cultural Heritage Research (NIKU) and three other museums that are not a part of the university structure, and have responsibilities for archaeological excavations. The Norwegian system of cultural heritage management probably represents the most centralized system because it is only divided into five museum districts. There is no parent museum in Norway. Instead, the five university museums function as decentralised national museums. This is a virtue in Norway's system for heritage management and development-led archaeology. In addition, some strong advantages include the integration of development-led archaeology into universities' research portfolios, their collection management, and their education (Glørstad & Kallhovd 2011; 2013; Glørstad 2010; Ravn 2013).

## **New Trends in Scandinavian Heritage Management**

Certain trends become apparent while analysing the three national aspects of heritage management. One common inclination visible in the twenty-first century is to divide cultural heritage management into two levels: a generalized national level closely connected to legislation and internationalization, and a local level responsible for the day-to-day management of heritage. This is not a unique model for cultural heritage management, but rather a standard bureaucratic solution to the

challenge of balancing local and national interests and activities. The willingness to delegate decision-making to a lower or more local administrative level is inversely proportional to the considered importance of the field in question. In other words, the importance of archaeology is gradually decreasing in Scandinavian countries. Although it is a general feature of modern Scandinavian states, the idea of delegating decision-making to a local administrative level can potentially erode the system's original intentions of using it as a beneficial tool for archaeological research. On a practical level, national legislation and policy outlining have a lesser effect in a decentralized system of decision-making. Sweden and Norway are good examples of this trend.

### Case Study, Sweden

The privatization of Swedish archaeology at the end of the 1990s fragmented the system of development-led archaeology in several ways. An evaluation from 2014 documented substantial regional differences, even though this practice is expected to follow a national standard (RAÄ 2014). As an attempt to counteract this tendency, the Riksantikvarieämbetet (Swedish National Heritage Board) has been redesigned into a directorate for the Ministry of Culture, quite similar to the Norwegian Riksantikvar function. However, the effect of this reform can be questioned because the actual decision-making process in development-led archaeology will still be appointed to the different counties across Sweden.

The Swedish reform has revealed some dysfunctionality in the present system. In order to recreate the Riksantikvarieämbetet as a directorate, the excavating units of this institution were moved to the National Museum of Sweden. At first glance, this seems to be a good solution; museum activities such as research, systematic collection development, and public outreach through exhibitions and curating can be strategically combined with development-led archaeology. In this way, the original intentions of cultural heritage management as a tool for scientific archaeology can be recreated. However, the fact that development-led archaeology is subject to competitive tendering prevents the National Museum of Sweden from benefitting from the reorganisation. Merging museum activities and research with development-led archaeology would be an unacceptable competitive advantage, and cannot be allowed in the market system. The administration of development-led archaeology must be strictly separated from the rest of the museum, thus unintentionally preventing any creative or efficient synergies from arising.

These are practical implications of a market-driven ideology combined with the political desire to prevent the scholarly temptation of viewing development-led

archaeology as a tool for producing knowledge – which is the original intention of cultural heritage management.

### **Case Study, Norway**

The Norwegian example has a different starting point, but may lead to the same results as the case in Sweden. Norwegian development-led archaeology is not organised in a market system. Consequently, there has been an urgent political agenda to ensure that public institutions do not abuse the organization of development-financed excavations. Institutions must ensure that the developer pays for no more than a strict rescue of the archaeological source material, which otherwise would have been lost.

This has been achieved by dividing the tasks of cultural heritage management between three types of institutions. The county administration is responsible for archaeologically surveying the areas under development, and to assess the range of conflict between the development plans and archaeological monuments. The university museums are responsible for evaluating the scientific value of the monuments threatened by planned development, and to present project plans and budgets for rescuing these monuments in case development plans are realised. Riksantikvaren (Directorate of Cultural Heritage) is responsible for making decisions on whether development plans should be allowed, and whether the rescue plans suggested by the museum are reliable. This way there are no conflicting roles in the management system.

However, transforming the Riksantikvaren into an updated modern directorate under the Ministry of Climate and Environment clashes with its role as an archaeological decision-maker in development plans. A more essential legislative and policy-making role is suggested for the future. There are various reasons that museums cannot take over the decision-making role. The only solution is to delegate this function to county administration as the regional political authority.

This development represents a potential conflict of interest. Counties have an immediate interest in local jobs and tax incomes. They could weaken the national system of cultural heritage management and undermine scholarly influence on the system in favour of a stronger political influence. It seems as though local and regional development in economy and infrastructure will always be considered more important than archaeology and heritage. Many politicians and developers believe that paying for the development-led excavations is too heavy of an economic burden, even though the costs of archaeological excavations seldom exceed 2-3% of the total budget. The result of the reform will be that the academic and scholarly engagement in archaeology as an academic practice will move further away from the most important institutional means of acquiring new knowledge and data through development-led archaeology.

A clear trend of the twenty-first century is therefore a growing divide between academic archaeology and cultural heritage management. This erodes the pillar of the strong Scandinavian archaeological tradition. It can also jeopardize the tight connection that exists between archaeological education and training, and cultural heritage management.

## The Role of the Scholar

The growing division between academic archaeology and development-led archaeology cannot be considered solely as a politically driven process. It is also intimately connected to the theoretical developments within the discipline. The relations between archaeological theories and society at large have been analysed and discussed by scholars on numerous occasions (e.g. Shanks & Tilley 1987; Trigger 1989). There is, however, a marked unease in analyses that focus on the relations between archaeology as part of a larger social fabric, i.e. archaeology as a means of subsistence, and archaeology as a theoretical and scientific discipline. On one hand archaeology is structured as a choice out of necessity, and on the other as a pathway to knowledge. This double truth about archaeology is crucial to understanding its function in a wider social setting (Bourdieu 2000).

The anti-nationalist and anti-colonial theories developed in the 1990s and the first decade of the twenty-first century are essential to archaeological theory discussion (e.g. Wobst & Smith 2005). The movements evolved in line with growing anti-humanism beliefs in archaeology, and the fascination with different structural and post-structural theories (e.g. Tilley 1991). Paradoxically, this perspective facilitated a stronger belief in the individual, and a greater interest in the individuals of the past. This combination of enhanced emphasis on anti-humanism and individuality has made way for a strong disbelief in social perspectives and collective solutions. Individuality is no longer reserved only for humans. Objects, animals, and places have individual features as well. Consequently, humans must be placed in a web of material and living relations, where matter, animals, and humans equally contribute to the trajectories of history. Hence the individual's ability to imprint this entanglement – whether human, animal or matter – defines the uniqueness of the situation in question, but does not define any real option for systematic changes. Individuals stand on their own with a background of prefixed social-material relations. In this way, post-structuralism disfavours the belief in the ability of humans and groups to change their terms of existence; rather, they are considered functions of a larger structure. Individualisation disagrees with the belief in the social group and redefines reality as a private or singular concern.

It is apparent that the full effect of the commercialisation of archaeology in Europe coincides with the breakthrough of theories downplaying the impact of the individual. This created a comforting buffer for scholars who did not want to fight for the original unity between academic archaeology and development-led archaeology in Scandinavian countries. Archaeologists were best off focusing on the ontology of the past and the career opportunities of the present inside a strictly defined university system.

At first glance, this argument can be seen as naïve or stunted because the relations between archaeological thinking and contemporary social relations are not causal or direct. However, it is pertinent to recall an argument of Pierre Bourdieu, which he mentions in his analysis of the political ontology of Martin Heidegger (Bourdieu 1991); he clearly demonstrates that Heidegger's scholarly *habitus* was structured by the social-political relations of early twentieth-century Germany. His impact as a philosopher was strongly influenced by his ability to mobilize the individual experience of social insecurity in a philosophical setting. This had a recursive effect on political thought because his thinking appealed to and mobilised these two social fields simultaneously. It is not unlikely that our present era's fascination with desirable objects, such as with certain individuals or pets, is nothing but a social manifestation of the same disposition apparent in post-humanistic thought. The same disposition is mobilised in two different social fields: the field of consumption and the field of academia (also confer Bauman 2007).

The need to engage in the political shaping of modern archaeology cannot be underestimated. The good intentions of cultural heritage management and the original definition of development-led archaeology in Scandinavia as tools for archaeological research and knowledge production were not created by chance or by visionary politicians. They were the direct product of the scholars' engagement in political processes in the twentieth century.

Today Scandinavian cultural heritage management and development-led archaeology face great challenges due to changes in political thinking and ideologies. From a scholarly perspective it may seem like this has little to do with archaeology as a scientific discipline or as a subject of university research. However, development-led archaeology is the most important source of new data sets in archaeology, and it enables us to write new histories and different pasts. Excavations are meaningless if not guided by academic principles and goals. Knowledge production must guide development-led excavations—or else they are little more than treasure hunts and penance. The future of cultural heritage management and development-led archaeology should be a concern to us all.

University scholars should feel the obligation to address the issues of political distrust toward academia. When faced with the ghost of the Danish king, Shakespeare's

Marcellus from *Hamlet* says: “*Thou art a scholar. Speak to it, Horatio*”. As scholars, we should feel that same obligation. If we are not able or willing to defend the value of development-led archaeology for the discipline at large, who else will?

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## Problems and Solutions Within Large Scale Preventive/Rescue Excavations Before and After 1990: The Case of Saxony

Harald Stäuble

### *Abstract*

*In Saxony, archaeological excavations accompanying large-scale development-led projects are always planned and conducted a long time before lignite extraction, gravel mining or the construction of motorways or pipelines begins. We do not distinguish these rescue or preventive excavations from research projects, either in terms of their methods of approach or in the way they are conducted. As all projects are carried out by the state heritage office, there is a standardised model for excavation, documentation and reporting. This may be the reason why economic crisis only conditions the number of preventive/rescue excavations, while the quality of performance remains unaffected. As we are keen to be a reliable partner for planning enterprises, we can rely on political understanding. Heritage law is good and, in some respects, open to interpretation, so the practice of 'polluter-pays' excavations is very much dependent on individual conduct and on a personal commitment to rescue information about archaeological monuments before they are destroyed.*

**Keywords:** rescue/preventive excavation; standardized documentation; archaeological state office; heritage law; personal commitment;

### *Zusammenfassung*

*In Sachsen erfolgen alle denkmalpflegerisch bedingten Ausgrabungen im Rahmen von Großprojekten rechtzeitig vor dem Beginn der entsprechenden Bau- oder Abbaumaßnahmen. Deshalb gibt es keine grundsätzlichen methodischen oder qualitativen Unterschiede zwischen dieser Art von Rettungsgrabungen und wissenschaftlichen Ausgrabungen. Alle Projekte werden durch das Landesamt für Archäologie organisiert und in einem einheitlichen Verfahren untersucht und dokumentiert. Aufgrund dessen kann die ökonomische Krise lediglich einen Einfluss auf die Quantität und nicht auf die Qualität der denkmalpflegerisch bedingten, großen Grabungsprojekte haben. Als verlässlicher Partner für die Verursacher erfährt das Landesamt in der Regel Unterstützung von politischer und wirtschaftlicher Seite. Die Gesetzesgrundlage ist gut, aber auch offen für Auslegungen, so dass die Durchführung solcher Großprojekte in großem*

*Maße auch vom persönlichen Einsatz abhängt und von der Einstellung der Beteiligten gegenüber solchen archäologischen Denkmälern, die ansonsten unbeobachtet zerstört werden würden.*

## Introduction

This paper examines the practice of preventive and rescue archaeology in Saxony, a small region of Germany that was formerly part of the German Democratic Republic. It will look at how we deal with large-scale projects, mainly open-cast mining and linear projects such as motorway and pipeline archaeology. The special feature typical to all these projects, in addition to the large areas they affect, is that they deal with cases that are unavoidable, i.e. where there is no further possibility of preventing archaeological monuments from being destroyed. I therefore refer to them as excavations conducted with the intention of 'rescuing' archaeological monuments by documentation. Rescue archaeology might (but does not have to) refer to situations in which archaeologists are summoned after the destruction has already begun, but it also includes planned and well-prepared excavations, as is the case with large-scale projects. In this sense, this denomination does not imply any information about the length of time or the intensity of preparatory work prior to the excavation itself.

I am therefore not drawing any distinction between preventive and rescue archaeology; together with other synonymous terms such as costs-by-cause archaeology, they include all the diverse ways of coping with the necessity of building or mining in new areas. However, we will have to distinguish these kinds of excavation project from those that are termed 'research' excavations, even if there should not be any difference concerning their aim and content. Preventive/rescue excavations and those planned only for reasons of scientific research share a common aim, but employ a different methodological approach. As the general strategy of research excavations is to seek out the best places for positioning relative small excavation areas, there are a vast number of 'soft' prospection methods, including the study of all data that is available in advance and that is used to find out where the 'best' places for the mostly short-term research excavations might be. The possible circular arguments connected with these approaches is, of course, well-known and has often been proved: for example, if we are just looking for a certain prehistoric settlement only where we expect to find it or where we already know it to be located, we can only confirm or disprove this expectation, but we would never find settlements in untypical places. Maybe future research will find out that a former untypical behaviour becomes typical, like for example the distribution of early Neolithic settlements we nowadays also find far from the margins of rivers (Stäuble 2012: 19–21). We should therefore not only be grateful

for all casual information gathered by excavating all the areas where building or mining projects take place, but should also strive to practise preventive/rescue excavation systematically in all areas of inevitable soil intrusion.

The main difference between research excavations and preventive/rescue excavations is therefore between targeted research (the former) and stochastic research (the latter). From this point of view, financing institutions will always expect, if not demand, positive results for targeted research excavations, whereas the culture, period of time or type of feature to be saved by excavation and documentation should not make any difference to preventive/rescue excavations. I will mainly restrict my paper to this point. Again, this is not about those projects that can be avoided, nor is it about publication or any other popular presentation of the results; it is only about what we can do best for this neither first nor last, this small but essential part of the 'chaîne opératoire' of preventive/rescue archaeology. If this functions well, we can also confront the other necessary and important steps.

Of course, there are many other organisational differences and constraints: the number of excavators, their skill and experience, the time available (and even the time available with respect to the weather), the technical equipment, etc. Nevertheless, there is no doubt that there is (or at least should be) *by definition* a difference in the level of professionalism, with all its advantages and disadvantages. In any case, this is less a systemic problem and more an individual one, where the differences in quality depend on the personal commitment of everyone involved, regardless of the different constraints characteristic of the respective approaches.

It does not come as a surprise if research excavations account for less than 5% of the total number and excavated areas. This must not necessarily be a bad development and it would surely be no problem if there were no differences in practice, i.e. if one did not regard preventive/rescue archaeology as being less valuable than research archaeology. At the same time, cooperation between institutions (universities, academies, museums, heritage management offices and professional enterprises) to combine excavations occasioned by building or extraction projects with targeted research could always be improved. It is therefore not really a matter of whether we are dealing with the costs-by-cause principle of rescue excavation or an academic excavation, be it a training excavation for students, a research excavation or, as is often the case, a combination of the two, as the archaeological methods are entirely and always the same. It is obvious that we use (or should always use) the best methods dictated by the aim, but whether we use more traditional or very modern methods is not so much a matter of big money as that of personal attitude.

As far as the discussion regarding the differences between excavations conducted by companies and those conducted by state heritage offices is concerned, we simply acknowledge the different approaches and can finally judge their value only by the

quality of what is to be done at all stages of the work. Alongside the issues of excavation costs, the necessity of turning a profit and the earnings of excavation staff, which is very important but will not be dealt with here (we have no experience with it in Saxony), it is always a matter of differing levels of personal effort and commitment, even within the same system and under the same framework conditions. This factor has the largest influence on the amount and quality of preventive/rescue excavations.

It is often said that general and inevitable problems within preventive/rescue excavations find their explanations in different causes, such as ineffective heritage laws, overall economic development and economic crisis, political understanding and acceptance, and the lack of social awareness. All these aspects surely have a more or less direct influence on heritage activities, but it is more a matter of who reacts in what way and at what time. After outlining the background to the situation in Saxony before and after 1990, comparing it with the development in other federal states in Germany, and briefly evaluating some of the results, I will finish by returning to the many possible reasons for the different ways in which the same profession is practised and evaluated.

## **Before and after 1990**

After the Second World War, the German Democratic Republic (GDR), the territory assigned to the Soviet sphere of influence, retained the five states that had existed before the war, only slightly restructuring their borders and then subdividing them into 15 districts. While the country was nevertheless ruled centrally in all aspects, and neither the federal states nor the districts enjoyed any autonomy, every state did receive a Central Museum for Archaeology, while academies of science were established in line with the Soviet model. Only three universities (Berlin, Jena and Leipzig) had faculties of prehistory, with a limited number of students being taught on a rotating basis. If they behaved themselves politically, these students could generally expect to be permitted to work in archaeology after their studies. The number of students of prehistory and of those who practised archaeology was therefore very limited.

Unlike the Federal Republic of Germany (FRG) after the Second World War, where the federal states were autonomous in cultural affairs and individual heritage laws were amended only slowly (mostly during the 1970s), the GDR had one general heritage law, adopted in 1954. The law itself was not bad, but as far as large-scale projects (the focus of this paper) were concerned, it was difficult or more often impossible to realise its aims. Interestingly enough, the two systems had a very similar development (with a great many differences in detail, of course): in both the FRG and GDR, preventive/rescue archaeology was only rarely applied and 'flagship' projects

were promoted. This means that it was less a consequence of two different political systems and more a problem specific to the time and the spirit of the time, as well as an issue of researchers' mentality. To conclude, the requirement to accompany large-scale industrial projects with large-scale excavations was not as common as it is today (although for some it is still not common even today). Large archaeological research projects focused on the themes of interest at the time, mostly based on archaeological cultures and specific topics, and were conducted in areas that were not endangered. They were often preferred to the more general approach that focused on the landscape, for which all archaeological information is important.

Since 1990, when a reunited Germany was again restructured, the country has consisted of 16 federal states, three of which are city-states (Berlin, Hamburg and Bremen). As Germany is a federal republic, all the states have considerable autonomy in many fields, including culture. Heritage management is therefore a matter for each individual state, which means that every state has its own heritage law.<sup>1</sup> These many different approaches make it generally impossible to refer to 'the German way'; moreover, a single state has many different ways of practising archaeological heritage protection within the given guidelines or legal frameworks. Consequently, the Valletta Convention of 1982 has had practically no impact on archaeological practice in Germany, and particularly in Saxony (Stäuble 2013: 59–60).

### **Legal basis after 1990, with a focus on large-scale preventive/rescue archaeology**

In relation to large-scale preventive and rescue archaeology in Saxony (a federal state of approx. 18,400 km<sup>2</sup> with a population of approx. 4 million people), the immediate post-reunification period can now be seen as a kind of 'lawless' time, when many large development projects were carried out without any archaeological supervision at all. However, it was also when a new heritage law was being compiled (it was issued in March 1993). I will quote only two passages from Article 14, i.e. those with most significance for large-scale development projects:

*'1) A concession from the cultural heritage department is required by anyone who: (1) plans to conduct building activities, construction work or watercourse regulation (re-location, renaturing, straightening, etc.) in a location where it is known or where it can be assumed that cultural heritage monuments exist.*

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1 The reason for more heritage laws than federal states lies in the fact that some of the old states which were joined together (e.g. North Rhine-Westphalia) retained their own different laws.

*(3) As initiators, the responsible bodies of larger public or private building projects or projects for mining raw materials or other resources may be obliged to refund, within just and reasonable limits, the expenses for archaeological excavations, preservation of the finds and documentation of the features. ...'*

Resulting from this legal basis, the period after 1993 saw different stages of archaeological activity in Saxony in relation to a range of topics. The reason for this step-by-step approach depended first and foremost on new cases; and as it was a new situation for all parties involved, everyone had to be convinced that it was better to cooperate with heritage management in order to realise projects in a planned manner. Since planning reliability is most important for developers, the heritage office has to guarantee that excavations are finished well before the construction works begin. However, the developer was not the only entity that had to be convinced; there were also extensive and protracted discussions with the responsible ministries and other federal state offices. As not all the items and problems could be addressed simultaneously, a gradual procedure was chosen, generally in correlation with the activities that arose. First, the open-cast lignite-mining areas in Lusatia and in the northwest region around Leipzig were addressed immediately after the law came into force in 1993. Large areas of the whole country had been affected by quarries of sand, gravel, solid rock and loam and kaolin; many of them had immediately been taken over, with old enterprises being bought up by Western European corporations in the early 1990s, meaning that only some of them were accompanied by archaeological excavations on a continuous basis. 'Others only came to our attention when new concessions were sought. The first projects for new interregional pipelines (gas, water, etc.) followed after 1995, and in recent years gas pipelines in place for 50 or more years have had to be replaced. New railways and motorways have been constructed, and considerable enlargements or modernisation works have been carried out mostly on the post-war or even pre-war road and railway network since 1996. Only some of the large-scale building projects for private houses and for industrial and business parks on the outskirts of cities, which began in the early 1990s, were accompanied by archaeology from 1994 onwards. We can say that most (if not all of them) have been supervised since the late 1990s, and continue to be so.

In contrast to the intensity of the activities, cooperation with the only university with a prehistoric institute in Saxony, in Leipzig, increased markedly only after 2006, mainly because of the cooperative relationship between the new persons in charge. With regard to external cooperation for investigations beyond direct archaeological tasks, there are many diverse scientific disciplines covered by a large range of scholars organised in different ways, from private individuals up to people attached to research institutes and universities not exclusively from Saxony. In contrast to other countries and even other German federal states, these 'neighbour sciences' are not handled by

staff members of the heritage office itself but by a vast scientific environment engaged in topics such as soil science, archaeobotany, archaeozoology, anthropology, dendrology and other chronological methods, as well as in many other special methods of analysis. They are, however, part of the regular documentation during and after the excavation itself. Alongside the standard analysis performed at every excavation, special new tasks might be needed for each new situation. While all these tasks belong to the documentation of the excavated site, the costs of the standard analysis are part of the sum negotiated and are therefore paid by the polluter.

There is no space here to discuss all the other details relating to the documentation drawn up during an excavation, the final report, the techniques used or the programs or methods used before, during and after excavation. They are applied as the situation demands. But it needs to be said that excavation, documentation and report are conducted according to a unique standardised model for the whole of Saxony. This model has always to be adapted to local needs and the individual ability and knowledge of the excavators. As soon as this data (the reports or the 'grey literature') is available (the period of time is defined by various factors, e.g. the duration of the excavations, which generally also reflects the density of archaeological features), it is placed in the archive, which also comprises a central GIS and which is available to all heritage office staff, as well as to specialists from outside and even interested non-professionals. Information on it and on the results is disseminated in the classic manner through oral presentations and publications for the wider public and for professionals, but journals and digital media are also employed. Of course, summary presentations are given in museums, if possible by adapting the information, but more commonly in special exhibitions.

These activities are probably more or less common to archaeological heritage management in many countries, albeit at a different level. However, if any differences in amount and quality exist, and they surely do, this is neither chiefly the result of the underlying law nor of economics or politics, even if these cannot be ignored. They are mostly a matter of personal attitude and estimation.

For large-scale development-led projects in Saxony, we can state that once we have succeeded in convincing the responsible persons at all levels, from private individuals to planning companies, from company owners to politicians, of the importance of giving archaeologists a sufficiently long period in which to do their work prior to construction or mining, and that cooperating with archaeologists is a good idea because it is plannable and therefore less expensive, archaeology becomes largely accepted. Of course, our demands must be 'within just and reasonable limits', and we ourselves have to judge this and be flexible.

In Saxony, cultural and archaeological heritage is defined by law as a matter for the federal state authorities: private companies are not allowed to conduct excavations. All archaeological heritage matters, i.e. those relating to underground features, are dealt with

and organised by a government agency, the Archaeological Heritage Office of Saxony in Dresden. In addition to the practical heritage management offices (two archaeologists responsible for special tasks: one for medieval archaeology within city centres, the other for large-scale projects across the whole state, with another six mainly organised on a regional basis), there are administrative offices, the archive, a large central depository of finds, restoration laboratories, an editorial department and a special library. Every aspect of heritage management is therefore covered. There are also several external departments in the three large districts in the northwest, in the centre and in the east of Saxony, dealing with the open-cast lignite-mining areas around Leipzig and in Lusatia. The new State Museum of Archaeology Chemnitz (SMAC), which opened in 2014, is physically separate from the headquarters and located some 70 kilometres west of Dresden.

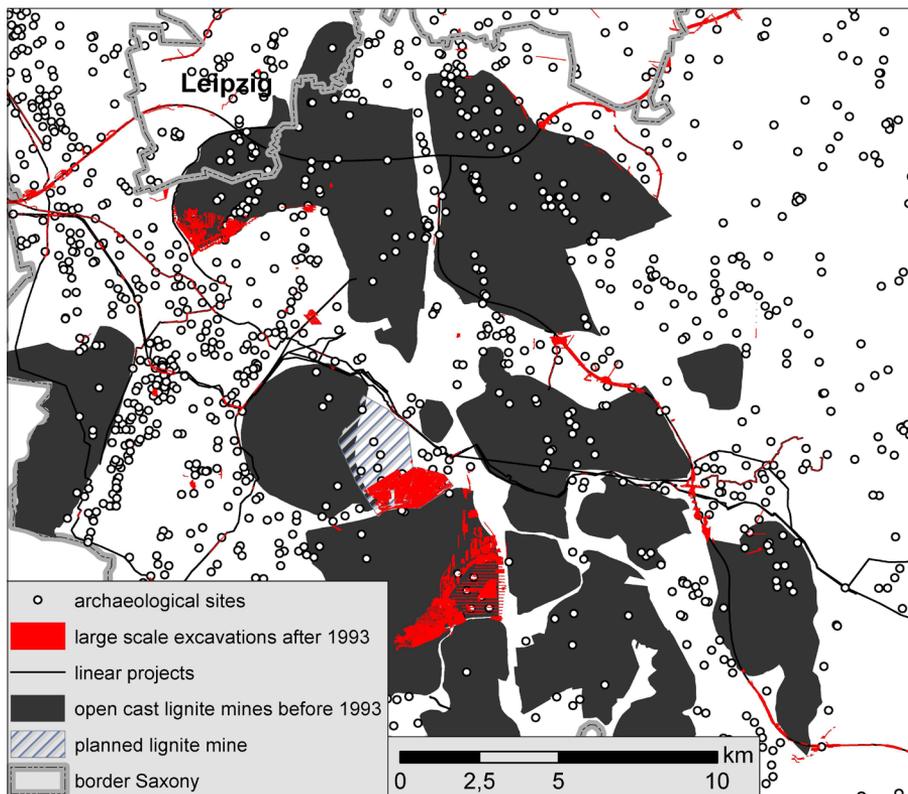
The enormous increase in the number and areas of new development-led projects in the 1990s led to an increase in the number of archaeologists. Unemployment amongst archaeologists was quite high in Europe and many of them came from the western German federal states, the UK, Poland and the Czech Republic. In Saxony, all development-led excavations are performed by workers from other professions, with archaeology professionals only being required as site directors and field technicians. On the other hand, many people in East Germany lost their jobs after reunification, as many companies were closed or the number of workers reduced; in response, the state created a large number of job programmes, which were of great help to archaeology as well. Since these job-creation programmes were co-financed by the state employment agency, they also constituted supplementary financial assistance for excavations. That meant that polluters did not have to cover all the costs of the excavations and the documentation. Many of these workers were interested in and eager to learn archaeological skills, and a large proportion remain in the archaeological service to the present day. Now, in the absence of job-creation programmes, they are employed by the heritage office and their wages are fully paid by the developer.

## **Before and after 1990**

However, it is only partly true that the explosion in the number of preventive/rescue excavations is due to an increasing number of development-led activities occasioned by larger investments following the collapse of the Iron Curtain (Stäuble, et al. 2011: 26).

The areas destroyed by open-cast lignite and other mining activities before 1990 were larger than they are today. As the GDR tried to depend as little as possible on fuel imports, even from its 'brother states', the lignite-mining industry was extremely powerful. In northwest Saxony, the mining region around Leipzig after the war consisted initially of 16 mines, concentrated in five large mining areas. These mines

operated simultaneously, destroying many hundreds of hectares of land each year. This happened more or less without any archaeological surveillance: only one archaeologist, assisted by a technician and sporadically also by volunteers, had to cope with this enormous destruction process (Fig. 1). The result was a small and sporadic distribution of single finds and structures discovered by chance. Only a very reduced number of already-known prehistoric (Herklotz 1987) or medieval sites (Mechelk 1987) and small areas were excavated and thereby rescued by Leipzig University and the Saxony heritage office in Dresden. After 1990 most of the mines were shut down or merged into the four remaining mining areas, which are run on a successive basis. Mining works now destroy 'only' about 50 hectares per year; areas that have already been excavated then need clearance from the heritage office. All these endangered areas have consequently been checked by archaeology since 1993 (Stäuble 2010, 69–70). Generally speaking, we have one or two years in which to carry out excavations in advance for each of these annual tranches. Between 25 and 100 workers are involved (the precise number depends heavily on the number of sites and features) for 12 months a year.



*Fig. 1. Northwest Saxony south of Leipzig, showing the areas destroyed by open-cast lignite mining before 1993 (accidental finds) and large-scale excavations after 1993.*

Of course, the process of evaluation starts a long time before an excavation and comprises all stages of research, from theoretical considerations to 'hard prospection'. This is therefore always carried out with no reference to any former knowledge (see below).

Moreover, the large industrial areas that were often concentrated close to the lignite-mining areas were bigger than they are today; they therefore had more archaeologically unattended land consumption before 1990. A large number of pipelines were built, but in Saxony only one was accompanied by archaeologists before 1990. These days we adopt the same strategies and methods with new pipelines as we do with the lignite mines. Depending on the width of the transect, we open 20 to 30% of the total width of the area along the whole distance; here the topsoil has to be stripped away. In places where we find traces of prehistoric activities, we open the entire area concerned. Archaeological excavations of older pipelines requiring replacement show us that the loss of archaeological monuments around the pipelines built before 1990 was, in a certain way, less significant, the reason being that the process was much less invasive, with only the trench itself being dug (Fig. 2). Pipe-laying worked directly from above the top soil without the top soil being stripped away, as is necessary today on account of the new soil protection laws. That said, at least pipe routes can be excavated today so that information about archaeological sites not formerly documented can be saved.



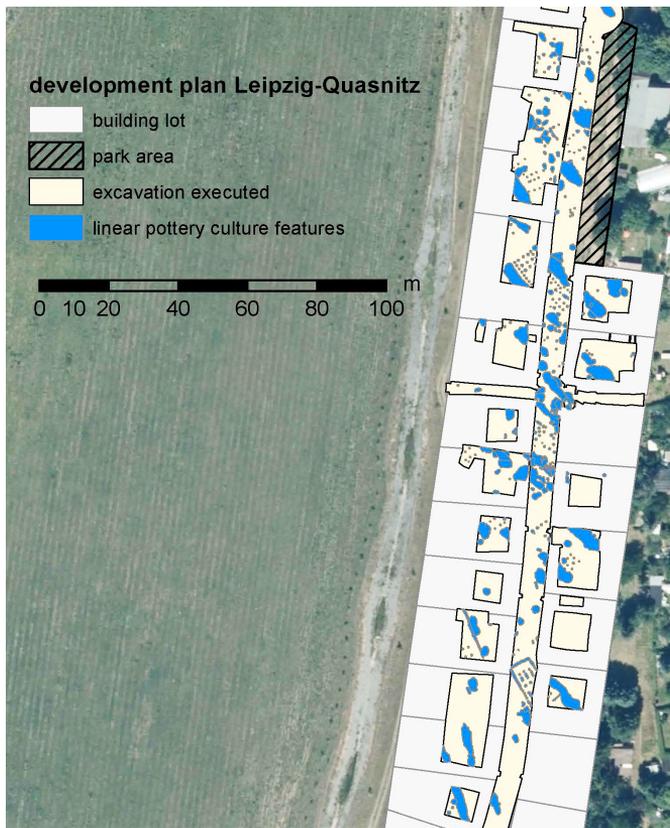
*Fig. 2. Prehistoric features disturbed by an old pipeline and today's requirement to strip large areas for pipeline replacement.*

The same applies to the large post-war housing projects, not only in large cities such as Dresden, Leipzig or Chemnitz (Fig. 3) but also around smaller towns and even in the countryside. There, large agricultural cooperatives or other small industries were established and were mostly accompanied by large housing complexes. As with the lignite-mining areas, only a small handful of these projects could be archaeologically supervised. But the calculated quantity of destroyed surfaces for housing per capita is nowadays probably even larger, as many people no longer want to live in 'social silos', as the corporation flats might be called, but in private houses with small gardens. But again, these projects could be checked and excavated by archaeologists, at least after 1993 (Fig. 4).

Of all the mining or construction activities involving large landscape consumption before and after 1990, only a few were infrastructural projects, for example roads and motorways. In the GDR between the end of the Second World War and 1990, these were repaired rather than newly built; consequently, archaeological substance was unaffected (Stäuble 2010: 77).



*Fig. 3. Large housing projects in the Dresden area, built without any archaeological surveillance (end of the 1980s).*



*Fig. 4. An example of a modern housing project in Leipzig-Quasnitz, 2015–16.*

### **The archaeologies of different times: West – East – West, small-scale – large-scale, thematic – landscape archaeology, research – heritage excavations**

Many of the differences between the way large-scale invasive projects were supervised and monitored by archaeological heritage entities in 1945–1990 and after 1990 are valid for the western federal states of Germany as well. Interestingly enough, the differences were not so much the result of the different political and social systems or archaeological traditions, and the similarities seem to have been dependent on the same strategies of and approaches to archaeological science at different times. One reason could be that no one was able and willing to pay for large-scale archaeological rescue excavations immediately after the war. Even disregarding the financial possibilities, which were of course generally higher in the West than in the East, it seems

rather than the reason lay within the traditional concepts of archaeology and scientific research of that time. No one appears to have been properly concerned by the fact that thousands of undocumented archaeological monuments were destroyed within the large areas cleared for reconstruction and the creation of new infrastructure; at the same time, archaeologists were engaged in excavating sites that were not endangered at all. In those times – and here again, there was no big difference between the political systems – it was common for ‘flagship projects’ to be given funding preference no matter whether the archaeologists came from universities, scientific academies or heritage offices. This changed slowly and only in some of the West German federal states in the late 1970s, e.g. when lignite-mining archaeology was established in the Rhineland (Schwellnus 1981). With regard to pipeline archaeology, this happened even later (Baumewerd-Schmidt & Gerlach 2001), as it did with railways and motorways, many of which were supervised by archaeologists only after reunification (Nadler 1999; Cziesla & Ibeling 2014). All heritage laws established during the 1990s were based on experiences from West Germany. Again as a reaction to East German experiences with these new laws, where the polluter-pays principle was in force many heritage laws from the so called ‘old lands’ of West Germany have also been changed at the end of the 1990ies and after 2000.

Since 1993 in Saxony, we have had the opportunity not only to be involved in all major construction projects, but to check about one quarter to one third of all areas earmarked for destruction by stripping the top soil with the help of a mechanical digger.<sup>2</sup> All settlement areas discovered using this method are then opened and excavated completely. If we do not find any traces of prehistoric activities at sites already known to us, we conduct some supplementary hard or soft prospection work. As all activities are attended by geoarchaeologists, we generally have good documentation on the old and new topographical situations and explanations regarding preservation. This means that the necessity of excavations – and again, I am talking here only about those development-led projects that cannot be avoided – does not depend on whether there are known prehistoric sites within the areas of the project. As this method is also applied in areas without sites that are already known, this often leads to a very considerable difference between sites that were known before and those that have been newly discovered through trial trenching. By systematically using this method of preventive/rescue archaeology we have between five to tenfold increase in archaeological sites (Stäuble, et al. 2007, 31-34, fig. 9). Even if no archaeological traces can be found, the scientific result is still positive. The method allows us to confirm the absence of archaeological features in regions with better, more direct proof and by

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<sup>2</sup> The usual soft or ‘non-destructive’ prospection methods, such as field walking, geophysics and aerial photography, do not work well (or at all) in many parts of Saxony, the reason being the very heterogeneous soil materials from the Ice Age sediments.

using a multidisciplinary approach. This function, which corrects our former knowledge of on-site distribution and the prehistoric use of landscape, makes preventive/rescue archaeology of enormous benefit to all archaeological research. No comparable method achieves as much.

### **On quality and quantity**

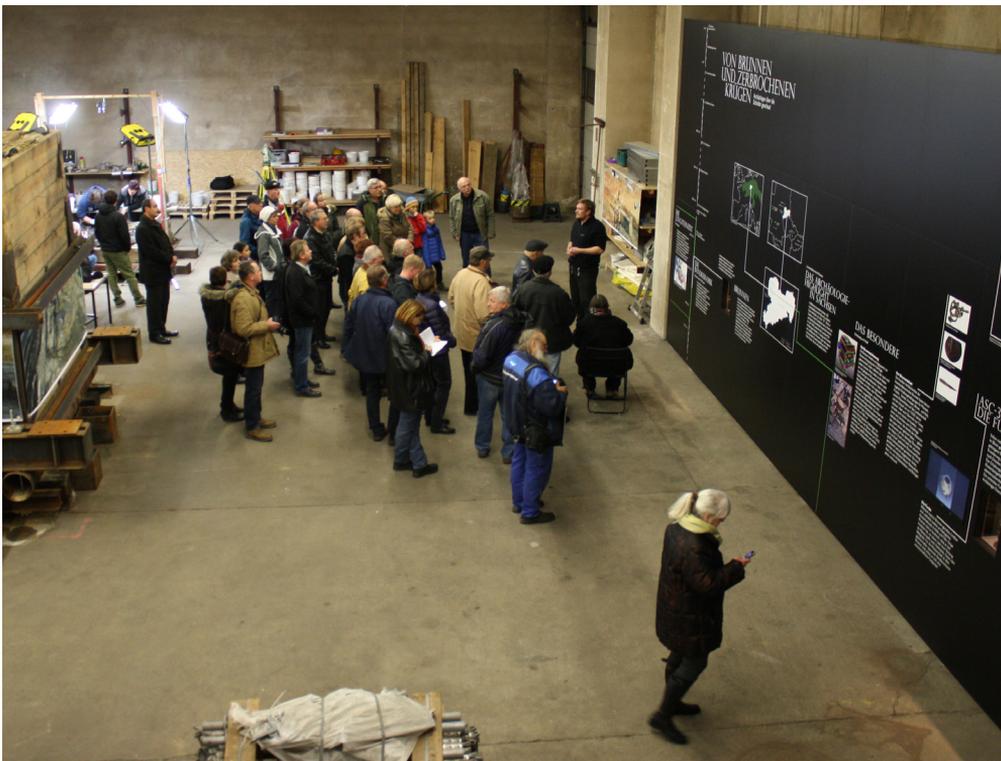
Over the last 20 years or so, preventive archaeology has not only increased the number of known sites but, by excavating large areas, also fostered an enormous increase in features, houses, settlements and sometimes even entire landscapes, and has also allowed us to produce completely new distribution maps. The large excavation areas have to be excavated more quickly (but also more efficiently) compared with scientific research areas. They also bring us a great deal of supplementary qualitative information. Linear Band ceramic wells, for example, have been found in large numbers in the last 10 years precisely because of the strategy to excavate whole archaeological sites, from the core to the margins and even beyond (Kretschmar et al. 2016).

As a further result of this approach, we should also think about the level, quality and amount of information we gather when discovering and documenting such large areas based on ideas formulated within excavation areas of a few square metres.

However, if we compare the quality of the normal preventive/rescue excavations being practised now in large-scale projects with that of the research projects we used to conduct when I was a student 30 years ago, the difference is not so great. Back then, between 10 and 15 students would excavate about 3,000 m<sup>2</sup> of a similar kind of settlement, working on it for two months a year. Part of my Master's thesis involved an interpretation of the features and the site (Stäuble 1997), so I feel I am well placed to judge the quality of the documentation. My conclusion is that there were no differences in quality in comparison with the rescue excavations carried out today.

Perhaps we should even rethink the value of 'classic data' and the claim that the bigger the amount of data, the more detailed and more 'objective' the documentation and the more suitable it is for scientific evaluation. In order to critically re-evaluate this concept, we occasionally organise a special project within large 'polluter-pays' projects of long duration (lignite-mining or motorway archaeology). For example, we chose at random a pit of a large settlement of Linear Band ceramic culture that had been excavated completely over an area of 15 hectares, and organised a very detailed 'Palaeolithic-like' excavation with students from the University of Leipzig using three-dimensional recording for each find and whatever new techniques were available, most of which we use daily during 'normal' rescue excavations. Two

teams of seven students worked for six months on this 'research experiment'. One student, who was writing her Master's thesis on the excavation, was permitted to organise and conduct the works (Hoga, in preparation). One aim of the project was to find out how much longer this kind of excavation took and how much more it would cost if the whole settlement were to be excavated this way; we also wanted to find out whether it would be worthwhile and helpful to excavate and document everything in the same way, and indeed whether such supplementary information was useful for understanding the sedimentation and taphonomic processes of the pit. One of the findings was that we produced too much information, which made processing and analysis difficult. The results are not at all simple and, of course, not unambiguous. Most crucial, however, was the finding that even though a large amount of extra information had been interpreted, this did not constitute an improvement over the interpretations produced for neighbouring features excavated in the regular fashion. It is difficult to imagine the time and money that would be needed to excavate the whole site in this way.



*Fig 5. Excavations of an Early Neolithic well from Droßdorf in a hall near where it was discovered (lignite mining area in Peres, south of Leipzig).*

This discussion changes completely if we apply very detailed analysis in special cases, as with special features such as Linear Band ceramic wells. These are, of course, handled in a special way, and if the time management of a rescue excavation does not allow for a proper excavation on site, we take special measures and transport some features in blocks to an off-site location, giving us sufficient time in which to excavate them under laboratory conditions (Kretschmar, et al. 2016).

In this particular case, the small excavation is open to the public for one afternoon every two months: we call it 'A look over the shoulder of archaeologists' (Fig. 5). The costs of transporting the 30-ton block, the protracted excavation (probably some two years), the analysis and the rental of the hall are all covered by the lignite mining company. Particularly during these hard times for lignite-mining companies, which are fighting for public acceptance, this public presentation of a work in progress, together with an exhibition about the site built around it, is a welcome and well-appreciated public relations platform (the same applies to politicians, with mass media and public interest at the forefront of their minds). Moreover, a great many scientists gather here for discussions, so there are networking opportunities as well.

## Conclusion

The general problems that affect the practice of preventive and rescue archaeology (which I refer to as one here) can, at the same time, be the solutions as well. One generally makes reference to insufficiently good or clear laws or to the influence of overall economic development, and much less commonly to the personal attitude of each of us regardless of position, from the field-worker to the excavation leader, from the responsible person at the heritage management organisation to the director, and regardless of whether the excavation is done by a company or by a state organisation. In my opinion, however, these less commonly considered factors have the biggest impact on how preventive and rescue archaeology is conducted at any time, whatever the legislative, economic and political background.

We need a good legal basis for heritage management, of course, but laws are not the most important factor determining how preventive and rescue excavations work. There are enough examples of countries that have a less satisfactory legal background but still have very good options for action. Unfortunately, the converse also applies: in some countries with better laws, preventive and rescue archaeology is not practiced in an appropriate or realistic way.

The same applies to the economic development, which surely affects the number of projects but should never affect the amount or the quality of preventive archaeology. The strong dependence on economic development obviously means that there is

an impact on the number of projects, particularly at times of fluctuation and crisis; however, it does not have to affect heritage management in a negative way and definitely does not influence development-led projects in a directly correlation. Neither the state nor the polluters are more 'generous' when the economy is more prosperous – in fact, sometimes it is quite the opposite, as archaeological items can also become an important social factor in periods of economic stagnation or identity crisis, which can easily lead to a political (mis)use of them.

Economic development might be more important with regard to the number of projects handled. In this case, the crisis is positive insofar as less investment and fewer invasive projects mean less destruction of areas and prehistoric monuments. If we only look at archaeological practice from an economic point of view, and organise preventive and rescue excavations with ever-expanding private firms, the economic crisis will have an important effect on the people working there. We are certainly aware of the endless spiral typical, for example, of the house-building industry: new streets are needed, necessitating concrete in ever-larger amounts, which calls for new and larger gravel and sand mines. Although preventive and rescue archaeology are hopefully part of this system, at least we do not have to encourage the ever-increasing sealing of the soil and thus, indirectly, the destruction of archaeological monuments, just in order to support our species.

As long as preventive and rescue archaeology is dependent on economic fluctuations, we will have to adapt and use periods of stagnation not only to catch up with the science and with publications, but also to adapt and improve the methods to the new situations.

Archaeologists should generally use these periods to consolidate, while those who have no backing yet should use them to gain more social acceptance, which is perhaps the most important aspect for improving the status of our profession in society. This can obviously only be achieved if we open our work up to cooperation with the popular mass media as well as with scientific publications, and through exhibitions and museums. Social acceptance of archaeological items does not have a direct correlation with economic wellbeing – in fact, the opposite could very well be the case. Social identity is particularly vulnerable at times of economic crisis; here we have to be even more careful to guard against the abuse of archaeological items and prevent their misuse for nationalist ideas and movements. This is the point at which we should, at last, mention political support, which is one further important aspect when examining the problems and solutions that influence our archaeological profession.

Not least, it will always be personal attitude, as well as personal preferences, that constitute the most important factors regarding the way archaeology is conducted in practice, at all levels. Only through personal dedication can we change things.

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## Preventive Archaeology Should not be Reified! The Case of the Swiss Motorway Archaeology<sup>1</sup>

Paul Jobin

### *Abstract*

*This paper proposes an analysis of the historic development of preventive archaeology in Switzerland since the end of the 50's. The particularity of preventive research in this country is its early development under the impulse of a motorway construction programme that has been in progress for 60 years. Moreover, the organisation of preventive archaeology is fragmented because of the political framework of the country, which is a federal state. Thus, Swiss motorway archaeology is an interesting case study for the analysis of the development of preventive archaeology.*

*In reality, it appears that motorway archaeological programmes have been undertaken under diversified frameworks of scientific research and through different contexts and strategies over time in each canton. This means that the practice of preventive archaeology has been carried out based on different perceptions of what constitutes heritage research, which are applied in different ways, rather than being an ideal organisational model which we tend to reify. Thus, it appears possible to reorganise the implementation of the principles of preventive archaeology, in a way to tackle the crisis.*

**Keywords:** *Preventive archaeology, Switzerland, Motorway, History of archaeology.*

### *Résumé*

*Cet article propose une analyse historique du développement de l'archéologie préventive en Suisse depuis la fin des années 1950. La particularité de la recherche préventive dans ce pays est son développement précoce sous l'impulsion d'un vaste programme de constructions autoroutières toujours en cours depuis 60 ans. De plus, la recherche préventive y est fragmentée en raison du cadre politique fédéral du pays. De ce*

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1 This paper presents the research realised by the author at the University of Neuchâtel in Switzerland in the frame of an interdisciplinary research project of the Swiss National Science Foundation (SNF) entitled: "History of Motorway Archaeology in Switzerland (1958-2010)". This project is led by Marc-Antoine Kaeser (UniNe, Institute of archaeology) and Laurent Tissot (UniNe, Institute of history) and coordinated by Géraldine Delley (UniNe, Institute of archaeology).

*fait, l'archéologie autoroutière en Suisse constitue un intéressant cas d'étude historique et comparatif pour l'archéologie préventive.*

*En réalité, il apparaît que les fouilles archéologiques autoroutières ont été le cadre d'une importante diversité de recherches scientifiques menées dans des contextes et selon des stratégies très différentes au fil du temps et dans chacun des cantons. Cela démontre que la pratique de l'archéologie préventive constitue en réalité des principes de recherche patrimoniaux pouvant être appliqués de manières très différentes et n'est pas un modèle d'organisation idéal que nous aurions tendance à réifier. De ce fait, il s'avère possible de réorganiser la mise en œuvre des principes de l'archéologie préventive afin d'affronter la crise.*

## **From a crisis to a chrysalis**

As in many other countries of Europe, the economic crisis affects the proper functioning of preventive archaeology in Switzerland. The resulting negative effects on the research are the consequences of the decrease in investments in the construction sector and of the public austerity measures. However, because of its organisation which is principally State planned, preventive archaeology in Switzerland is mostly prejudiced by public sector initiatives taken to reduce costs at the state level.

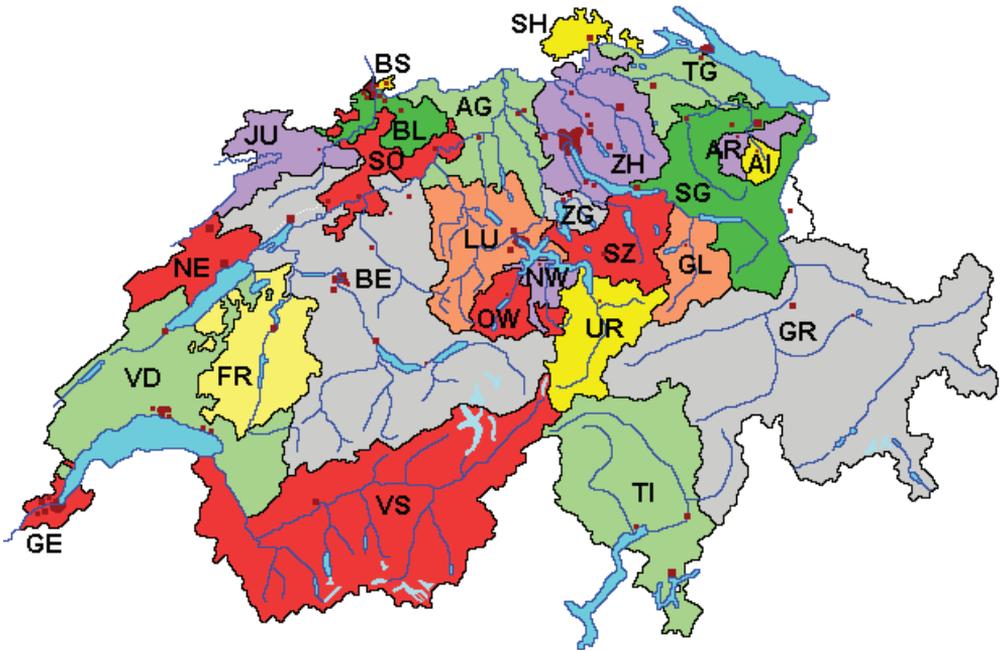
In this situation, Swiss archaeologists have to develop strategies to maintain or preserve preventive archaeology. However, at the same time, the establishment of preventive archaeology cannot be considered as fully set-up everywhere in the country. In this context, it is important to ask ourselves what is meant by preventive archaeology, how it is actually practiced, and what needs to be achieved or preserved.

In fact, as will be demonstrated below, the history of Swiss motorway archaeology shows that preventive archaeology can be practised in very different ways. From this standpoint, preventive archaeology appears to be a set of guiding principles connected with heritage management rather than a definitive model of the research organisation which we tend to idealize and reify. Thus, the historic analysis of the Swiss motorway archaeology provides us an opportunity to reconsider the functioning of preventive archaeology in practice while we are looking for new strategies in the context of the current European economic crisis.

## **A decentralised organisation through a long term construction programme**

The particularity of preventive archaeology in Switzerland is its decentralised organisation. Despite its modest size, comparable to the Netherlands or Moldavia, Switzerland is a Federal State divided into 26 cantons and half-cantons which are all sovereign states (Fig. 1). For example, each canton has its own laws, its own police force, its own educational system and its own economy.

As with all cultural affairs, heritage management and preventive archaeology are the responsibilities of the cantons and the federal authorities are only allowed to provide support (see Kaenel 2002; 2007; 2013; Niffeler 2002; Wolf 2010)<sup>2</sup>.



*Fig. 1. Map of the Swiss cantons (Source: swisstopo).*

The cantons are free to organise preventive archaeology as they think best, in accordance with the Malta Convention<sup>3</sup>. Thus, there are 26 different organisations responsible for preventive archaeology, as though they were from 26 different countries, similar to a diminutive “European Union” in the centre of Europe.

The other particularity of preventive archaeology in Switzerland is its early development under the impulse of the long term motorway network construction programme. Still in progress, this federal construction programme was initiated in 1959 after its acceptance by referendum (Piveteau 1964; Burnier 1985). Thanks to the negotiations led by several Swiss archaeologists<sup>4</sup>, the federal authorities exceptionally

2 According to article 724 of the Swiss Civil Code (1907 – RS 210) and the article 78 of the Federal Constitution (1999 – RS 101).

3 The European Convention on the Protection of the Archaeological Heritage or « Malta Convention » was ratified by the Swiss Confederation in 1996.

4 In particular thanks to Professors Hans-Georg Bandi (Bern), Marc-Rodolphe Sauter (Geneva), Rudolph Laur-Belart (Basel) and Emil Vogt (Zurich), with the help of Felix Endtner, lawyer and deputy director of the Federal Office of Roads.

accepted to finance in the motorways construction budget, the excavations of the archaeological remains which were menaced by the national motorways network construction programme (Bandi & Niffeler 2007: 41-42; Kaenel 2002: 35-37; Leesch, et al., 1998: 28-29; Leesch, et al., 2000; Niffeler 2002: 70). This decision was taken through a decree of the Federal Council on March 13, 1961 (Fig. 2). Consequently, federal financial means, which are more important than those of the cantons, have been deployed for preventive archaeology.

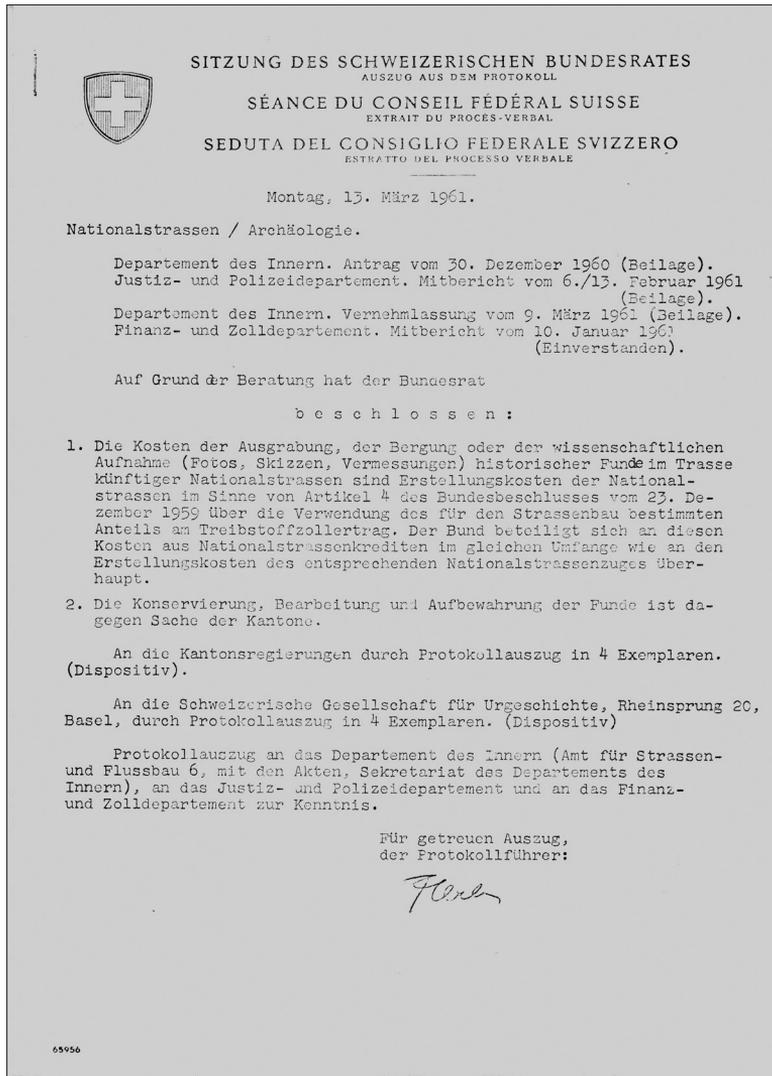


Fig. 2. Federal decree March 13, 1961, concerning the funding of archaeological operations linked to the construction of the national motorway network.

## The heroic times of motorway archaeology

The original research was carried out whilst archaeology in Switzerland was only performed with few financial means by academics and museum curators, supported by the work of numerous amateurs. These were associated in networks under the Swiss Society of Prehistory (SSP)<sup>5</sup> and under local societies attached to a museum or a site.

For the purpose of developing preventive research during the construction of the national motorway, the SSP set up a Central Service for Archaeology<sup>6</sup> led by a special commission<sup>7</sup> (Kaenel 2002: 36; Leesch, et al., 1998: 28-29; Weidmann 1998: 80-81). The SSP's Central Service for Archaeology was charged with engaging with and motivating the cantonal managers responsible for Heritage. Indeed, despite the federal financial support, preventive excavations have always depended on local initiatives from the cantonal managers responsible for Heritage.

However, these cantonal persons or administrative departments designated as being in charge of Heritage management were often not trained as archaeologists. Moreover, they were not always able, motivated or ambitious enough to organise such large scale preventive excavations, which had to be undertaken during the construction of the motorways network. As a consequence, several of the first highway sections were not considered for archaeological research (see: Weidmann 1998: 82; Niffeler 1998: 19-20). During the first decade of construction, only some 30 archaeological excavations were undertaken, whilst 650 km of motorways had been opened, which represent one third of the initially planned national motorway network (Leesch, et al., 1998: 29).

However, the number and scale of these excavations was relatively important considering the technical and personnel resources available for the archaeological research at that time. Moreover, during the construction of the motorways, the Central Service for Archaeology was successful in initiating the archaeological research, as planned.

## The development of the cantonal archaeologies

During the 70's, both in society and in cantonal politics, we can observe a growing awareness of the impact of the new construction projects both on heritage as well as

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5 Founded in 1907 and based in Basel, the Swiss Society of Prehistory (SSP) was called: « *Schweizerische Gesellschaft für Urgeschichte / Société Suisse de Préhistoire / Società Svizzera di Preistoria* (SGU/SSP) » and became in 1966 the « *Schweizerische Gesellschaft für Ur- und Frühgeschichte / Société Suisse de Préhistoire et d'Archéologie / Società Svizzera di Preistoria e d'Archeologia* (SGUF/SSPA) » and in 2006 « *Archäologie Schweiz/Archéologie Suisse/Archeologia Svizzera* (AS) ».

6 « *Archäologische Zentralstelle für den Nationalstrassenbau / Service archéologique pour la construction des routes nationales* (AZN/SACRN) ».

7 « *Kommission für den Nationalstrassenbau* (NSK) ».

on the natural environment. In this context, most of the cantons created their own cantonal archaeological service to manage the archaeological heritage of their territory (Niffeler 2002: 72-73; Weidmann 1998: 81).

Thus, structural changes appeared for the organisation of preventive archaeology in Switzerland. The cantonal archaeological services took control of archaeological remains, which are the objects of scientific study. As a consequence, academics, museums and archaeological societies rapidly lost their dominant position in archaeological research. The activities of the Archaeological Central Service for motorway construction were reduced to a liaison office between the different cantonal services and the Federal Office of Roads and were directed by a supervisory commission from the SSP<sup>8</sup>. Since that time, preventive operations during highway constructions was organised and carried out by each canton without the coordination of the organs of the SSP. As a result, motorway preventive archaeology lost homogeneity. In fact, the duties, the administrative status and the importance of the cantonal archaeological services are different in each canton. Thus, based on the intentions and the initiatives of all these local research structures, different research strategies were implemented on the motorway worksites.

Important methodological changes also occurred with the introduction of new methods of prospecting. Previously, archaeologists used documentary analysis and field walking to discover the archaeological sites on the motorway worksites. During the 70's, archaeological surveys realised by test-pits was gradually elaborated to detect the archaeological sites which were not discernible from the surface (Boisaubert, et al., 2008: 22-31; Boisaubert, et al., 1992: 36-40; Niffeler 1998: 20; Weidmann & May Castella 1994: 19-23). By trial and error, this method was refined and added to the previous procedures. As a result, Swiss archaeologists progressively developed the archaeological assessment methods and procedures which are central to preventive archaeology. It should be noted that this procedure was in fact elaborated separately in each canton. Thus, archaeological prospection on motorway construction sites was undertaken using different approaches depending on local interests, the environment, the means available and the nature of the remains.

As a result of cantonal initiatives, we observe an important development in the methods and procedures deployed on motorway excavations during the 70's. However, because of the integration of preventive archaeology in the cantonal administrations, this development resulted in different methods for undertaking research in the country.

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8 « *Aufsichtskommission der Archäologische Zentralstelle für den Nationalstrassenbau* ».

## New possibilities for ambitious research programmes

The situation for motorway archaeology changed again during the 80's when a new funding system in the civil engineering sector was introduced to improve the flexibility regarding the methods of payment, thus reducing the budgetary constraints. At the same time, the recently established environmental impact studies, allowed preventive archaeology to be positioned in a better light. Furthermore, the deadlines for motorway construction were rescheduled and extended due to a lack of federal funds, providing longer timelines for archaeological research (see: Leesch, et al., 1998: 29; Bruckner & Sulzer 1981: 6). Thus, the financial contributions and delays which archaeologists could request from the Federal Office of Roads were significantly increased.

In this context, some of the cantonal archaeological services chose to undertake more ambitious research programmes. Examples included systematic surveys by test-pits and meticulous excavations (see Figs. 3 and 4).



*Fig. 3. The excavations of the site of Hauterive/Champréveyres (NE) in 1983, during the construction of the Motorway A5 (Photography: Éric Gentil, Laténium).*



*Fig. 4: Motorway excavations have been the framework of large scale preventive operations. Here the removal of a part of the archaeological site of Monruz (NE) during the construction of the Motorway A5 in 1991 (Photography: Béat Arnold, Laténium).*

At the same time, we also observe an increase in the number of palaeoenvironmental studies. As a consequence, the mass of data collected during the motorway excavations increased substantially. Prior to that time, archaeologists often requested financial support from the Swiss National Science Foundation to analyse the data collected (Delley 2013: 37). In order to cope with the increase in the data collected during motorway archaeology, important federal means devoted to the constructions was now also requested to study and analyse the data collected from the sites investigated, leading up to the production of the excavation reports. Thus, some of the archaeological research programmes initiated during the motorways construction projects became large-scale long-term research projects, able to employ hundreds of scientific professionals.

However, an important problem to resolve in the organisation of such research programmes was the lack of professional archaeologists in Switzerland. As a consequence, the cantonal archaeological services which wished to undertake more ambitious research programmes chose different strategies: some employed foreign archaeologists (Weidmann 1998: 82), whilst others decided to mandate private companies

to undertake preventive excavations on their territory (see: Weidmann & May Castella 1994: 23).

At that time, Swiss Motorway Archaeology became the enormous archaeological undertaking which lives in memory of numerous European archaeologists. Nevertheless, some cantonal managers of archaeological heritage did not use this opportunity to undertake more ambitious research programmes. Moreover, in several cantons, especially in the east of Switzerland, the construction of most of the motorway sections had already been completed. Thus, in parallel to the increase in the financial means available for archaeology during motorway constructions, we can observe that the importance and the scale of the research undertaken were variable as between the cantons.

### **Motorway archaeology and heritage management**

During the 90's, the cantons reinforced the procedures for the application of preventive archaeology on their territories. In fact, the ratification of the Valetta Convention by the Swiss Confederation led the cantons to readjust their legal texts concerning Heritage causing a redefinition of the role of the cantonal archaeological services.

Thus, preventive archaeology became something more than an opportunist and providential strategy for scientific research: it was now expected to record all scientific data about the past for eventual future studies in the context of cultural heritage. In the motorway archaeological programmes, these new approaches were developed in a framework of a systematic research strategy involving the collection of a maximum amount of detailed data (see: Kaeser 1994) and a generalized use of palaeoenvironmental data.

As a consequence, the volume of data collected was further increased. These new approaches also changed the definition of the archaeological site, which became the entire motorway section. Thus, to integrate all different remains in a research thematic, a revised scientific discourse was gradually establish concerning the territory and its evolution through its anthropic occupation. This new strategy was finally deployed in only two of the last few cantons still concerned by motorway construction during the 90's. Although this strategy was the culmination of motorway archaeological research, it represented only a small part of the research effectively undertaken.

### **26 Motorway exits for archaeology in Switzerland**

Currently, the national motorway network is almost completed and the major high-way sections have been now opened. However, since 2008, the maintenance of the

motorway sections which was originally a cantonal responsibility has been taken over by the federal authorities<sup>9</sup>. As a consequence, new motorway archaeological research will certainly be organised on the last planned sections and during the future improvements of the highway network<sup>10</sup>. In this sense, the Federal Office of Roads created in 2012 its own specialised service for archaeology and palaeontology which collaborates with the different cantonal archaeological services to plan the current and future research operations during motorway constructions (FEDRO 2012: 20). The importance of this future research is, of course, unpredictable, but we can at present observe an almost total interruption in motorway archaeology in Switzerland.

After this interruption, it appears that the activities of preventive archaeology suddenly dropped in Switzerland. However, the substantial federal funded motorway archaeological research was developed in parallel with the organisation of the cantonal preventive archaeology which depended on cantonal credits. Moreover, the motorway research programmes took place in each canton at different periods between 1961 and the present, depending on the federal highways construction schedule. Thus, the interruption of the most important motorway archaeological programmes and the succeeding reorganisation of preventive archaeology have occurred at different times in each canton. However, the problem is that the cantonal volume of funding for preventive archaeology differs between the cantons, but is in all cases of lesser importance than the federal means which were deployed during the construction of the motorway network, thereby giving this impression of a decrease, which is in fact mainly the result of the reduction in the long term and exceptional federally funded research programme.

Another major current problem of preventive archaeology in Switzerland is its difficult implementation within the cantonal territory planning. Concerned with motorway constructions, Swiss archaeologists have missed the opportunity of participating in the definition of territory management at the federal level<sup>11</sup>. Thus, the organisation of territory planning in Switzerland is *de facto* not favourable to the integration of the requirements of preventive archaeology. Indeed, the procedures regarding territory planning in Switzerland are extremely rigid and slow. Even if it is very useful for heritage conservation, it disadvantages the implementation of dynamic preventive archaeology. The management of territory planning in Switzerland is a

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9 This change concerning the responsibility for motorway maintenance was operated in the framework of a major renegotiation of the administrative roles between the cantons and the federal authorities in 2008.

10 Currently, motorway archaeological excavations are still being carried out, notably by the archaeological service of Canton of Bern during the construction of the last sections of the A5 motorway, close to the city of Biel (*Biel/Bienne*).

11 In Switzerland, cantonal territory planning is regulated by the 'Federal Law on Territory Planning' (1979 - RS 700) which came into effect in 1980.

cantonal responsibility, so that the implementation and the efficiency of archaeological preventive procedures within territory planning vary between cantons, depending on the cantonal research guidelines.

Common research standards and research coordination at the national level are non-existent for preventive archaeology. However, the Federal Office of Roads adopted a normalised procedure for federally funded preventive excavations linked to the completion and the maintenance of the national motorway network (FEDRO 2012: 20)<sup>12</sup>; also, a group of Swiss archaeologists created a forum concerning the situation of archaeology in Switzerland called “Horizon 2015”, and proposed research standards which could be used for reference<sup>13</sup>; furthermore, the association of the directors responsible for the cantonal archaeological services<sup>14</sup> has adopted common guidelines for the training of volunteers during archaeological research<sup>15</sup>; we can also point out that Switzerland is a member of the European Archaeological Council, so that preventive archaeology in Switzerland is concerned by its guidelines. However, other than in the case of federally funded archaeological excavations, these standards are more in the nature of recommendations, and the cantonal managers have no obligations to follow them; thus each canton has its own procedures and standards for preventive archaeology. Moreover, there are no external supervisory measures to the canton regarding the excavations and for the application of preventive archaeology, except, again, in the case of federally funded operations<sup>16</sup>.

This situation is problematic: on the one hand, the lack of common standards and coordination for preventive archaeology in Switzerland generates a diversified and unbalanced collecting of data and research, disadvantaging the establishment of interpretative regional syntheses beyond the cantonal framework (Kaenel 2013: 41; Corboud 1998: 57); on the other hand, this situation is also problematic for preventive archaeology funding, since the heads of most of the cantonal archaeological services are at the same time curator and operator of the preventive archaeological operations. Therefore, because of the lack of external supervision and common standards which could be used as criteria, it is impossible to evaluate or justify the financial means required for the functioning of preventive archaeology, and the cantonal budgets for

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12 Applied procedures in case of archaeological and palaeontological discoveries during the construction of the National Roads (ASTRA 7A020 – 2012 V1.01).

13 Horizont/Horizons/Orizzonte 2015 : Guidelines for field archaeological research.

14 *Konferenz Schweizerischer Kantonsarchäologinnen und Kantonsarchäologen / Conférence Suisse des Archéologues Cantonaux / Conferenza Svizzera degli Archeologi Cantionali* (KSKA/CSAC).

15 KSKA/CSAC’s guidelines concerning volunteers, version: 10-2013.

16 If an archaeological site is considered to be of national importance, financial funds for its preventive archaeological research can be requested by a cantonal archaeological service from the Federal Office of Culture, according to the Federal Law of Nature and Landscape Protection (1966 – RS 451).

preventive archaeology in Switzerland are therefore dangerously susceptible to be cut, depending on the cantonal economic situation.

Given this situation, we can observe a crisis in the archaeological labour market, resulting from a redefinition of the terms of employment in preventive archaeology (SSSP 2002). Motorway archaeological research programmes have created some sudden and temporary increases in labour requirements, which have generally been without long term consequences (Schifferdecker 1998: 26). The gradual completion of the most important motorway construction programmes has led to a substantial reduction in the labour requirements (Leesch, et al., 1998: 30)<sup>17</sup>. At present, the public employment market is saturated and permanent contracts are very rare. However, to fulfil their mission in Heritage management, the cantonal archaeological services have to engage numerous archaeologists on short-term contracts and to externalize a lot of analyses and data studies. Thus, numerous young Swiss archaeologists are only temporarily employed and are contracted as independent workers. The termination of motorway archaeology in Switzerland has brought about the demise of private archaeological companies. In fact, the current austerity measures blur the distinction between public and private employment.

Subsequent to the completion of the motorway research programme, important problems disadvantage the functioning of cantonal preventive archaeology in Switzerland, which are perceived differently in each canton, and which all need to be resolved at their own level. Thus, different strategies have been implemented, depending on cantonal specificities, giving rise to a diversity of organisations for current preventive archaeology in Switzerland.

### **More than an organisation for archaeological research**

During the development of preventive archaeology under motorway construction, during the recession which followed their interruption, as well as its organisation in the cantonal territory planning, preventive archaeology in Switzerland has been carried out in different ways depending on the cantonal politics and the timeframe.

Thus, the history of Swiss motorway archaeology demonstrates that preventive archaeology has a History! Preventive archaeology is, in fact, a continuously changing process composed of numerous mechanisms and diversified practices. Rather than an evolution, we observe a succession of research experiments which depend on both internal and external factors, as well as for example: the availability of financial and technical means, the theoretical and practical context of the research, the scientific

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17 For information, in 2002, it was estimated that 500 people were employed in archaeology (Niffeler 2002: 69).

thematic chosen, the number of archaeologists and their levels of competence, the situation of the archaeological institutions as well as the nature of the archaeological remains and how archaeologists perceived them... In reality, the organisation of preventive archaeology depended mainly on the initiatives and the ambitions of the archaeologists under whose responsibility they evolved. In fact, preventive archaeology is not a monolithic and definitive model for the research organisation; at the theoretical level, it is made up of research principles which are connected to Heritage and which can be practised in numerous ways.

Given this situation, to cope with the current crisis of preventive archaeology in Europe, it appears that it could be more judicious to follow new trends and solutions for the functioning of preventive archaeology, instead of looking for the establishment or the preservation of an idealized organisational model. However, our new choices and strategies have to be negotiated with civil society because of our obligations towards Heritage Management. To achieve this, we can look to change the legal and fundamental framework of archaeological heritage. In fact, the basic procedures, laws, norms and standards are also the connectors which link archaeological research with the political, economic and social spheres, which regulate research. This renegotiation will allow us to readjust the functioning of preventive archaeology to the current context of the research, to the evolution of the discipline and to our scientific ambitions.

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## Management of Large Archaeological Projects in a Competitive Environment: The French Case

*Pascal Depaepe, Isabelle Kerouanton, Gilles Prilaux, Marc Talon*

### **Abstract:**

*In France, the development of preventive archaeology has provided a framework for systematic archaeological investigation prior to the building of large scale infrastructures such as motorways, rail tracks, airports, etc. Since 2002, preventive excavations have been put out to tender with the contractor being able to contract a company of his choice after the archaeological project has been vetted by the government. Here we will compare two large scale archaeology projects, one having been put out to tender, the other not.*

**Keywords:** *Preventive archaeology, Large archaeological operations, Excavation costs, Geophysics prospection*

### **Résumé**

*Le développement de l'archéologie préventive française a fourni un cadre à des recherches systématiques préalables aux grands travaux d'aménagement du territoire comme les autoroutes, les lignes ferroviaires, les aéroports, etc. Depuis 2002, les fouilles préventives sont mises en adjudication, l'aménageur pouvant contracter avec une entreprise de son choix après validation du projet archéologique par l'état. Nous comparons ici deux grands projets archéologiques, le premier soumis à la concurrence entre des opérateurs en archéologie préventive, le second non.*

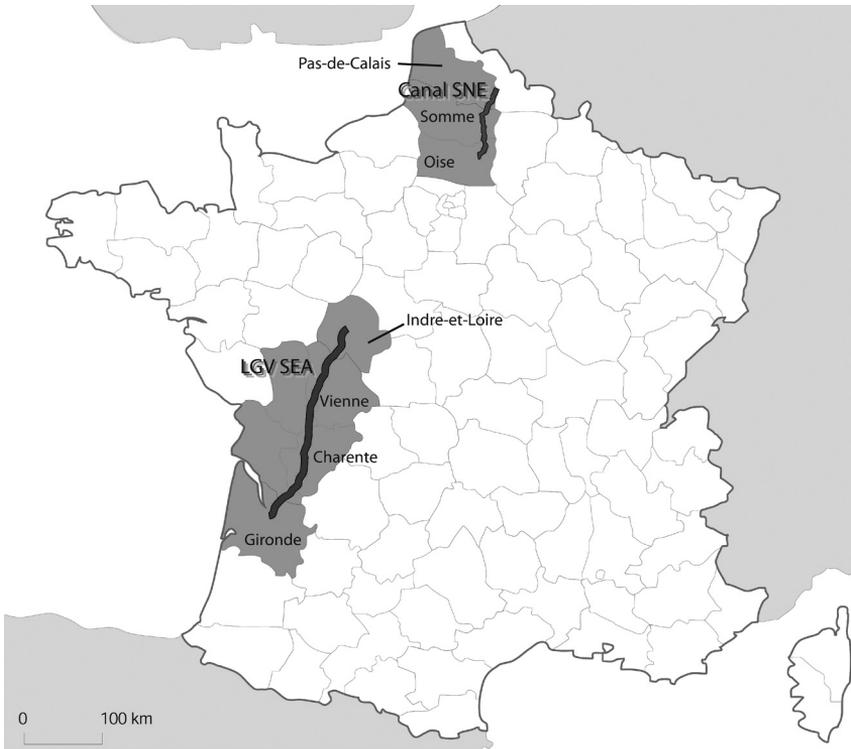
## Introduction

The operations that we have chosen to present here are the Seine-Nord-Europe Canal (CSNE) and the High-speed rail link Sud-Europe-Atlantique (LGV-SEA ; Fig 1). The first is still ongoing, the second has recently finished.

We will be tackling aspects relating to the organisation and the cost of these projects. As the publication of the results is in progress and it is for the moment too early to provide an exhaustive overview of each operation.

## The LGV Sud Europe Atlantique

The LGV Sud Europe Atlantique (LGV SEA) project involves the building of a new rail track between Saint Avertin – to the south of Tours, in Indre-et-Loire and Ambarès-et-Lagrave – to the north of Bordeaux in Gironde (Kerouanton pending). This new track, characterised by its high-speed infrastructure, is 302 km long



*Fig. 1. Locations of the LGV-SEA and CSNE operations.*

and has 40km of linking track that connects it to the existing network. It crosses the former regions of Centre (17.4 % of the track), Poitou-Charentes (72.2 % of the track) and Aquitaine (10.4 %), and the departments of Indre-et-Loire, Vienne, Deux-Sèvres, Charente, Charente-Maritime and Gironde. Its impact on the areas it crosses is significant as it has generated 70 million m<sup>3</sup> of spoil and 38 million m<sup>3</sup> of rubble over 4200 hectares.

It is the first high-speed rail track built within the framework of a public-private partnership using the system of concessions. This administrative structure with a tight operational timetable took a long time to put into place and was not without repercussion for the archaeological programme. It involves two correlative phases with overlapping timetables: the first pilot project (APS) proposed by Réseau Ferré de France<sup>1</sup> was subsequently refined into the detailed pilot project (APD) after the appointment of a concessionary. The impact of this final and more detailed project was to double or even triple in some sectors, the initial surface area of the project. Many additional zones were included corresponding to the temporary or permanent housing of material used in the construction of the new rail track as well as areas for work bases, retention basins, anti-noise sidings and other zones used for the construction or the installations (electrical stations, etc..) of the rail track. The archaeological prescriptions were firstly based on the first pilot project and were then completed after the presentation of the final pilot project by the appointed concessionary.

The administrative, operational and scientific management of the project encouraged INRAP, who carried out all of the evaluations, excepting a few hectares<sup>2</sup>, and almost half of the excavations, to set up a management structure tied to the Interregional Grand-Sud-Ouest office. The input of such an organisation allows, other than providing a real scientific coherence in line with the specifications of the three regional authorities, to limit the logistical repercussions for the fieldwork teams. In the preparative stages, a technical assistant (or several assistants when the activity was at its peak) was responsible for not only organising the necessary mechanical and logistical means but also to prepare the fieldwork operation itself in order to facilitate the work of the archaeologists. This included ensuring and negotiating access to sites, mapping out access routes, following up on authorisations from landowners to intervene, etc. This preparation could not of course completely erase any unexpected incidents but could at least lessen their impact.

Crossing three regions the route of the LGV SEA was under the authority of three regional prefectures, three regional archaeology services and two interregional

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1 SNCF réseau since January 2015.

2 In Indre-et-Loire, almost 85 ha were surveyed by the Departmental Archaeology Service (SADIL).

commissions for Archaeological research. The scientific guidelines for methods and means relating to fieldwork and appended to the governmental authorisations for the archaeological evaluations varied from region to region and needed to be included globally in the project. Guidelines for fieldwork could in some cases specify long trenches, while others specified 20m long staggered trenches. In the field and during the post-excavation phase, standard procedures were also put into place for the evaluations allowing amongst other things to transcribe the up to date data in a Geographic Information System.

The first evaluations, divided into 50 distinct operations (with a total surface area of 1914 hectares), began at the end of September 2009 using the first pilot project submitted by Réseau Ferré de France as a basis. 79 additional evaluations were carried out between August 2011 and June 2013 using the detailed project submitted by the appointed concessionary. This increased the evaluation area by 1105 hectares, corresponding to 57.8% of the areas that were surveyed. In total 3 020 hectares of the 4200 hectares of the surface area of the final project were surveyed between September 2009 and June 2013, corresponding to 10 hectares per linear kilometre (this average goes up in the Centre region to 17.2 hectares and decreases to 9.1 hectares in Poitou-Charentes and 4.2 hectares in Aquitaine – Fig. 2).

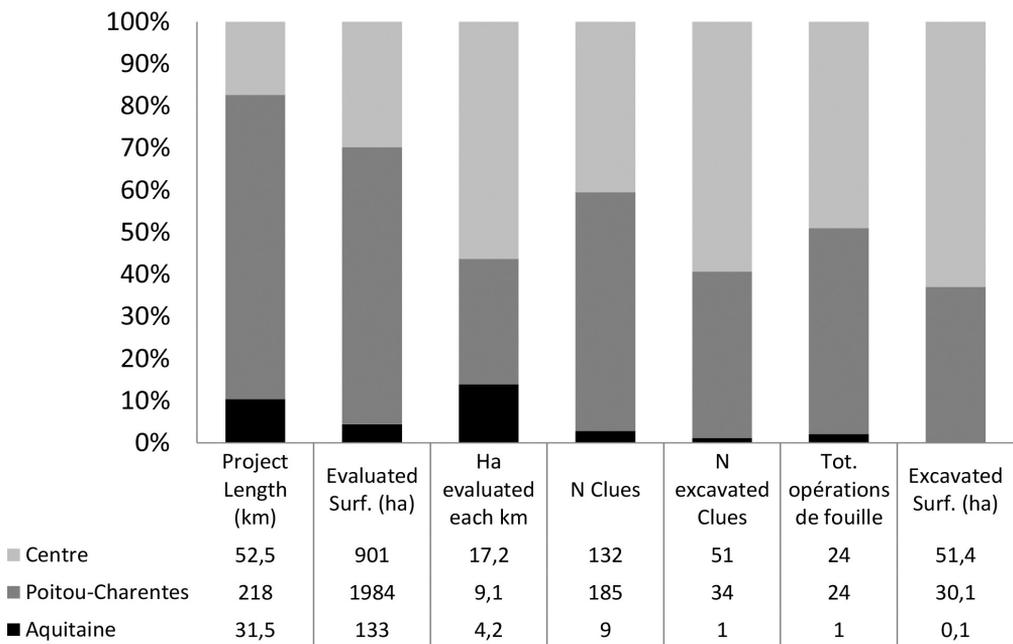


Fig. 2. LGV-SEA, regional differences in the execution of the archaeological operations.

On the basis of these evaluations, 300 sites<sup>3</sup> or indicators of sites were identified, 49 excavations were undertaken after authorization by the government. The excavations have led to the study of 86 sites, 51 of which are located in the Centre region. The total area of the excavations that corresponds to about 82 hectares is divided up as following: 0.1% of the area is in Aquitaine (one excavation), 36.9% in Poitou-Charentes (24 excavations) and 62.9% in the Centre region (24 excavations). This underlines that the northern part of the route was the most impacted by archaeology, corresponding to 29.9% of the total area surveyed and 62.9% of the total excavated area, even though distance wise this part of the route only represents 17.4% of the total length of the track. In view of the important differences from one region to another, it remains quite difficult to overview the LGV as a whole. These differences are due to the very urbanised southern part of the route (Bordeaux and its agglomeration), certain sectors being less well preserved than others (plateau, valleys, chalk/silt/sand), the denser human occupation in the valleys (mainly in the Vienne, but also the Indre and Charente), but other extrinsic causes could also be alluded to.

Under private project management, the contracts for the excavations were put out to tender (each new authorisation generated a contract). INRAP won the most contracts (23). The Departmental Archaeology Service of Indre-et-Loire (SADIL) won one contract and the 25 other contracts were won by 8 private companies<sup>4</sup>, either separately or by associations of companies (4 cases).

The contribution of public operators in this project has been important as on top of the evaluations almost half of the excavations were carried out by INRAP (and slightly more than half if you take into consideration the surface area) and the Departmental Archaeology Service of the Indre-et-Loire (SADIL). Competition between different companies was deemed beneficial to the contractor as it helped to reduce costs but probably also to reduce the timeframe of the intervention. The total cost of construction is announced at 7.8 billion euros, the cost of the archaeology can be estimated at 32 million euros, 0.41% of the global cost. In terms of schedule, the first excavation was undertaken at the end of 2010 and most of the operations were carried out within two years, from the summer of 2011 to the summer of 2013, mobilising several hundred archaeologists (and at the peak of the activity more than 200 at the same time). The evaluations and the excavations were carried out in three and a half years along the 300 km of the LGV route.

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3 The term site here can be defined as »occupation type + chronology«. The same excavation that unearthed a Neolithic settlement and a medieval cemetery counts for two sites.

4 Archéosphère (3 contracts), Arkémine (1 contract + 4 in association), Archéoloire (3 in association), Eveha SAS (11 contracts), Hadès (3 contracts), Iker (1 contract), Oxford Archéologie (1 in association) and Paléotime (2 contracts + 1 in association). Two of these companies have gone bankrupt and a third is no longer authorised to excavate.

Even if the competition between different companies was beneficial for the contractor, it was probably less so in terms of the research aspects of the project. One geographical sector, in particular, seems to symptomatically illustrate a certain number of scientific shortcomings: here at the bottom and on the slopes of a small valley, several excavations of sites dating from the Neolithic to the Early Medieval period, and located only a few hundred metres from each other were, carried out by different companies. Archaeological sites are spread all over the valley and further, but between the different excavations, the question of a global approach to land occupation via chronological gaps (site displacement?) or functional differences (settlement/funerary contexts) could not be answered satisfactorily. If the independently managed fieldwork did not hamper the comprehension of the sites themselves, an overview of their immediate context was lacking. A comprehensive approach can only be attempted outside of this competitive environment once the site reports have been finished. So it is not possible to tackle the question of the occupation within the framework of the excavations when paradoxically the archaeological research that is carried out on linear routes is the most suited for this type of analysis. This widened focus can only be attempted outside of a competition framework once the reports have been given in and the contracts honoured.

The archaeological data collected from the excavations and the evaluations carried out on the LGV SEA is important and the papers and conferences provide a first if somewhat timid feedback to the scientific community. It remains to engage the scientific exploitation of these results that aims to go further than the excavation reports, incorporating the results of the evaluations and the documentation that has been made available by the research community. The multiplicity of the public and private contributors to this project makes this enterprise more complex but not impossible as shown by the first publication projects that bring together government services, public and private companies.

## **The Seine-Nord Europe Canal Project**

The Seine-Nord Europe Canal is the central segment of the high priority European Seine-Escaut project that involves the building of a fluvial link between France, Belgium and the Netherlands, opening up the fluvial basin of the Seine by joining it to 20000 km of European waterways. The future canal stretches over 107 km between Compiègne, where it connects to the Oise, and Aubencheul-au-Bac near to the town of Cambrai, where it connects to the Dunkerque-Escaut canal. The building of this high capacity canal, overseen by the Voies Navigables de France (VNF), will have a width of 54 m and a depth of 4.5 m. It includes six locks, a 1,3 km long canal bridge, 61 re-established road and rail links, four multimodal platforms, six transshipment

platforms, two pleasure boating installations and a reservoir of 14 million m<sup>3</sup> of water. The project covers a 2 500 hectare area and will generate 57 million m<sup>3</sup> of shifted rubble, digging down to a depth of up to 45 m necessitating the opening up of areas as wide as 180m in several sectors.

As early as 2004, archaeologists became aware of the importance of this project which largely surpasses other building projects in France. Using this dynamic and with the experience and the expertise of a local team used to work on large scale projects (Bayard, et al. 2011; Prilaux & Talon 2012a; 2012b; Buchez & Talon 2014), an archaeological programme was put into place as early as September 2008.

### The impact and the archaeological programme

The Seine-Nord Europe Canal affects large areas (three times the width of a motorway) and has a considerable impact on archaeological sites. In terms of their identification, the project has three main advantages: its linear route provides a transect of the region, the opening up of large areas to survey provides a global vision of sites and the depth of the digging gives access to Prehistoric sites buried in the loes several metres under the arable soil (Coutard, et al. 2015).

To expertise and then excavate the better preserved archaeological sites, INRAP created a local management of the project, based midway along the route at Croix-Moligneaux in the Somme between Ham and Péronne. The management team, that includes an operational and administrative staff of 10 and a technical platform that brings together different resources (topography, GIS, computer aided design, desktop publishing, palaeoenvironment, geomorphologic studies), is charged with coordinating the programme and the operational teams.

The archaeological programme consists of evaluation campaigns and excavations carried out under the authority of the Regional Archaeology Services (SRA) of Picardie and Nord-Pas-de-Calais, but also of publication and valorisation projects. Given the vast scale of the construction project (Fig. 3) and the means invested in assessing its archaeological potential and ensuring its survey, INRAP envisioned using the project to develop new methods but also as a communication tool towards the general public, local government and the scientific community.

The defining feature of the evaluation phase (Talon 2012) was to set up at its very beginning three specialised teams adapted to the type of survey to be carried out (shallow trenches, deep trenches and the survey of river valleys). Regional referents were involved to ensure the correct expertise or study of each site, to precisely identify its nature, its function and the dating of indicators and occupations and to inform the local scientific community of how work was progressing. Finally, some of the referents and the project managers actively participated in the training and the tutoring of the less experienced members of the team, providing a “nursery” of



*Fig. 3: Aerial view of an evaluation on CSNE Project (Campagne, Oise Dpt - @Altimage, Ph. Frutier).*

young project managers from a recruiting ground of more than a hundred archaeologists who were assigned to the project or who were permanently recruited by INRAP between 2009 and 2012.

### The evolution of the project and the field work

The initial project was launched as a public-private partnership and intervention times were very short. The fieldwork was due to finish in 2011 to give way to construction work with the objective of the canal opening in 2015. The workforce needed for the archaeological interventions was at the time estimated at 250 people which necessitated the creation of an independent management. In reality, the construction project was running behind schedule and the archaeological work (evaluations and excavations) of this first phase was drawn out over a longer period allowing a smaller workforce of a maximum of 120 people between 2009 and 2012.

Since the autumn of 2012, the project's reconfiguration ordered by the government led to the suspension of operations, the subsequent abandon of the most important public-private partnership in Europe (40% of the total cost) and the creation of a project company in May 2016 charged with the management of the construction. The cost of the project in real value in 2013 was 4.5 billion euros paid for by central and local government, the European Union and public finance. This new setup should enable the reprise of the archaeological programme from the autumn of 2016. It will focus on the survey of more than 1000 hectares and several excavations. Following an agreement with the local archaeological services of the Pas-de-Calais, the Oise and the town of Noyon, INRAP, the only provider of evaluation services, carried out trial trenches on 1800 hectares of the 2500 hectares of the initial project between September 2008 and December 2012. The evaluations have led to the discovery of 320 archaeological indicators, detailed in 48 site reports.

A geophysical survey was carried out on a section of the route over a 60 hectare area as a test to establish its pertinence for the detection of archaeological features. The results of the survey (using electrical and magnetic methods, Géocarta) were compared to the results from the conventional trial trenches that were implanted without the knowledge of the geophysical survey. Of the 13 sites that were identified, 12 were detected in the trial trenches, but only three were identified in the geophysical survey using both methods (Hulin, et al., 2014 and pending). This can be explained firstly by the discrete nature of the archaeological features and also by the nature of the soils.

Excavations started in March 2010 and focused only on the most scientifically interesting indicators and the best preserved sites. At present, of the 320 indicators, 98 were excavated, divided into 40 contracts by the VNF. INRAP and Oxford Archaeology, the only companies holding authorisations for all chronological periods, bid for contracts. They were each attributed three lots (Pas-de-Calais, Somme, Oise). INRAP won 39 contracts corresponding to 95 excavation sectors (121.5 hectares excavated for a cost of 26 million euros). Oxford Archaeology won only one contract for a 3 hectare excavation, having not bid on all of the contracts. In 2010, Oxford Archaeology failed to renew its national authorisation and from June 2011 INRAP was nominated sole operator within a framework agreement.

## Reports and publication programme

The priority of the archaeological programme was to free up the excavation areas as quickly as possible subsequent to the demands of the contractor and in accord with the authorising bodies. Site reports were to be finalised within the timeframe of 24 months after the end of the excavation. From 2012, the teams were mainly focused

on data analysis (post-excavation), on report writing and on the first publications. At present, of the 39 excavation reports that are due, 37 have been completed and have been examined by the Interregional Commission for Archaeological Research.

The efforts made in communication and valorisation have been and remain constant, one of the principal objectives being to inform the local population and schoolchildren of how sites are excavated and of the results of these excavations. Different media has been used to reach out to all types of public and an interactive atlas details the archaeological programme: <http://multimedia.inrap.fr/atlas/canal-seine-nord-europe/archeo-canal-seine-nord-europe>

The publication programme (Talon & Prilaux pending), was conceived from the start with the project managers and specialists and in consultation with representatives from the Regional Archaeology Services and the Scientific and Technical Direction of INRAP.

Chronological and regional syntheses and overviews on different themes as well a methodological and operational overview are all in the pipeline. Many of the excavated sites are diachronic and have not provided results that justify a monographic approach. In order to communicate the results of the archaeological programme within a short a timeframe as possible, archaeologists from INRAP have presented their results during the Regional Archaeology meetings or during more specialised workshops and conferences. Short papers are easily presented. By the end of 2015, 70 notes and longer papers have been referenced, mainly using means provided by INRAP in support of publication and research projects. However, the broader monographic and themed overviews need more important investment in terms of time and publishing. The books are still being written and will be published over several years according to the investment that will be made in scientific publication in the future.

## Discussion

Comparing the LGV-SEA and the CSNE brings to light certain resemblances and differences between the two projects. The archaeological evaluations enabled the identification of about the same number of sites for each project (LGV-SEA: 326; CSNE: 320), however, the surface areas are very different from one project to the other with a much higher density of occupation on the CSNE (Fig. 4). This difference stems from the methods put into place for each project and from the great width of the CSNE construction site, opening up larger areas for a better visibility of archaeological features. The types of sites that were excavated can also be considered a factor as medieval sites were the main focus of the LGV-SEA project, whilst Late Prehistoric sites

were mainly excavated on the CSNE (Fig. 5; but see Kerouanton 2014 for Bronze Age studies on LGV-SEA).

The number of excavated sites is also very similar from one operation to the other: LGV-SEA: 86; CSNE: 95. Consequently, the number of excavations in relation to the number of site indicators is also similar (Fig. 4). However, the number of excavations in relation to the total surveyed area is very different in the two cases: one excavation per 35 hectares surveyed on the LGV-SEA and one excavation per 19 hectares surveyed on the CSNE (50% less). This assessment can be linked to the number of indicators per hectare.

The total surface area excavated is 82 hectares for the LGV-SEA and 121.5 hectares for the CSNE. This difference is important as the average area of excavation is 9.500m<sup>2</sup> for the LGV-SEA and 13.000m<sup>2</sup> for the CSNE. This is probably because in average Late Prehistoric sites are more extensive than medieval sites. However, the cost of an excavation on the CSNE is lower (LGV-SEA: 370.000€; CSNE: 270.000€; Fig. 4). Therefore, the surface area excavated is not the sole determining factor of cost and the type of site to be excavated also needs to be taken into account. Even so, several Palaeolithic sites with high excavation costs were excavated on the CSNE and the relationship between site type and cost needs perhaps to be put into a larger perspective. The cost per hectare is inferior on the CSNE: 214.000€ compared to 390.000 for the LGV-SEA. In conclusion, opening excavations up to tender does not seem to guarantee lower excavation costs.

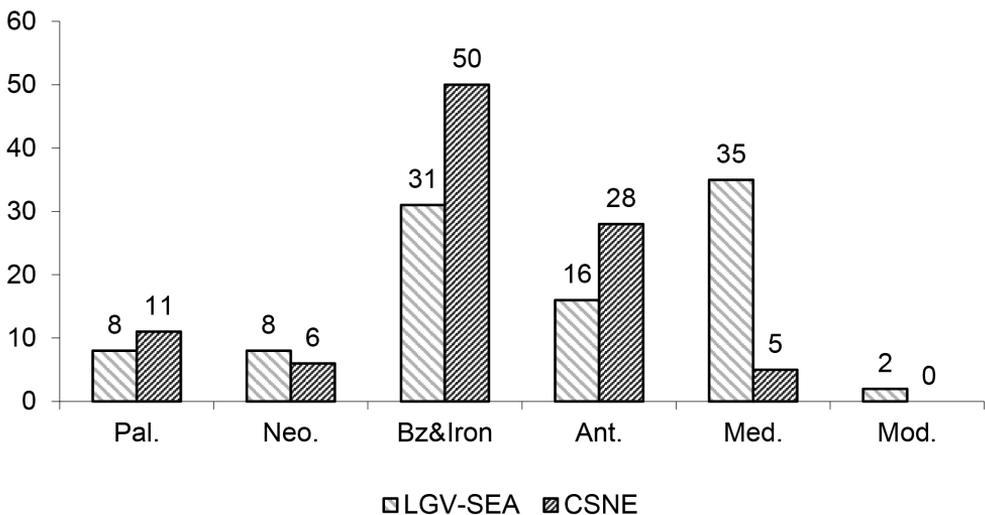


Fig. 4. Some comparisons between LGV-SEA and CSNE.

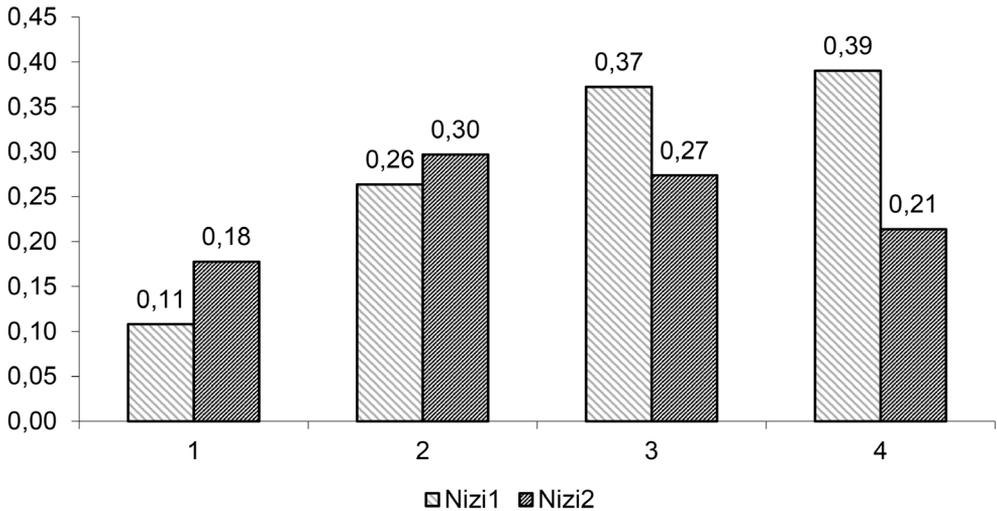


Fig. 5. Number of excavations according to archaeological periods.

It is important to tackle the question of the scientific exploitation of archaeological data. Due to the presence of several archaeological operators (in the case of LGV-SEA), it is difficult to engage collaborations with the objective of publishing the results (for financial and also for psychological reasons). Raising funds to publish research is a real problem in preventive archaeology (and certainly not only in preventive archaeology). It's also difficult for people from different companies or services to work together: it's true we're all archaeologists, but our employers don't necessarily have the same goals.

To conclude, it is perhaps important to focus on the future of archaeological data from fieldwork, as the mission of preventive archaeology is not only to protect cultural heritage but to also play a leading role on the scientific stage (third article of La Valetta Convention). This constitutes a major challenge for the future of preventive archaeology.

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## Comission for Archaeological Research and its Role in the Slovene System of Heritage protection

*Danijela Brišnik, Mihela Kajzer Cafnik, Predrag Novaković*

### **Abstract**

*The Commission for Archaeological Research (SKAR), though previously existed in different forms and structure, was re-established in 2009 as a counselling body of the Minister of Culture, who is according to the Cultural Heritage Act (2008) responsible for issuing the permits for any physical intervention into objects designated as cultural heritage. To SKAR (numbering 7 experts from conservation, museum and academic fields in archaeology), according to the Rules on Archaeological Research, all request for reasearces (preventive, academic or other) are obligatory addressed for reviewing: reasons for research, competency of research team, correpondency with conservation plans, conditions and recommendations, other legal and financial aspects. After careful review, SKAR issues recommendations to the Minister for signing the permits. Since its establishment in 2009, SKAR maintains a data base of more than 3000 reviewed research projects applications which is excellent source for following the actual trends, especially in preventive archaeology (more than 95% of proposals fall into this category) in Slovenia.*

**Keywords:** *Commission for archaeological research, Slovenia, archaeological heritage protection, Ministry of Culture, preventive archaeology*

### **Povzetek**

*Prenovljena in avtonomna Strokovna komisija za arheološke raziskave (SKAR) je bila imenovana leta 2009 po spremembi Zakona o varstvu kulturne dediščine (2008). Imenovana je kot svetovalno telo ministra za kulturo, ki je na osnovi Zakona o varstvu kulturne dediščine odgovoren za izdajo kulturnovarstvenega soglasja za raziskavo in odstranitev arheološke ostaline oziroma kulturne dediščine. SKAR sestavlja sedem arheologov s konservatorskega, muzejskega in akademske področja, deluje pa na osnovi Pravilnika o arheoloških raziskavah. Pristojna je za obravnavo vlog za vse vrste arheoloških raziskav (tako preventivnih kot akademskih in drugih), pri čemer se vsakokrat opredeljuje do številnih različnih postavk – razlogov za raziskavo, ustreznosti raziskovalne ekipe, usklajenosti projektov s kulturnovarstvenimi akti*

ter drugih zakonskih in finančnih vidikov raziskave. Po pregledu in uskladitvi vseh okoliščin poda ministru za kulturo (pozitivno ali negativno) mnenje glede izdaje konkretnega kulturnovarstvenega soglasja. Od ustanovitve leta 2009 do danes je SKAR na osnovi več kot 3000 vlog za izdajo soglasja k raziskavam ustvarila podatkovno bazo načrtovanih arheoloških raziskav, obremenjenosti posameznih območij s posegi v prostor in izvajalcev predhodnih arheoloških raziskav. Taka baza je odličen vir informacij za sledenje in spremljanje razvoja in trendov, še posebej za področje preventivne arheologije v Sloveniji (več kot 95% vlog sodi v to kategorijo).

In 2008 Slovenia introduced major reforms to cultural heritage protection that included changes to the legal status of the various components of cultural heritage, along with major organisational changes to the public service responsible for heritage protection. Archaeology had been the particular focus of these changes since the early 1990s, when large-scale rescue projects were launched in response to motorway construction.<sup>1</sup> It was at this time that the La Valletta Convention was ratified (1999) and implemented. The implementation itself required further changes to the archaeological heritage protection system, which in 2010 or so evolved into what can now be termed 'preventive archaeology'.

The principal legislative changes were made between 2008 and 2013, a period that saw the substantial transformation of the public archaeological service and of preventive work in general. A special role in this process of transformation was given to the Commission for Archaeological Research, which has since proved to be an essential body for archaeological practice (preventive and otherwise) in Slovenia. However, prior to reflecting on the Commission's work, a few words are needed in order to help us better understand the preventive archaeology system in Slovenia.

The most recent Cultural Heritage Protection Act (2008) recognizes three legal protection statuses: a) cultural heritage (*registered*), b) cultural monuments of local importance (*statutorily protected*) and c) cultural monuments of national importance (*statutorily protected*).

One of the most important achievements of the 2008 act was to insert heritage protection within the spatial planning process; this means, in general, that no spatial plans or subsequent development can occur or be adopted without proper consideration of the impact on cultural heritage.<sup>2</sup> If it is deemed necessary in a particular case, preventive archaeological research is conducted in order to properly evaluate heritage content and any area of land containing heritage, at all three major levels of spatial

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1 It is in motorway construction that the first new practices and methods of preventive archaeology were developed and implemented on a much larger scale. During the decade of 'motorway archaeology' (ca. 1994–2004), a proper organisational model of preventive procedure and research was developed that influenced the further development of the preventive archaeology system. For more on this model, see Djurić (2003).

2 For the situation and status of preventive archaeology in Slovenia prior to the 2008 act, see Djurić (2007).

planning: the National Spatial Plan (DPN), Municipal Spatial Plans (OPN) and Detailed Municipal Spatial Plans (OPPN).

This process includes a consideration of all existing documents on monument declarations and on registered archaeological sites and heritage, cultural heritage impact studies, and expert opinions and recommendations by the relevant bodies responsible for cultural heritage protection. It is here that preliminary or preventive archaeological research is normally planned and implemented in order to:

- Obtain the information required to evaluate heritage prior to development or to any other physical interventions on the land;
- Prescribe more detailed protection measures;
- Monitor the removal of heritage (e.g. excavations) prior to development.

Another important clause in the 2008 act defines all necessary post-excavation works and analyses on finds and records as an integral part of preventive research; this had not been the case in earlier acts and it has had a major impact on funding. In actual fact, the 2008 act considers all archaeological works to be research aimed at obtaining information about the meaning and significance of heritage, its conditions of preservation and any threats to which heritage may be exposed. Finally, all the costs of preventive research are covered by planners (i.e. the state, municipalities, others) and/or developers (investors).<sup>3</sup>

Another very important legal document was adopted in 2013: the Rules on Archaeological Research (*Pravilnik o arheoloških raziskavah*). These rules, which have the status of an executive document, were required by the 2008 act, but it took almost 5 years for them to be prepared and adopted in their present form. Similar rules did already exist, but were never as detailed as the current version. The annexes to the rules, including an annex on the standards of archaeological fieldwork and associated procedures (Annex 1), which did not exist in earlier versions, are particularly important.

Work on standards began back in 2006 when the Ministry of Culture commissioned a study on standards in field archaeology. The study (Novaković, Grosman, Masaryk, Novšak 2007) was completed in 2007 and served as a basis for discussion and preparation of the final version of the standards and the rules. The current rules are a fairly large document (the legal section contains 29 articles) with 6 annexes (1. Standards of archaeological research, 2. Record of conservation inspection and monitoring, 3. Requirements for the initial technical report, 4. Requirements for the final report, 5. Structure of the site archive, 6. Record of proposal for processing a

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<sup>3</sup> There are some situations where the 2008 act provides for the funding of preventive research from the state budget, but these cases are very specific (e.g. sampling in the case of the development of non-profit housing, private family houses, etc.) and they account for a small percentage of all preventive works. For this reason we will not present them here in any great detail.

site archive). These rules also define in more detail the tasks and responsibilities of the various entities involved in the process of obtaining permits for research, and the execution and monitoring of that process (quality control).

Any preventive (and academic) research can be conducted only after careful consideration of the 'cultural heritage protection conditions' (Kulturnovarstveni pogoji - KVP). These conditions are official documents issued by authorised conservators from the Institute for the Protection of Cultural Heritage, and they lay down the scientific, expert and technical measures for research. Meeting these conditions is necessary for obtaining a cultural protection permit.

The Registry of Immovable Heritage, established in its present form in 1995 at the Ministry of Culture, is the principal tool for maintaining accurate administrative records of heritage structures, areas and monuments (see the latest regulations on the *Register kulturne dediščine* 2009). By default, any structure or area included in this registry is protected as 'heritage', the lowest level of protection. The registry has been freely available online for many years, allowing anyone to check the status of a certain heritage area or structure, or whether a certain plot of land contains heritage structures.<sup>4</sup>

Slovenia established the Institute for the Protection of Cultural Heritage (ZVKDS) to protect immovable cultural heritage as a public service. The first such institute dates back to the second half of the 19<sup>th</sup> century; since then it has gone through a series of statutory and organisational changes, mainly due to the changes to state frameworks and territorial jurisdiction that occurred in the 20<sup>th</sup> century. Today, the ZVKDS has the status of expert organisation at the Ministry of Culture and is not directly subordinate to the minister. The ministry itself has a Directorate for Cultural Heritage, a purely administrative body responsible for dealing with legislative and administrative heritage protection issues, while all expert work is the autonomous domain of the ZVKDS. The principal tasks of the ZVKDS include:

- a) Identifying, evaluating and recording cultural heritage;
- b) Drawing up proposals for new structures and areas for the Registry of Immovable Heritage;
- c) Compiling conservation plans and restoration projects;
- d) Monitoring and/or implementing construction, research and protection work on heritage structures and areas;
- e) Monitoring all archaeological research;
- f) Advising owners/proprietors of cultural heritage structures, and conducting education and promotion work.

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4 In 2013 the register contained 29,446 registered heritage units and monuments (11.18% or 3,295 were archaeological sites, i.e. one registered archaeological site per 6.11 km<sup>2</sup> of land) (Pirkovič 2014, 82).

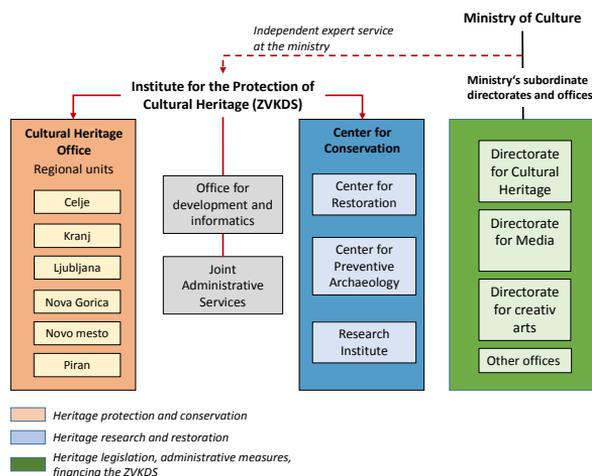


Fig. 1. Structure of the Institute for the Protection of Cultural Heritage (ZVKDS).

The ZVKDS has two major offices: a) the Office for Cultural Heritage, responsible for developing and implementing protection strategies, and for issuing protection recommendations and protection conditions (KVP); b) the Centre for Conservation, responsible for undertaking research and restoration work on heritage structures and areas. The centre itself consists of two units, the Centre for Preventive Archaeology (CPA) and the Centre for Restoration, both acting as expert services with no executive or administrative powers. The CPA's primary task is to carry out preventive research in cases where such research is funded by the state budget (see footnote 1) and preventive research (estimation of archaeological potential) within spatial planning procedures, most frequently in cases of large (mostly publicly funded) infrastructural projects, e.g. motorways, pipelines, power plants, etc.

The archaeological research procedure, from the permit application to submission of the final report, involves several steps; these are outlined below.

When obtaining a building permit, a public or private developer must consult the ZVKDS to ascertain whether the plot of land on which construction is to take place contains any heritage properties or monuments (Fig. 2, Step 1). If there are no registered heritage properties, the developers are free to continue; otherwise they have to apply to the ZVKDS for cultural heritage protection conditions, a document prescribing preventive archaeological research (surveys, test trenches, geophysics, etc.) to enable a precise evaluation of the archaeological potential (Step 2). The Commission for Archaeological Research checks the research application and recommends it to the minister, who issues the permit (Steps 3–5). Depending on the results of the first preventive phase, the ZVKDS decides on further steps; these may range from

allowing the developer to continue the works to requiring full archaeological excavation. If full excavation is required, for example, additional protection conditions (KVP) are issued by the ZVKDS, listing in more detail all the major parameters (area, depth, principal techniques, etc.). Again, the application is discussed by the Commission prior to the permit being granted.

During the excavation, the ZVKDS is obliged to undertake inspection visits to check whether the works comply with the protection conditions (KVP) and are being conducted in accordance with the standards. Once the excavation is complete, the research director nominated in the permit must submit the following to the ministry and the ZVKDS: a) brief information on the results (within 30 days), b) the initial technical report (within 60 days), and c) the final report (within 5 years). These reports are also given to the museum that stores the finds and documentation. The extent and type of post-excavation work on finds and the stratigraphic record (e.g. various analyses of finds, samples, plans) required for completion of the final report are decided by a special *ad hoc* committee comprising experts who did not take part in the research project. This committee issues a special document, the Record of the Proposal for Processing the Site Archive, which lists all the required types and quantities of analyses in the post-processing phase. Once the final report on stratigraphy, finds and samples is completed, it must be reviewed by two independent experts and made public.

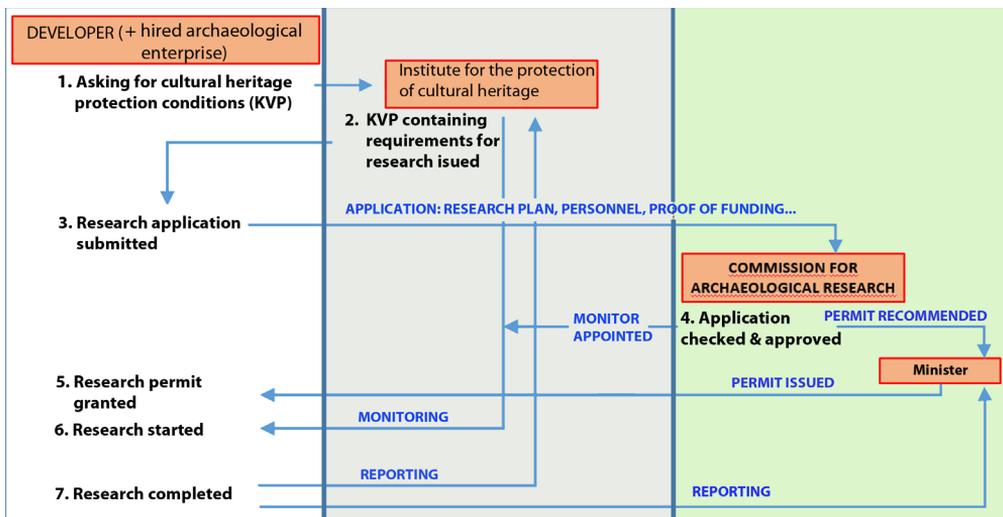


Fig. 2. Flow diagram describing the principal stakeholders and their tasks, and the steps taken in the process of obtaining a research permit and undertaking research.

## Commission for Archaeological Research

The Commission for Archaeological Research was established in 2009 by the Ministry of Culture pursuant to the Cultural Heritage Protection Act (2008) and the State Administration Act (2005). The Commission comprises 7 members (5 conservators from the ZVKDS, one from a public museum institution and one from an academic institution). All members are appointed by the minister for the period of 5 years.

The Commission has no executive powers; instead, it has the status of consultant to the minister who, under the Cultural Heritage Protection Act, has exclusive powers to permit any kind of research or physical interventions on structures designated as 'heritage' or as a 'monument' in the national registry. In practice, all applications for research (e.g. preventive, academic, educational, etc.) have to be sent to the Commission, which studies them in detail and consults the minister on whether to issue the research permit. The Commission is fully autonomous in its decisions and is bound only by the regulations defining its work.

The principal tasks of the Commission include:

- Issuing official recommendations to the minister to obtain (or reject) research permits after a detailed examination of the research application submitted by the developer (or archaeological enterprise on its behalf);
- Giving an opinion on the abilities of the project leader (and deputy) nominated in the research application;
- Proposing additional conditions for research (supplements to the existing CHPCs);
- Giving an opinion on the adequacy of works in the site archive (analyses of finds and samples, quality of documentation);
- Giving an opinion on the adequacy of the proposed storage location for the site archive after the completion of research;
- Giving an opinion on proposals for the *in situ* conservation of sites or parts thereof;
- Giving opinions on proposed changes to accepted standards of archaeological research.

In the past 6 years, the Commission has become a crucial element in quality control. Being fully independent of any political or financing bodies of the Ministry of Culture, the ZVKDS or any other public political or administrative body, and made up of highly experienced and trained members that meet around 35 times a year, it has become the leading authority on research planning and implementation, and has had a very positive influence on archaeological practice in Slovenia. In spite of the large volume of work (they process 500 or more research applications per year), the members of the Commission are not paid and their home institutions do not require any compensation for their absence.

## Data

No archaeological research in Slovenia has been permitted since 2010 without proper examination by the Commission; in that time more than 3,400 research applications have been processed. Since its establishment, the Commission has kept complete minutes of its meetings and a complete archive of materials supporting research applications; that archive has become an invaluable resource for understanding developments in preventive archaeology in Slovenia. Statistical analyses can be conducted using the Commission's data, detailed searches conducted for past projects, and project permits cross-referenced with reports, etc. The potential of this archive is still far from exhausted and will only increase in the future with the electronic submission of research applications.

We will only focus here on data that illustrates a few of the general trends in Slovenian archaeology in recent years, the types and amount of work involved, and the principal subjects included in preventive archaeology practice. Requirements for preventive research are emerging continuously throughout the country, and such pressure for timely preventive research can only be met by the Commission if it convenes frequently. Some 100,000 man/hours were spent on Commission work by the seven members between 2010 and 2015.

2010	38 sessions	621 applications
2011	31 sessions	596 applications
2012	34 sessions	574 applications
2013	35 sessions	498 applications
2014	35 sessions	588 applications
2015	33 sessions	523 applications
<b>2010–2015</b>	<b>206 sessions</b>	<b>3,400 applications</b>

*Fig. 3. Commission sessions 2010–2015 and the applications processed.*

The greatest development pressure (and hence the greatest demand for preventive research) is in central Slovenia in and around the capital, Ljubljana. Fig. 5 shows the amount of preventive research conducted per regional unit of the ZVKDS. It is important to note that each regional unit has one or two archaeologists/conservators charged with monitoring development proposals in their respective regions on a daily basis, and with preparing and issuing the cultural heritage protection conditions required by developers.

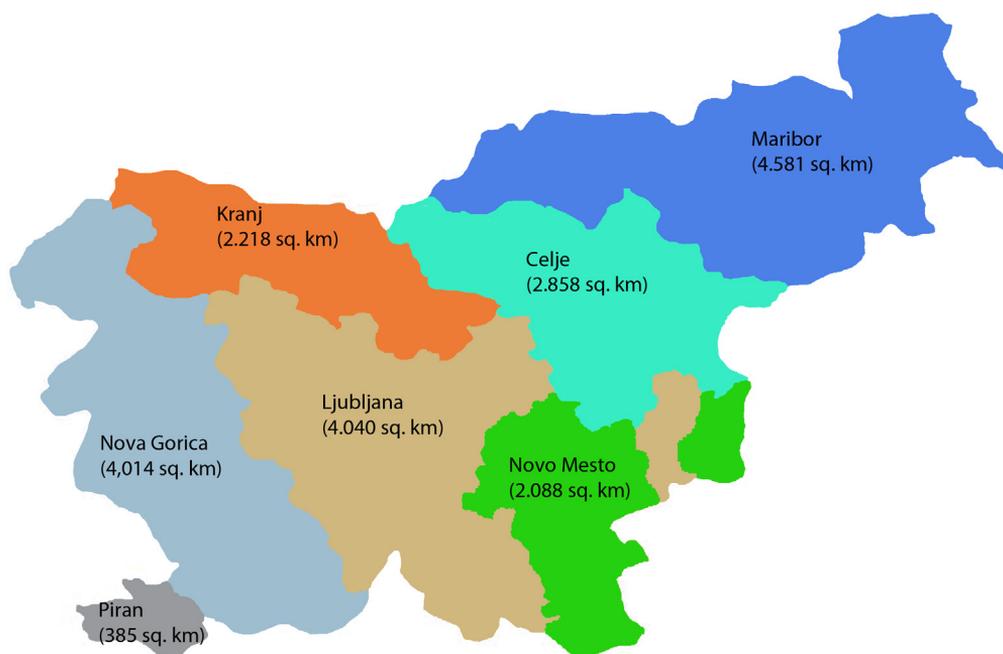


Fig. 4. Regional units of the ZVKDS and the size of their territories. On average, each regional unit has one to two archaeologists/conservators.

Regional unit	2012	2013	2014	2015
Celje	35	27	31	30
Kranj	28	23	23	26
<b>Ljubljana</b>	<b>231</b>	<b>198</b>	<b>188</b>	<b>191</b>
Maribor	46	38	49	43
Nova Gorica	32	39	43	29
Novo Mesto	78	69	81	79
Piran	30	36	36	38
<b>TOTAL</b>	<b>480</b>	<b>430</b>	<b>451</b>	<b>436</b>
<b>TOTAL 2012–2015</b>	<b>1,797</b>			

Fig. 5. Distribution of preventive research in regional units.

Most preventive archaeological research (nearly 62% in 2014 and 2015) is carried out in relation to three types of development: residential buildings, business buildings and areas, and municipal infrastructure.

<b>Development structure</b>	<b>2014–2015</b>
Research	25
Restoration of monuments	44
Squares, parks	17
<b>Business buildings/areas</b>	<b>143</b>
<b>Residential buildings</b>	<b>258</b>
Farm buildings	70
Simple buildings	106
<b>Municipal infrastructure</b>	<b>213</b>
Roads, railways, parking places	76
Farmland	17
Other	22

Fig. 6. Types of development project requiring preventive research (2014–2015).

Fig. 7 shows the ratio between the seven major types of method used and areas covered. Three types account for the bulk of the areas worked on: machine trenching, intensive surface surveys and research during construction work. The last-mentioned should not be confused with simple archaeological monitoring of construction work, since it does include archaeological fieldwork and checking of the deposits. It could be considered a means of archaeological testing during construction works, guided by archaeologists in the course of this research.

One can see the increasing ratio of machine trenching, which has recently proved to be the best method for sampling and is increasingly being prescribed by conservators in their protection conditions. There has been clear positive feedback from the comparisons of sampling and testing results in the last few years. We can also see that purely academic research accounts for a very small proportion. This is not directly connected with the increase in preventive research in the last decade, but with a decrease in funding of academic projects and the abolition of academic research by regional and local museums, which today are increasingly engaged in preventive practice.

Type of research	Spatial plans (ha)		Construction works (ha)		Academic research (ha)	
	2014	2015	2014	2015	2014	2015
Extensive surveys	8.6	37	3	2.1	1	5.7
<b>Intensive surveys</b>	40	4.3	4.1	8		0.3
Trenches	3.1	2.8	2.6	3.2		
<b>Machine trenches</b>	46.1	497.5	14.5	10		
<b>Research during construction</b>	3	9.5	33.1	19.4		
Excavations	2	16.6	3.6	1.2	0.1	2.8
Geophysics	1.5	2.4	3.4	10.6		

Fig. 7. Types of research and areas covered.

However, extensive surveys are still an important part of preventive research conducted in response to changes in national spatial plans brought about by large-scale development. The principle researcher here is the Centre for Preventive Archaeology (a unit of the ZVKDS), which primarily works on preventive projects associated with changes to various spatial plans.

2010	2011	2012	2013
600 ha	725 ha	718 ha	247 ha

Fig. 8. Areas of extensive surveys in response to changes to national spatial plans.

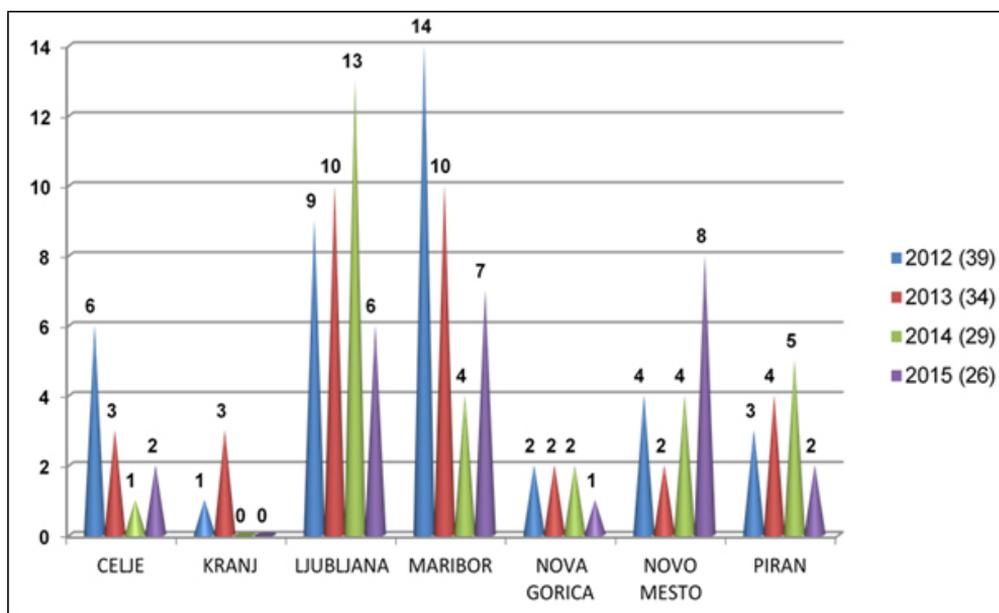


Fig. 9. Regional distribution of preventive research projects carried out in response to changes in spatial plans (national, municipal and detailed municipal plans).

Under the preventive archaeology system in Slovenia, one particular measure is conducted if an owner would like to construct a building without a complete building permit on a plot of land registered as containing cultural heritage. In such cases, 'substitute' research in the vicinity of the land is normally prescribed. If this research proves negative, the owners can continue the process of legalising their construction. Applications for 'substitute' archaeological research are also subject to the Commission's consideration.

Legalisation of construction	2012	2013	2014	2015
Celje	2	0	1	1
Kranj	1	3	2	3
Ljubljana	24	16	23	13
Maribor	0	1	1	1
Nova gorica	1	1	0	0
Novo mesto	12	20	19	12
Piran	1	1	1	1

Fig. 10: 'Substitute' research applications in individual regions.

The Commission is also charged with approving budget-funded preventive research projects (sampling and testing projects only, excavations excluded). According to the 2008 Cultural Heritage Protection Act and its subsequent amendments, the budget funding of sampling and testing projects is possible only in a few cases:

- when preparing spatial development plans that form the basis for the granting of permits for development, where no prior preventive research has been carried out
- when constructing an individual house or extension thereto for own use (residential), or when developing land for non-profit or 'social' housing
- when maintaining or renewing residential buildings for own use, or when housing is declared a public asset, in areas designated as areas of settlement heritage
- when developing or renewing public areas and areas of agricultural and architectural heritage

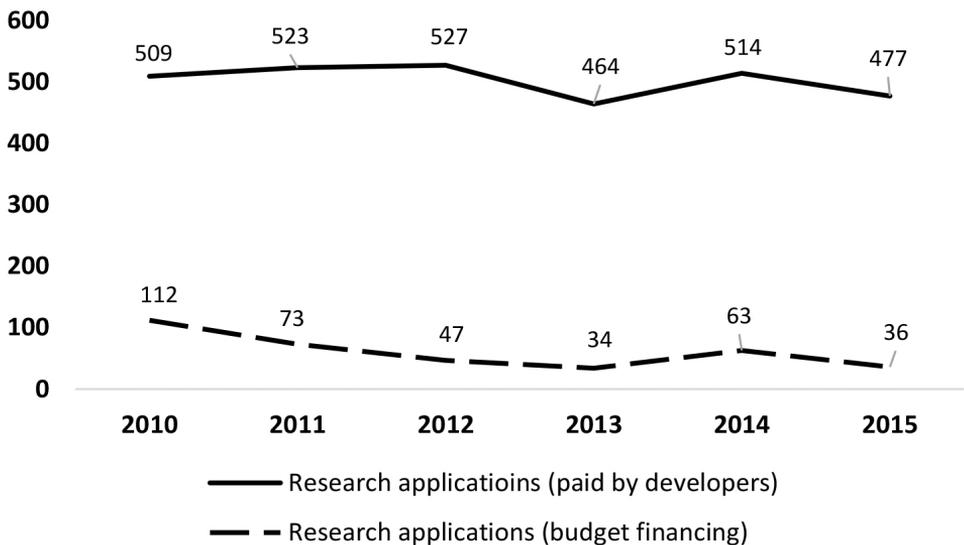
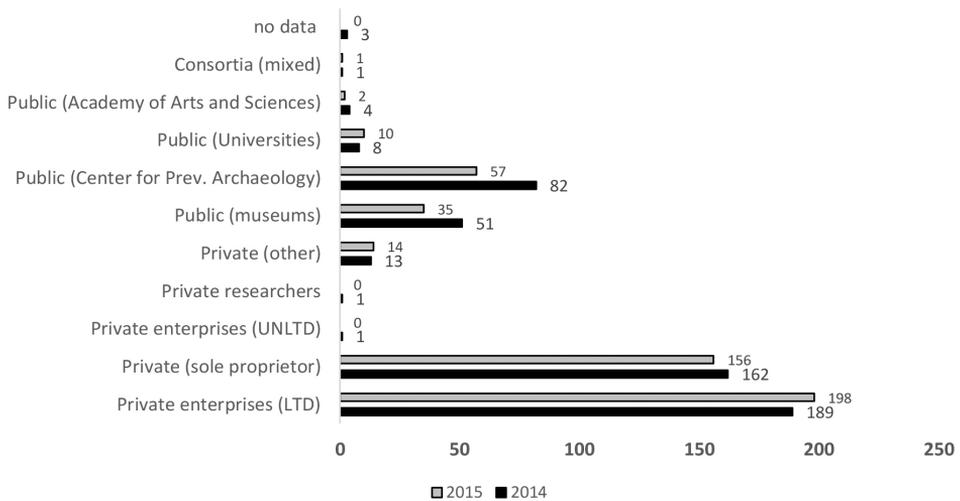


Fig. 11. Developer- and state/public-funded projects (2010–2015).

Slovenian legislation and other executive acts on preventive archaeology do not list the types or legal statuses of organisations permitted to carry out archaeological research. The Rules on Archaeological Research require project leaders and expert teams to supply proof of qualifications and references, and enterprises to supply proof of certain capacities (e.g. proper storage locations, etc.) and of good standing in terms of reports submitted on time, etc. Foreign archaeologists and teams are also permitted to conduct preventive research but they have to submit the reports (and all other official documents and records) in Slovene language. Selection of the research organisation (enterprise) depends first on the legal status of the developer or investor. Public investors (e.g. municipalities, the state, public enterprises) have to comply with the Public Procurement Act, which precisely defines the selection procedures and criteria, while a private investor has a more or less free hand in choosing which enterprise will be given the job. This system allows a market in archaeological services to develop in which public and private organisations compete.

	2012	2013	2014	2015
Private enterprises (limited companies)	10	8	9	9
Private (sole traders)	8	11	9	8
Private enterprises (non-limited companies)	1	1	1	0
Private researchers	0	0	1	0
Private (other)	2	4	1	1
Public (museums)	8	9	8	7
Public (Centre for Preventive Archaeology)	1	1	1	1
Public (universities)	2	2	2	2
Public (Academy of Arts and Sciences)	0	1	1	1
Consortia (mixed)	0	1	0	0
No data	0	0	3	0
<b>Total number of research organisations</b>	<b>32</b>	<b>38</b>	<b>36</b>	<b>29</b>

*Fig. 12. Number of research organisations active in preventive archaeology.*



*Fig. 13. Number of research projects by legal status of the research organisation.*

Figs. 12 and 13 show that, in terms of the number of projects, private organisations play a dominant role (around 75% of all projects in 2014–2015) in the preventive archaeology market, although the share taken by these organisations in terms of the overall budget spent on preventive research is probably lower: the rough estimate is 60–65%.<sup>5</sup> For more information on this aspect of preventive archaeology, see M. Novšak's text in this volume.

## Conclusion

The way the Commission was established, its status defined and its tasks delegated was largely dependent on the administrative system and administrative tradition in Slovenia. For this reason, an organisation of this sort cannot easily be 'transplanted' to other countries. However, experience demonstrates that a properly autonomous body of experts within the archaeological heritage protection system and within (academic) research can play an important role in the overall system of quality management, especially in systems where most of the preventive work is subject to market competition.

There is one further very important aspect that should be noted: in a small national framework such as the one in which archaeology operates in Slovenia, it is often very difficult to establish properly professional relationships between practitioners

<sup>5</sup> More precise financial estimates are not possible from the data available to SKAR.

in the field. Around 15 public institutions and between 20 and 25 private enterprises employing 250 to 300 archaeological professionals of various levels and profiles can hardly be considered a system in which one could expect purely professional relationships. The number of people active in the field of archaeology is simply too small, they all studied under the same professors and have worked together on many occasions; to conceive of a level of professionalism seen in larger countries is impossible. Nevertheless, the Commission has succeeded in imposing, through its practice and integrity, a much higher level of professionalism in Slovenian archaeology than ever before. However, it should be considered more as a case of good practice, as a great deal of its authority and integrity stems from the overarching system of preventive archaeology, which enforces a fairly coherent division of tasks and responsibilities between stakeholders. Once such a formal system is established, it inevitably increases the level of professionalism, even within very small national frameworks. This is not to say that everything works flawlessly. Indeed, there are many important issues we have not considered here: a lack of efficient control over prices for archaeological work (i.e. predatory pricing), considerable deficiencies in the inspection and monitoring of archaeological works, a lack of highly trained and experienced archaeologists/conservators, who are crucial for prescribing the types and other important parameters of preventive research, the rather low quality of research reports, and so on. However, the basis for future improvements in these areas appears to be very sound.

The system of preventive archaeology as fully established in the last 10 to 15 years has had very positive effects at many levels. Twenty-five years ago, the number of archaeological research and rescue projects was ten times smaller than it is today, and archaeology was considered more of a 'boutique' discipline than an important service for the understanding, protection and promotion of heritage; still less was it seen as having a role to play in sustainable development and improving quality of life. The situation is very much better today, with archaeology, through preventive practice, becoming an everyday element of the professional lives of many people, from spatial planning administrators and mayors of small municipalities, to the thousands of developers and individuals engaged in construction. However, it remains the case that when comparing the costs and benefits of preventive archaeology on the one hand and investments and potential income on the other, archaeology is seen by many as an obstacle, an unnecessary cost and something that slows down development. While it would be unwise to ignore the existence of such widely shared public views, the same could be said of revenues and taxes: no one likes them, but we all know why there are needed. There are many ways of challenging such opinions. One way is surely to take preventive archaeology very seriously and to demonstrate that behind it all lies a carefully considered and well-organised system of decision-making, control and presentation regarding all major aspects of archaeological research – and one that clearly adds value to public life.

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## Working in Preventive Archaeology in Slovenia: A View from the Trenches

Matjaž Novšak

### *Abstract*

*Slovenia kept probably the best organized and efficient heritage protection service in former Yugoslavia with a well developed regional network of heritage protection institutes. Transformation of old 'Yugoslav' system started early in the 1990s. Here, two major trends could be seen: a) positioning archaeology in obligatory procedures in spatial planning, and b) emergence of liberalized market of archaeological services. For the period 1994–2008 one could speak of a hybrid system of organization of archaeological preventive works with regional heritage protection institutes officially directing large scale excavations, but hiring private SME for the actual job in the field. The existing public institutions simply could not meet the requirements for fast and efficient archaeological preventive research. In 2008, the situation changed again with new Cultural Heritage Protection Act (which introduced the term preventive research) which limited the tasks of the Institute for the Protection of Cultural Heritage in preventive archaeology to issuing conditions for preventive research, and its monitoring, while the actual research was undertaken by private enterprises or public institutions which compete in the market. Such liberalization, on one hand, made the system more flexible and productive, and opened more jobs in archaeology, but, on the other hand, it demonstrated also several disadvantages, especially in the context of the recent economic crisis, which in Slovenia, indeed, affected the most the investments in spatial development, and consequently, also all 'players' in preventive archaeology.*

**Keywords:** *Slovenia, rescue archaeology, preventive archaeology, private enterprises*

### **Povzetek**

*Slovenija je verjetno imela najboljše organiziran in učinkovit sistem varstva kulturne dediščine v nekdanji Jugoslaviji z dobro razvito mrežo regionalnih zavodov za varstvo kulturne dediščine. Spreminjanje "jugoslovanskega" sistema se je pričelo v zgodnjih devetdesetih letih. V tem procesu sta bila vidna dva glavna trenda: obvezno vključevanje preventive arheologije v sistem prostorskega planiranja in postopen razvoj prostega trga arheoloških storitev. Za obdobje med 1994–2008 lahko rečemo, da je bil zanj značilen*

*“hibridni” sistem, kjer so regionalni zavodi poslovno vodili velike izkopavalne projekte, pri tem pa kot podizvajalce najemali zasebna arheološka podjetja, ki so opravljala večino terenskih del, saj zavodi enostavno niso imeli dovolj kapacitet (osebja, opreme...), da bi lahko hitro in učinkovito opravljali preventivne raziskave. Razmere so se spremenile z novim Zakonom o varstvu kulturne dediščine iz leta 2008 (v tem zakonu se prvič pojavi termin preventivna arheologija), ki je naloge zavodov na področju preventivne arheologije med drugim omejil predvsem na izdajanje kulturno-varstvenih pogojev in strokovni nadzor arheoloških raziskav, same terenske raziskave pa so postale storitev, za katero so na trgu prosto konkurirala zasebna podjetja in druge javne arheološke ustanove. To je sicer pripeljalo do bolj fleksibilnega sistema in tudi povečanja dela v arheologiji in povečane produktivnosti, po drugi strani, pa so se sčasoma pokazale tudi pomembne pomanjkljivosti. Te so bile še posebej izrazite v času ekonomske krize, ki je v Sloveniji najbolj prizadela prav gradbene investicije in s tem tudi vse arheologe, ki so delovali na področju preventivne arheologije.*

The aim of this paper is to briefly present the current stance of preventive archaeology in Slovenia as seen from the field, through the eyes and experiences of an archaeological entrepreneur. Being fully active in preventive archaeology over the past 20 years, that is, during the establishment and development of an actual system for preventive archaeology in Slovenia, places me in a privileged position of being a rather well informed ‘participant-observer’. To begin, some basic information will be relayed which can greatly contribute to a better contextualization of my personal reflections on preventive archaeology in Slovenia.

Slovenia extends over 20.000 km<sup>2</sup>, and has a population of 2 million people, the average density being 100 inhabitants per 1 km<sup>2</sup>. At present, there are approximately 200 professionally employed archaeologists in the country, and some 120 are actively working in the field of preventive archaeology (ca. 50% in public institutions and 50% in private enterprises). The data may vary due to the rather rapid fluctuations and shifts in the market of archaeological services in preventive works, but the ratio stays more or less very similar. At present, there are 22 private enterprises of different legal statuses (LLCs and Sole Proprietors mostly) and 13 public institutions (museums, universities, and the Institute for the Protection of Cultural Heritage) actively engaged in preventive archaeology, and which compete in the market.

It should also be noted that the most important public institution in preventive archaeology is the Institute for the Protection of Cultural Heritage, which employs 13 archaeologists-conservators at 7 regional branches (Celje, Kranj, Ljubljana, Maribor, Nova Gorica, Novo Mesto, Piran), who are responsible for issuing ‘cultural protection conditions’; these are documents prescribing archaeological preventive research apropos of each individual case of development threatening the heritage. These ‘conditions’ list the most important research parameters: exact area, methods, techniques and types of sampling or testing to be implemented, and some other legal aspects relevant for the developer. In short, these conditions must be fully

adhered to by all archaeological researchers, preventive and academic. The Institute also employs archaeologists in its Center for Preventive Archaeology, but only some 20 – 30% of the jobs are funded from the state budget, and the rest needs to compete in the market.<sup>1</sup>

From the economic perspective, the greatest deal of preventive archaeology is linked to the development and construction sector, which represents some 10% of the GDP (ca. 4.2 billion €). Though the size of the market in preventive archaeology varies (especially during the recent economic crisis in which it was the construction sector that suffered the most), it is safe to say that at least some 7 million € are spent annually on projects in preventive archaeology (0.17 % of the gross economic traffic of the construction sector). In simple mathematics, this would calculate to five research projects worth a total of 70.000 € per 1 archaeologist within a 20 km<sup>2</sup> area per year. In the recent years, approximately 500 permits for preventive research were issued annually. Mathematically, each archaeologist-conservator would monitor 8 archaeologists in the field or 3 private and 2 public organizations. Annually, the incomes of private and public sectors would be more or less equal, some 3.5 million € per year.

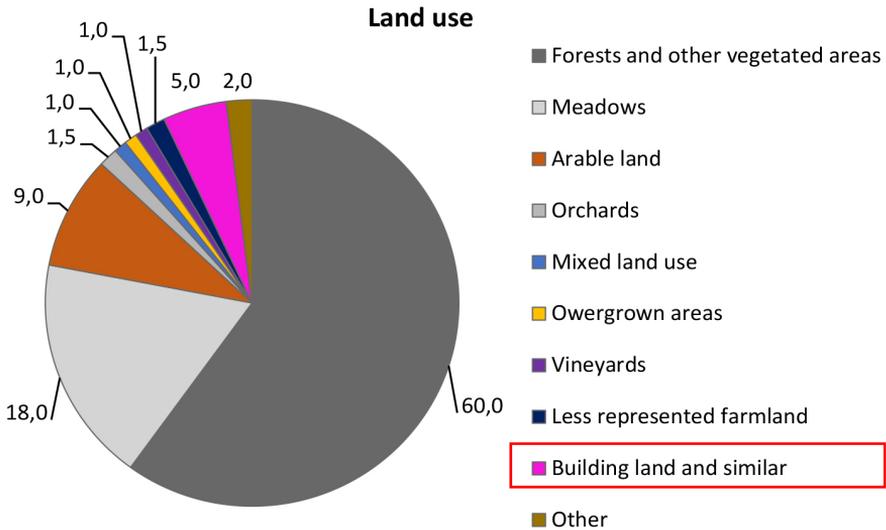
The figures presented above would seem perfectly reasonable were they more evenly distributed. They would suffice for the relatively healthy economic situation. Coupled with other incomes, budgets of public institutions, incomes from national and EU research projects, conservation projects, museum projects and similar, the situation in professional archaeology (preventive and academic) might even be considered relatively sound. But, as usual, the real situation falters in its shortcomings. Both public and private organizations suffered acutely since the emergence of the recent economic crisis in 2008. Private organizations experienced a radical decrease in investments in development and construction, while public institutions had to face equally fierce budget cuts forcing them to compensate with a more active engagement in the already shrinking market of preventive archaeology.

Slovenia, in the period between 1991 and until the adoption of the Cultural Heritage Protection Act in 2008, could be considered an emerging market in development-led archaeology. Since no law or executive document prohibited the involvement of private enterprises in archaeological research, or anticipate their existence for that matter, the first ones began to emerge in Slovenia already in the late 1990s.<sup>2</sup>

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1 The reasoning behind the 'amphibian' nature of the Center for Preventive Archaeology lies in the law (Culture Heritage Protection Act from 2008), which defines certain works in preventive archaeology as the responsibility of the state and hence covered by state budget. For more details on the division between state and non-state funded preventive archaeology refer to the paper of Brišnik, Kajzer Cafnik and Novakovič (*this volume*).

2 Even prior to this period, during the Socialist political and economic system in Slovenia (and Yugoslavia), it was possible to engage as an individual, normally via a public institution that directed the research project. Numerous technicians,



*Fig. 1 Land use in Slovenia. Basically, all preventive archaeology is carried out on 5% of the land (Building land and similar; ca. 5.000 square km).*

Major systemic changes then transpired during the course of the next decade. Four major, far-reaching factors influenced the transition from traditional rescue archaeology to modern preventive archaeology:

- The ratification of the La Valletta Convention in 1999 and the subsequent introduction of archaeological impact studies as obligatory in spatial planning procedures.
- The rapid growth of the archaeological profession and private enterprises due to the intensive construction of highways (1995-2008).
- The centralization of the Institute for the Protection of Cultural Heritage; semi-autonomous regional offices were joined together, which considerably strengthened the authority of the Institute and enabled more 'standardized' practices in heritage protection.
- The adoption of the Cultural Heritage Protection Act in 2008.

draughtsman, and similar profiles were engaged in this way. However, prior to the 1990s and the abolishment of the Socialist system, no private archaeological enterprises were able to engage (which explains why they did not exist yet), while in other sectors of conservation private enterprises participated in a number of different endeavors. There are many cases of smaller building enterprises, which worked on reconstructions of monuments, architectural studios making plans for restoration works, etc. Actually, there was no real legal base why archaeology was exempted from this practice, at least as sub-contractors. The main reason actually lay in the popular perception of archaeology and its social role. In many respects, archaeologists considered their role as a sort of 'mission', a highly ethical endeavor towards preserving the heritage and uncovering knowledge of the past (see in Pintarič & Novaković 2008: 101-103). Any professionalization, particularly working in archaeology for a profit, was simply not considered appropriate.

The major modification in terms of institutional powers, compared to the period prior to the year 2000, regards the much stronger role played by the Institute for the Cultural Heritage Protection. At present, the Institute employs 13 archaeologists-conservators who are in charge of issuing 'cultural protection conditions' and monitoring all the research in preventive archaeology. In addition to this, the Institute has another archaeological unit (Center for Preventive Archaeology), which has no executive powers but is responsible for research associated with larger evaluation projects in the spatial planning procedures (regarding organization and tasks of the Institute, see more in Brišnik, Kajzer Cafnik and Novaković, *this volume*).

The impact of the 2008 Act was also significant. Together with the Rules on Archaeological Research (adopted in 2013), it not only clearly specifies the public service, but also all the components and phases transpiring in the archaeological research process, standards of archaeological research methods and recording, the deadlines for reports and post-excavation processing, responsibilities of all involved parties, as well as rules for handing over the site archives. In this sense, the 2008 Act can be considered a cornerstone of modern preventive archaeology in Slovenia, it has also placed preventive archaeology on the free market and allowed private enterprises to be directly contracted by developers. Prior to 2008, the existing law listed the Institute as the sole researcher in development-led archaeology and private enterprises were only able to work as sub-contractors of the Institute.

However, while the 2008 Act had the best of intentions and was able to assist in resolving some very acute issues (e.g. unpublished site archives), it was adopted at the most inopportune moment: at the beginning of the global economic crisis. Slovenia was strongly affected, and soon enough, very demagogic claims appeared in public that our country could not afford luxuries such as archaeology at a pre-crisis scale. The archaeological profession faced several major problems, among them also the need for better promotion and the enhancement of public awareness concerning the value of cultural heritage. As it would be, time and money were too short, fewer and fewer large-scale projects were available, and predatory pricing emerged. The invisible hand of the free market showed its claws.

Those enterprises formed between the years of 1998 and 2008, and which comprised of a strong team of experts with know-how and quality equipment, were somehow able to withstand through to 2012. However, over the course of the last 7 years, one-half of all employees had to be laid off.<sup>3</sup> The numbers of unemployed archaeologists increased also due to the influx of new graduates. The competition on the market became very harsh and prices in preventive works rapidly decreased. And once prices go down, it takes that

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3 For the situation in professional archaeology in Slovenia see the national reports in the DISCO Project publications (Pintarič & Novaković 2008; Kompare, Lazar & Kocuvan Pintarič 2014).

much more effort to just maybe bring them back to a sustainable level. At the same time, some unfinished or bankrupt construction projects left a wake of debts also among such archaeological enterprises, and some very important site archives were left unprocessed.

Most of what took about 15 years to create simply crumbled overnight. As our old rock-and-roll singers seem to already know, the fact that there is '*a highway to hell*' and just '*a stairway to heaven*' says a lot about anticipated traffic patterns. It was precisely the highway (the motorways), just a decade ago, which enabled our fast – maybe too fast – progress.

And, then again, it can't be that bad. I believe we have actually reached the bottom in predatory pricing, and the market is slowly recovering due to some increase in investments in development. In the meantime, there are also other positive effects resulting from the Regulations on Archaeological Research from 2013. For instance, reports are equipped with accurate geo-referenced data, and site archives are processed and handed over to museums (this was, at least, a wake-up call to those in museum jobs). Various scientific analyses are increasingly affordable on the market. Prospective students have come to recognize that field archaeology is not necessarily the only way to make a living and they have begun to apply for various postdoc or specialization studies, such as in geochemistry, osteology, 3D processing, etc. And what they have learned is now available to us. The teams in the field now have higher profiles. In the past, fieldwork required hiring a lot of manual workers; today most of the work is actually carried out by archaeologists. Private enterprises also started to look for alternative sources. Instead of depending exclusively on the diminishing market with prices going down, enterprises, mostly those established prior to 2008, are now also competing in various national and European calls for bids.

Important relief also came from the two-year negotiations between the Institute for the Protection of Cultural Heritage and State Motorways Authority (DARS), which agreed to finance post-excavation efforts also for excavations completed before 2008.<sup>4</sup> This considerably helped the private enterprises to stay afloat in business; however, more importantly, it saved numerous site archives from being left unprocessed or poorly processed. Recently, we have also learned another important lesson regarding the advantages of integration. Several times now while working on large-scale projects we have come to recognize how unnecessary it is that everyone plays their own box-of-tricks in solo mode; rather, by forming a consortia of private and/or public organizations, we, in fact, stand to benefit an increase in the efficiency of our work while still earning a decent income. I would also like to add that, in the meantime, a user-friendly registry of the cultural heritage has been established. Now every developer can attain immediate insight into the limitations and conditions that must adhere to prior to executing any intervention or construction.

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4 The new Cultural Heritage Protection Act required developers to finance also the post-excavation works, which was not the case before. The agreement with DARS brought some 3-4 million € of work.

At the same time, the CPA (Center for Preventive Archaeology at the Institute for the Protection of Cultural Heritage) created an extremely useful and transparent GIS database of archaeological data reports, so now everyone has access to the archaeological data regarding any micro-location prior to the onset of their own preventive research.

Of course, some large issues remain unresolved, and they emerge during crises. One would definitely be a large number of reports that are of very questionable quality. While the mandatory structure and content of reports were indeed defined in the Rules on Archaeological Research (2013), time pressure, chasing one job after another, and the general lack of funds brought about the reality of these reports becoming simply a mass of data included simply in order to meet the obligations. This was made at the cost of the human factor, the knowledge that had the capacity to bring added value and depth through interpretation. And, yes, there is always the issue of how the free market affects how the people relate to each other, particularly in a small country with a very small market such as ours.

All in all, my conclusion would lean towards viewing the blow of 2008/09 as a sort of wake-up call. Who knows what kind of decadence might otherwise have enticed us? This way, what we ended up doing was reaching in for and finding our internal reserves. One could even say that we are now re-activated. The next time we need to find some other reserves, some of them may be temporarily beyond our reach and require large systemic changes. In the future, we will probably have to turn our attention to the agricultural land. In Slovenia, 9% of the land is intensively cultivated as arable land. At the moment, this land is not allowed to be developed (therefore it is not subject to preventive archaeology), and yet the archaeological remains do continue to get destroyed by deep plowing and spraying with pesticides. It is a challenge for our next crisis. Or, perhaps hopefully even sooner.

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## Archaeological Heritage in Lithuania after the 1990s: Defining, Protecting, Interpreting

*Justina Poškiienė*

### **Abstract**

*The paper seeks to present developments in the state system of archaeological heritage protection in Lithuania after the 1990s. National legislation was essentially modified twice: in 1994 and in 2004. Aspects of defining (inventarisation, assessment and listing in the national Register of Cultural Properties), protecting (requirements for archaeological heritage protection, regulations on archaeological excavations' procedures) and the interpreting of archaeological heritage (preservation of archaeological remains in situ) are under consideration.*

**Keywords:** *archaeological heritage, assessment, archaeological excavations, in situ.*

### **Santrauka**

*Straipsnyje pristatomas Lietuvos archeologinis paveldas bei apžvelgiama valstybinė archeologinio paveldo apsaugos sistema po 1990 metų. Teisinis paveldo apsaugos reglamentavimas iš esmės keitėsi 1994 ir 2004 metais. Straipsnyje aptariami šie archeologinio paveldo apsaugos aspektai: apskaita (archeologinio paveldo vertinimas, įrašymas į Kultūros vertybių registrą, archeologinių objektų paveldosauginis statusas), apsauga (reikalavimai archeologiniams tyrimams, ardomųjų archeologinių tyrimų apimtys, archeologinių tyrimų kontrolės sistema) ir archeologinio paveldo interpretacija (archeologinio paveldo apsauga in situ).*

## Introduction

Archaeological heritage management is defined as a cyclical process, based on documentation and inventarisation, followed by the stages of assessing significance, selection, protection (conservation or excavation) and finally interpretation with necessary feedback provided (see in Deeben, et al. 1999: 177-199; Willems 2000: 159-160; Willems 2010: 212-229; Carman 2015). Major tasks within this process fall into the area of governmental responsibility and are regulated by legal instruments (presented by Carman 2015: 3). The Lithuanian National Independence Movement brought attention to the issues of the protection of national cultural heritage<sup>1</sup> and a new law began to be drafted in 1991. The Law on the Protection of Immovable Cultural Properties was adopted in 1994<sup>2</sup> and the current Department of Cultural Heritage under the Ministry of Culture was established. It became the main institution in charge of cultural heritage protection.<sup>3</sup> The Law of 1994 basically defined the state administrative structure for the control over archaeological interventions. The last decade has been determined by the new version of this law, adopted in 2004<sup>4</sup>, the Law on Protection of Immovable Cultural Heritage (Lietuvos Respublikos nekilnojamojų kultūros vertybių apsaugos įstatymo pakeitimo įstatymas, 2004). In contemporary legislation, the “heritage management” concept is not elaborated and is defined as the “administration” and “protection” of cultural property. Nevertheless, significant developments can be identified in regard to archaeological heritage management. Changes in the following fields will be presented: 1) archaeological heritage inventarisation, assessment, and listing; 2) requirements for archaeological heritage protection and regulations on archaeological excavations’ procedures; 3) requirements for the preservation of archaeological remains *in situ*, which are closely related to archaeological heritage interpretation.

## Inventarisation, assessment and listing of archaeological heritage

It is legally defined that “according to the nature of the valuable properties determining significance or combination thereof, immovable cultural heritage may be: archaeological – locations of past economic or defensive activities, residential, burial or cult sites, complexes thereof or the sites the only or one of the main sources of scientific

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1 In 1990 the Interim Law on the Inspection of Heritage Protection was adopted and the Inspectorate for the Protection of Cultural Heritage under the Parliament (Seimas) of the Republic of Lithuania was founded. The Monument Protection Department was created within the realms of the Government.

2 The Law of 1994 came into force in 1995.

3 In 2005 overall responsibility was passed to the Minister of Culture.

4 The Law of 2004 came into force in 2005.

data whereon is archaeological research and findings". According to the structure, archaeological heritage may be: 1) an individual object; 2) a complex object – a group of objects which is significant in its totality; 3) a site. In the national Register of Cultural Properties archaeological objects are listed as individual or complex ones in most cases. "A site" means a territory of historical character, where natural environment and cultural heritage properties are to be protected while establishing a cultural reserve, cultural preserve, historical national or regional park. There are 3 archaeological sites listed in the Register so far.<sup>5</sup>

Circa 2850 objects of archaeological heritage are listed in the Register of Cultural Properties<sup>6</sup>: 856 hillforts, 426 ancient settlements, 10 places of ancient villages, 642 burial mounds and their places, 648 burial grounds and ancient cemeteries, 36 places of castles, 74 places of estates, 39 places of ancient towns, 15 fortifications, ca. 53 mythological places and over 50 other types of archaeological objects (e.g. places of ancient agriculture, industry, ancient roads, places of churches and monasteries, etc.). After the 1990s, the procedure of listing has been changed several times. Since 2004, the concept of "valuable property"<sup>7</sup> was legitimated. In conjunction with the Department of Cultural Heritage and municipalities, Immovable Cultural Heritage Assessment Councils were established for the assessment and listing of cultural heritage properties. As a rule, these Councils are composed of experts from different heritage fields. A heritage object is listed in the Register after the Assessment Council has decided that it needs legal protection. No listed objects can be taken off the Register of Cultural Properties and if an object loses its valuable properties, legal protection will not be applied.<sup>8</sup> The Assessment Councils assess valuable properties, as well as decide on significance and define the boundaries of protected territories and buffer zones of cultural heritage objects and sites.

Thus, the system of archaeological heritage protection formally turned towards a democratization process. It also "stepped" into the "archaeological value debate", as well as faced the problem of selection (discussions presented in Darvill 1995: 41-50; Carman 2002: 148-176; Carver 2007: 45-56; and other numerous studies). However, neither the professional community of archaeologists nor heritage managers have

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5 Kernavė archaeological site (Širvintos municipality), the site of Vaisgėliškis (Nuotekos) burial mounds (Ukmergė municipality) and the site of Bražuolė hillfort and burial mounds (Trakai municipality).

6 Approximate numbers of objects are given without calculating their complex parts.

7 According to the Law of 2004, "valuable property" means "a feature of an object or site of cultural heritage, part or element thereof, which is of value from the ethnical, historical, esthetical or scientific point of view".

8 In this regard the example of the place of the former Stabatiskės Estate (Ignalina municipality) can be given. As an archaeological object it was listed in 2007, and in 2012 its legal protection was annulled. The object was completely excavated because of radioactive nuclear waste storage, which was to be constructed in that territory (see in Fediajevas, et al. 2000: 225-240).

conceptually debated the issue yet. Typical “valuable properties” attributed to archaeological heritage are cultural layers and relief indicating that the assessment is based on scientific potential. The main criteria to indicate such potential is the chronology – the legitimated chronological limit for archaeological heritage is 1800.<sup>9</sup> As a result, all objects which are chronologically earlier are assessed as archaeological or indicated as possessing archaeologically valuable properties.<sup>10</sup> The Assessment Councils also rank archaeological objects according to their significance – national, regional or local. Up until now, the majority of archaeological heritage objects have been declared to be of regional significance (more than 60%), almost 40% – of national significance, with a small percentage being considered to be of local significance. Objects of national significance can also be declared as “cultural monuments” (the concept was “inherited” from the Soviet period system), i.e. they obtain the highest “heritage” status by decree of the Minister of Culture. Ca. 30% of archaeological properties have been declared as “monuments”.

In addition, several ranking systems seek to differentiate administrative load and prioritize the state’s financial support for their maintenance.<sup>11</sup> Since 2005 the heritage protection procedure has been divided into two stages: initial protection (i.e. listing in the Register of Cultural Properties) and declaration of a protected object.<sup>12</sup> Properties of national and regional significance can be declared as “state protected” and thus potentially demand resources from the state’s budget for their maintenance. Circa 70% of archaeological objects have been declared “state protected”, which is a comparatively high share in comparison with other heritage types. Objects of local significance can be declared “municipality protected”, so far no municipality has taken on such responsibility. Moreover, in order to focus the state’s budget resources, an additional special list of “elite” historical, archaeological and cultural heritage monuments of “state significance” has been created.

9 Since the 1990s the chronological limit has been altered several times – in 1992 it was the 18<sup>th</sup> century, in 2005 – 1721, in 2013 – 1800.

10 Ca. 500 heritage objects of this kind, mainly buildings, are listed in the Register.

11 After Lithuania re-established its independence, archaeological heritage protection could be seen as one of the priorities in regard to the state’s budget allocations. E.g. in 1993 one of the largest projects for archaeological heritage preservation – the “Hillforts’ Preservation Program” – was launched. Projects for the preservation of 73 hillforts were carried out up until 2005. During the last decade, the financing priorities (programs implemented by the Department of Cultural Heritage) have changed and have basically been concentrated on built heritage preservation. Nevertheless, maintenance of archaeological objects, mainly for tourism purposes, has been carried out using resources of EU structural funds and other financial mechanisms by various state institutions and public organizations.

12 Special territorial planning documentation had to be prepared in order to implement the second stage of protection. The extent of resources needed for preparation of this documentation was not initially estimated and in 2013 the procedure was returned back to the system valid in 1995–2005: for individual and complex objects the procedure of declaration of a protected object is introduced by typical or individual protection regulations, for cultural heritage sites – by special territorial planning documents.

In conclusion, the instruments for the assessment and selection of archaeological heritage have been formally introduced, but their applied assessment criteria are rather obscure. The various archaeological heritage valuation systems, being aimed at different results, are barely related to each other.

Since the 1990s the legal requirements concerning the documentation of listed objects have been changed several times. In the beginning of 2005, there were ca. 2500 archaeological objects listed in the Register of Cultural Properties. Until now, ca. 50% of them have been “re-assessed” according to the new type of documentation<sup>13</sup>, and ca. 350 new objects have been listed. In 2012, the Department of Cultural Heritage established the specialized Immovable Heritage Assessment Council for archaeological heritage in order to “speed up” the process, meaning the administrative and technical resources were concentrated mainly on the preparation (or “re-writing”) of the new documentation for already listed properties. This led to the stagnation of the state-supported programs for archaeological surveillance, inventorying and research indispensable for assessment procedures.

Nevertheless, significant technological achievements in regard to the Register of Cultural Properties should be mentioned. Textual and spatial data on archaeological heritage has been digitalized and provided in open access via the internet.<sup>14</sup> In 2006–2007, the plans of territories and protected buffer zones of archaeological objects were digitalized utilizing the GIS systems. Moreover, since 2005 data exchange has been conducted between the Register of Cultural Properties and the Real Estate Register in order to make information publicly available on restrictions of land use in places where archaeological heritage objects are situated.

## **Requirements for archaeological heritage protection and regulations on archaeological excavations’ procedures**

Archaeological heritage properties occupy only ca. 0.1% of the territory of the Republic of Lithuania.<sup>15</sup> A typical archaeological object takes up ca. 4 ha territory on average, but there are also large archaeological complexes and sites<sup>16</sup> which are usually situated in cities or picturesque landscapes. Since 2004 the owners, managers and users of cultural heritage objects have become the main “actors” of the protection

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13 Since 2005 the listing of heritage objects has been based on the Act of Assessment Council.

14 Access via the internet: [www.kvr.kpd.lt](http://www.kvr.kpd.lt).

15 Not taking in account protected buffer zones.

16 E.g. Šventoji ancient settlement (Palanga municipality) – ca. 648 ha; a place of Vilnius ancient town with suburbs – 580 ha; Kernavė archaeological site (Širvintos municipality) – 284 ha.

process and are obliged to conduct the maintenance of the archaeological property. According to the data of the Real Estate Register of 2010, ca. 10,000 private land plots and 8000 buildings were situated in the territories of archaeological heritage objects. In the territories of protected buffer zones, there were ca. 30,000 land plots and 11,000 buildings (see in Augustinavičius & Poškienė 2015: 135-155). Thus, archaeological heritage management is seen as a serious social challenge, and proper well-timed information on restrictions of land use for those who possess or manage a property in the territories or protected buffer zones of cultural heritage objects is vital. In this regard, data exchange between the Register of Cultural Properties and the Real Estate Register should be identified as an important effort in making relevant information available. Additionally, it can be considered as the first step for the legitimating of archaeological heritage protection requirements.

As a rule, the application of means for archaeological heritage protection – conservation or excavation – is related to selection based on assessment and the legal requirements for archaeological interventions. In Lithuania, the assessment procedures and status of an archaeological property actually have no relation to the strategy of its protection. In fact, almost any archaeological object facing construction activities may be excavated, i.e. protected “by record”, despite its “heritage status”. Contemporary legislation establishes the possibility to apply “the reserve regime (...) to the objects of cultural heritage expedient to be preserved so that they could be researched in the future by making use of broader scientific possibilities. The activities which may destroy scientific data – destructive research, maintenance operations, economic activities – shall be prohibited therein. The list of the objects subject to the reserve regime shall be approved by the Minister of Culture”. In 2005, a list of 76 archaeological objects, mainly burial mounds, which are to be preserved in the reserve regime, was approved and no amendments have been made to this list up until now. Thus, archaeological excavations, or “protection by record”, can be identified as the only means of archaeological heritage protection.<sup>17</sup>

One of the first regulations concerning cases for obligatory archaeological excavations was issued in 1992. The Law of 2004 established that archaeological interventions are legitimized by so-called heritage maintenance regulations. Standardized requirements regarding *where* and *how* archaeological excavations should be conducted became the legal norm in 2011, when the Heritage Maintenance Regulation PTR 2.13.01:2011 “Archaeological Heritage Maintenance”, was adopted (Dėl paveldo tvarkybos reglamento PTR 2.13.01:2011 „Archeologinio paveldo tvarkyba“

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17 The professional community began to discuss the issue of archaeological sites which should be preserved as an intact archaeological resource for future excavations. E.g. in 2013 the Scientific Archaeological Commission adopted special guidelines for Šventoji ancient settlement (dated back to the Stone and Bronze ages) concerning unique territories which should be preserved.

patvirtinimo, 2011). The Regulation established eight cases when archaeological excavations are obligatory and four cases when the need for archaeological excavations should be based on additional data. However, archaeological operations have not always been placed into the territorial planning process satisfactorily. In comparison with the system that was valid from 1994 to 2004, contemporary regulations do not require compulsory excavations in the territories of large-scale construction works (e.g. the lack of regulations for compulsory archaeological excavations in the territories where large-scale construction projects are implemented without environmental impact assessment procedures), but do require archaeological investigations in the burial places of victims of the 19<sup>th</sup>-20<sup>th</sup> centuries armed conflicts.

A number of archaeological investigations, which were conducted for economic reasons and financed by developers, have revealed valuable scientific information<sup>18</sup>, but it is difficult to deny that in general a developer seeks merely to fulfil the legally established basic requirements. Since the 1990s, in regard to developing a contract archaeology system with the principle “the polluter pays” being fully implemented, most attention has been focused on the control of procedures and methodological standards in archaeological work. The first standards for archaeological excavations and archaeological documentation were established in 1994 and finally became the legal norm in 2011. The contemporary system of control over archaeological interventions was formed in 1995-1997, in which permits for archaeological interventions are issued by the Department of Cultural Heritage; projects for archaeological investigations as well as scientific reports are approved by the consultative body – the Scientific Archaeological Commission.<sup>19</sup> An archaeologist can obtain a personal permit (with some exceptions) for archaeological interventions only for a particular archaeological object and only for one year (season) of archaeological research. A permit can be obtained only after the approval of scientific reports on previously conducted excavations<sup>20</sup> and with the undertaking of submitting information on the research results to the periodical “Archaeological Investigations in Lithuania” (*Archeologiniai tyrinėjimai Lietuvoje*, published every two years from 1967, annually, since 2000).<sup>21</sup>

18 E.g. one of the biggest burial grounds in the Baltic countries, Marvelė burial ground in Kaunas, was excavated as a development-led research project, also the unique *Civitas Ruthenica* cemetery in Bokšto Street 6, Vilnius.

19 The Scientific Archaeological Commission was established in 1997 under the Department of Cultural Heritage and can be considered as an element of self-regulation. It is composed of 9 members: 7 archaeologists (scientists) are elected and proposed by the Lithuanian Society of Archaeologist, 2 members (heritage management specialists) are appointed by the Department of Cultural Heritage.

20 Excavation reports are available in two archives – the Institute of Lithuanian History and the archive of Cultural Heritage Centre.

21 Access via the internet: [www.atl.lt](http://www.atl.lt).

The Department of Cultural Heritage issues over 400 permits every year<sup>22</sup> for archaeological surveys, trials or large-scale excavations. During the last decade, development-led archaeology became the main form of scientific inquiry – ca. 90% of archaeological operations were initiated due to development activities, mainly in urban territories (almost 70% of cases). Circa 63% of permits were issued for archaeological trials, 22% – for large-scale excavations and 15% – for archaeological surveys. As a result, the majority of new data has been generated from small-scale excavations and attracts minimal academic interest. As archaeological properties are ultimately protected as a potential scientific resource, the necessity to convert this data into relevant knowledge about the past, as well as to provide feedback to the heritage management system in order to make choices for the future, is crucial. It is worth mentioning that the professional community, the Scientific Archaeological Commission, has brought up the issue of amendment of the insufficient Regulation of 2011 concerning the extent of excavations (e.g. in cases of linear development projects), as well as the scope of information obtained.<sup>23</sup>

The Archaeological Heritage Maintenance Regulation has also established a basic framework with regards to competition of archaeologists working as contractors. Circa 100 archaeologists employed in private companies, universities, museums and as free-lancers conduct excavations on contract archaeology grounds. Since 2004, the archaeologists (but not enterprises) who carry out fieldwork are required by law to hold a license issued by the Department of Cultural Heritage.<sup>24</sup> Criteria for eligibility to apply for the license are rather minimal.<sup>25</sup>

In conclusion, after the 1990s the “market” contract-archaeology model was developed (after Kristiansen 2009: 641-648). Requirements for archaeological heritage protection were focused on protection “by record”, accompanied by a rigid system of the heritage authorities’ control over archaeological interventions, which aimed to ensure methodological standards and quality of archaeological documentation rather than interpretation.

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22 E.g. there were 252 permits issued in 2005, and 476 permits issued in 2015. The total number of permits issued in 1997-2015 was 6304.

23 E.g. in 2013 the Scientific Archaeological Commission approved special guidelines for the conservation and research of Šventoji ancient settlement. Nevertheless, the existing legal framework leaves the question on its implementation possibilities open.

24 An exception is made for those holding a scientific degree.

25 For the first time a license applicant is required to have an academic qualification or 10 years’ experience of archaeological work. A license of the 1<sup>st</sup> category enables a person to conduct archaeological research of objects which are not listed but are situated in the protected zones of the archaeological heritage objects. A license of the 2<sup>nd</sup> category enables a person to conduct archaeological research into all objects of archaeological heritage except monuments. The 3<sup>rd</sup> category license enables a person to conduct archaeological research with no limitations.

## Requirements for the preservation of archaeological remains *in situ* and the interpretation of archaeological heritage

The preservation of archaeological remains *in situ* (if there are opportunities) became law in 2004. Procedures of preservation of archaeological remains *in situ* are defined by the Archaeological Heritage Maintenance Regulation: an archaeologist cannot dismantle constructions which were discovered during archaeological investigations without their prior assessment. Decisions on the preservation of such constructions *in situ* are made by the Immovable Cultural Heritage Assessment Council. In order to implement such a decision, there are certain limitations related to the cost and time-consuming legal procedures for a developer, as well as for the municipal and heritage authorities. Thus, the decision on the preservation *in situ* is not only a technical question or an issue of archaeological heritage assessment, it is also a financial and legal challenge too.

Urgent attention is needed to address the problem of the maintenance of *in situ* preserved archaeological construction, especially if it is set up as an exhibition, in the case of the development project being stopped or after it has been completed. For example, in 2008, during archaeological excavations in the territory of the construction of the building complex “Moscow House” in Vilnius, the remains of a kiln from the 17<sup>th</sup>-18<sup>th</sup>



Fig. 1. Development-led archaeology and heritage: the remains of a kiln from the 17<sup>th</sup>-18<sup>th</sup> century in Vilnius, Rinktinės St. (photo by Tauras Poška, 2008).

century were found (see in Poška 2009: 466-467); the construction works were stopped and the remains were assessed as a valuable property of Vilnius cultural layers and were to be preserved (see fig. 1). As it was not possible to do it during the construction, it was decided that the kiln should be conserved and dismantled into three segments at the cost of the developer. It was planned that the kiln would be brought back for public display after the construction. However, later the construction works were halted because the developers faced financial difficulties. The dismantled kiln is currently stored on the construction site, but its future is rather vague. There are no solutions as to who should take over the costs and responsibility for the preservation of the remains. Of course, there are examples of more successful implementations of the *in situ* principle.<sup>26</sup>

The requirement to preserve archaeological constructions *in situ* also refers to their presentation and interpretation. The earliest examples of the preservation of archaeological remains *in situ*, consisting mainly of constructions of brick buildings suitable for exhibition, date back to the early 1960s.<sup>27</sup> Preservation of archaeological remains *in situ* still meets the idea of “exhibition” rather than that of a potential intact archaeological resource for future investigations. Less “presentable” archaeological remains are usually deconstructed during archaeological excavations or removed to other places<sup>28</sup>. *In situ* preserved remains are most often marked by outlining them on the surface<sup>29</sup>, excavated and uncovered archaeological structures are sometimes sheltered by protective roofs, or by buildings, constructed over the archaeological structures, also serving as protective casing.<sup>30</sup> However, preservation of archaeological remains does not necessarily mean a successful conveyance of archaeological heritage values – a number of cases lack basic visual and textual interpretation and provide minimal value for society (argued by Jurevičienė 2012: 16-21).

Archaeological heritage interpretation can also be seen in the wider perspective. In Lithuania, the best perceived archaeological resource is the hillforts, which are perceived as a source of national identity. The year 2017 has been declared ‘A Year of

26 E.g. a wax-melting kiln in Kaunas Town-Hall square was successfully displayed to the public in 2002 with private funding. The kiln was covered with a glass roof. In 1996, the remains of two kilns from the 15<sup>th</sup>-16<sup>th</sup> centuries were discovered during excavations in a private Amber Museum-Gallery (Mykolo St.) in Vilnius. Today these elements are successfully exhibited and interpreted. In 2006, a 17<sup>th</sup> century kiln was discovered in the villa of the former Tuskulėnai Estate in Vilnius. The building is dedicated to the museum of the Soviet regime victims; nevertheless, the kiln was preserved *in situ* and successfully interpreted by means of textual and multimedia panels.

27 E.g. fragments of Vilnius Upper Castle (14<sup>th</sup>-15<sup>th</sup> century), Trakai Island Castle (15<sup>th</sup> century), Kaunas Castle (14<sup>th</sup>-15<sup>th</sup> century), Vilnius City Wall segments (16<sup>th</sup> century), Trakai Peninsula Castle (14<sup>th</sup>-15<sup>th</sup> century).

28 E.g. there are plans to open a craft village in Kairėnai Estate Park (near Vilnius) and the excavated pottery kilns from Vilnius, which cannot be preserved *in situ*, are to be transferred there.

29 E.g. the Cathedral Square in Vilnius, the place of St. Anna and St. Barbara church in Vilnius, the remains of the old churches in Kernavė, and the remains of Dubingiai church.

30 E.g. the remains of Dubingiai Palace (Molėtai municipality).

Hillforts' by the Parliament of the Republic of Lithuania. The idea of archaeological reconstruction, which aims at filling in the gaps between the "place" and the "text", is also popular (after Blockley 2000: 43–68). The construction of the medieval castle on the most excavated Šeimyniškeliai hillfort, the open-air museum of the reconstructed 13<sup>th</sup>–14<sup>th</sup> century craftsmen yards (*ex situ*) in Kernavė, and the Grand Dukes' Palace in Vilnius Lower Castle are some examples of the attempts to convey to visitors the most complex and visible information about the past. The "archaeological reconstruction" encompasses not only structures but also an experimental archaeology, which in Lithuania is closely related to the living history activities. Living history festivals are probably the most popular form of archaeological interpretation. Each case could be a target for academic criticism, but archaeological reconstructions are undoubtedly appreciated by the wider public. It is also worth mentioning that more and more frequently non-professionals construct the "archaeological narrative", which is not necessarily based on reliable scientific data (presented by Kulevičius 2012: 224–239). Different approaches towards archaeological interpretation are still waiting for academic reflection within the discipline of archaeology in Lithuania.

## Conclusions

After the 1990s, a number of principles replacing the concept of "monuments' protection" with the concept of "heritage resources management" were introduced into the legal system (e.g. the framework for archaeological heritage assessment, technological elaboration in the field of maintaining the national Register of Cultural Properties, standards and system for the control of quality in archaeological work, etc.). There is a need for further developments in archaeological heritage management to focus on the following: 1) intensive and technologically developed archaeological surveillance; 2) elaborating the criteria for archaeological heritage assessment and selection related to further decisions on the protection strategy; 3) establishing feedback between research and management in order to make management decisions based on research data and with respect to archaeological content; 4) reconsidering the environment of contract archaeology in order to provide emphasis on the scientific interpretation of the results; 5) exploring and establishing the relationship between archaeology, management, and wider society in order to convey the values of archaeological heritage and explain the meaning of heritage management decisions in each case. The aspects presented do not reflect the complexity of archaeological heritage management problems; nevertheless, developments during the past decade have led to a new approach in archaeological heritage management in Lithuania, which should be further elaborated as a process with necessary reflection and feedback.

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## Preventive Archaeology in Austria

*Eva Steigberger*

### **Abstract**

*This article deals with the structural changes that have taken place in Austria's archaeological heritage management over the last few years. Issues such as the current state of human resources and general tasks of the Federal Monuments Authority's Archaeology Department are covered. Special emphasis is placed on the rise of commercial archaeology, as well as on the "Guidelines for Archaeological Measures" which was introduced in 2010 and strategies for the use of preventive archaeology. The presented data clearly show that the restructuring of archaeological heritage management in Austria since 2010 has shown positive effects. The concentration on core competences, the abandonment of direct excavation activity of the Archaeology Department and the assignment of archaeological personnel to each of the respective state departments has intensified the level of regional supervision and has led to a considerable increase in archaeological measures taking place. Furthermore, the quality of excavation documentations and their data integrity has improved through the introduction of the "Guidelines for Archaeological Measures".*

**Keywords:** *Heritage management, monument protection law, archaeological measures, guidelines, Austria*

### **Zusammenfassung**

*Der vorliegende Artikel behandelt die strukturellen Änderungen in der österreichischen Bodendenkmalpflege in den letzten Jahre. Der Personalstand und die generellen Aufgaben der Abteilung für Archäologie des Bundesdenkmalamtes werden ebenfalls behandelt. Das Hauptaugenmerk liegt auf dem Wandel zur kommerziellen Archäologie und den Richtlinien für Archäologische Maßnahmen, die 2010 eingeführt wurden, sowie auf Strategien zur Preventive Archaeology.*

*Die aktuellen Daten zeigen, dass die Umstrukturierung der archäologischen Bodendenkmalpflege seit 2010 mehrfach positive Effekte hat. Die Konzentration auf die Kernaufgaben, die Aufgabe von Grabungstätigkeit und die Aufteilung des Personals in alle Bundesländer hat die Intensität der*

## Legal Basis

The main task and therefore core competence in the preservation of monuments of all kinds (historical buildings, archaeological heritage, industrial heritage, historic gardens among others) is the protection and preservation of those objects. This task is defined by law – in the Austrian case especially – by paragraph 1 of the Austrian “Denkmalschutzgesetz”, or Heritage Protection Law (Full title: Bundesgesetz betreffend den Schutz von Denkmalen wegen ihrer geschichtlichen, künstlerischen oder sonstigen kulturellen Bedeutung (Denkmalschutzgesetz - DMSG) StF: BGBl. Nr. 533/1923 (NR: GP I 1513 AB 1703 S. 209.)

### Passage 1

*This law's provisions concern man-made objects both moveable and immobile, including remains and traces of human handling, artificially built or shaped formations that are of historic, artistic or other cultural significance, if their conservation is of public interest. This significance can concern the object alone or stated because of its relation or position to other objects. Conservation means preservation from destruction, change or export.*

### Passage 2

*Conservation is of public interest, if the monument is, from a national or at least regional (local) point of view, considered a cultural asset. A loss of it is an impairment of the Austrian national treasure as a whole in regard to its adequate quality, variety and diversity and distribution. Whether the preservation contributes to a historical documentation is also of importance.*

The most important thing in § 1 of the “Denkmalschutzgesetz” is its lack of a temporal limitation – in contrast to other laws which focus on one or the other time period, and because there is an important link between preservation and historical documentation. Besides the more general regulations like paragraphs 3 and 5 which regulate how to protect, modify or even destroy a monument, paragraphs 8 to 11 deal exclusively with archaeology.

§ 8 states that accidentally found objects or sites must be reported to the authority within one working day, either by the person who discovered it, the landowner, the tenant or the construction manager in charge, in order to prevent destruction, theft, or modification of the object or site.

§ 9 states that after a report has been made, the site has to be left untouched for five working days unless the Bundesdenkmalamt (Federal Monuments Authority, later referred to as “BDA”) or a representative of the BDA lifts this ban or allows work to progress. The site and object are automatically under the protection of this law

from the time of the report up to 6 weeks. During this period the BDA has to decide whether the site is, in fact a monument and what sanction or course of action should be taken. There is no suspensive effect for an appeal in the case of a positive decision. Also, the finder, owner or occupant is obliged to hand over the objects to the BDA for scientific research and documentation for a period of up to two years.

§ 10 provides for the ownership of finds. In contrast to other European states, the Austrian law does not follow the “Schatzregal”, or treasure trove principle, but divides ownership equally between the finder and the landowner (thus following §§ 399 and 400 of the “Allgemeine bürgerliche Gesetzbuch” or General Civil Code).

Searches via alteration of the surface or under water (excavation) and other searches on site with the purpose of the finding and examination of moveable or immobile monuments under the surface can only be conducted with a license granted by the BDA as stated in § 11. Such a license can only be issued to persons who have an appropriate university degree and only for a specific project or excavation. These licenses can be issued with restrictions, stipulations, and special regulations.

On completion of the permitted excavation an extensive report including all necessary drawings, plans, pictures and other documentation, must be submitted to the BDA. § 11 also prohibits the use of metal detectors on properties under protection. An exception is made for use only during a licensed excavation.

## **Structure of the Department of Archaeology of the Bundesdenkmalamt**

Since 2010 a significant structural change took place in the Department of Archaeology of the Bundesdenkmalamt and therefore also in the archaeological preservation of monuments. Up until then the focus of the staff was excavation work, but since then this has changed to heritage management in a broader sense. The department focuses on their core competences like preservation of the archaeological heritage, better use of regulations by the authority, quality control and consulting services for construction companies and owners. It also offers support and supervision nationwide. Therefore structural adaptations were necessary. For the first time, there is one staff member responsible for these duties in every province. Excavations were outsourced to the commercial sector like private excavation companies and obligatory “Guidelines for archaeological measures” were established as well. These changes were concluded at the end of 2012 and have been evaluated since then.

The Department of Archaeology has 16 staff members. These include the head of the department, two administrative personnel, one person responsible for publications, two for research on archaeological sites and one archaeologist for each of the nine provinces, only Lower Austria has two. Associated with the BDA’s Conservation

and Restoration Department is one person who works on the conservation of archaeological finds. The so called “Gebietsbetreuerinnen” or area manager, are located in their assigned provinces. They are the first person to contact for all parties: archaeologists, collectors, builders, land owners, and finders. They are responsible for the preparations of the licenses, applications for financial aid, supervision of excavations and all other archaeological measures, evaluations of reports and documentation as well as all problems which might arise.

## Stock of monuments

As of 2010 19.550 known sites were recorded in our database. Based on this data – the entry of which is not yet being finished, we can act on the assumption of an archaeological landscape that includes up to 100 000 to 200 000 sites – depending on the mathematical model. About 37 % are in Lower Austria, followed by Upper Austria with 18 % and Styria with 17 %. This special situation of Lower Austria is determined by the historically developed tradition of archaeological research from the 19<sup>th</sup> century onwards on the one hand and on the other hand, it is the largest province in Austria.

By the end of 2012, **36.955** monuments were protected – archaeological and architectural. Lower Austria with 10.229 monuments has approximately one third of the whole stock of monuments listed. Concerning the archaeological monuments that are protected, those figures differ: only 2 % of all monuments are archaeological – in 2010 only 798. This is – at least in part – because of the legal regulations for protection. Archaeological sites usually concern plots of land rather than buildings and since the scientific probability of containing an archaeological monument/site has to be proven for each plot of land during the legal procedures, those processes are usually much more complicated. Also, the loss of many monuments owned by the Church or a regional authority, that were under protection by law via § 2a, is significant. This can be, at least partly, compensated by the registration of archaeologically potential sites in spatial plans in all provinces. Still, protecting archaeological monuments is one of the important tasks for the future for our department.

In addition to planning, financing, consulting and supervising, another important task is the coordination of Environmental Impacts Assessments (EIAs) – Umweltverträglichkeitsprüfung (UVP) – in reference to cultural heritage and especially archaeological heritage. Austria has – as many other countries do – legislation and policies in place which have the effect of ensuring that archaeological and cultural heritage assessment is part of the planning process that precedes all major building or infrastructure developments. But only known sites are protected and it is the national heritage department’s responsibility to undertake a preliminary desktop evaluation in

order to establish whether any known site may be affected by a development project. Our database provides a basis for government experts in expertise for these assessment processes and for the definition of the course of action to be taken, such as geophysical surveys, test excavations or full excavations. However, since the regulations that apply to the discovery of unknown sites during building work are very stringent, including the potential for substantial costs to the developers, more detailed evaluations are often recommended before the project has begun.

In addition to these major building developments, small scale ones are also covered. Through federal state law all Austrian provinces enable the BDA to give a statement for the land development plan and therefore also for the zoning process. We deal with eight different federal and state laws – Vienna is an exemption – but all of them state that find spots or sites or zones have to be indicated and a different symbol is used to identify monuments. These state laws enable the BDA in various forms to participate in application hearings for construction projects and therefore early in the building process in order to protect known sites and to ensure proper excavation in cases where preservation is not possible.

## Guidelines

Since the restructuring of the department in 2010 the “Guidelines for archaeological measures” were implemented and are now an integral part of the license granting permission for an archaeological measure in Austria.<sup>1</sup> Originally, those guidelines were associated with German and especially Bavarian examples, but very soon it became clear that they had to be adapted to fit Austrian circumstances and modern techniques in excavation. A working group under the leadership of the BDA was established and brought together members of the Universities, museums, various research facilities and commercial excavation companies. In addition, 12 special sub-groups were formed – such as for anthropology, depot, long-term archiving, legal matters, prospection, mining archaeology and various others. On January 1<sup>st</sup> 2012 the guidelines came into effect – and as of January 1<sup>st</sup> 2016 in their fourth version that was the result of extensive evaluation and qualification. These guidelines are a milestone for quality assurance for archaeological measures in Austria. Acceptance of these guidelines is very high in Austria and they are implemented nationwide. A significant increase in the quality of documentation can be seen. Up until 2009, a report had to be submitted to the BDA for long-term archiving, but via the guidelines – and therefore as an obligatory part of the licence – the complete documentation has to be

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1 <http://www.bda.at/documents/262104480.pdf>.

submitted. This obligation increases the workload for the staff, but safety of data (e.g. the results of excavations) can be ensured via long-term archiving.

Austrian law divides the ownership of finds in equal parts between the land owner and the finder – the second one now being in most cases the employer of the archaeological excavation companies. This scenario covers almost 100% of the archaeological measures in Austria and thus creates a new problem relating to the ownership of finds and their storage, but in most cases, the owners could be convinced to transfer the finds to public institutions for archiving and storage.

## **Development of archaeological measures**

Between 2000 and 2004 only a small increase in archaeological measures can be noted – from 119 in 2000 to 138 in 2004. In 2005, 146 measures took place and until 2008 not much more happened. In 2009, when – for the first time – the commercial archaeology was introduced on a regular basis, a significant increase to 311 measures can be noted. Between 2008 and 2011 a further increase of 150 % to 536 archaeological measures was recorded. Partly responsible for this is the installation of a “Gebietsbetreuer” or area managers in the provinces of Vorarlberg and Styria in 2011. Also of importance is much better inter-departmental communication within the BDA and for the first time the implementation of one responsible person – “Gebietsbetreuer” in each province. Most of the measures take place in Lower Austria – in fact, half of them do. The main reason for this is not research-based excavations but rather rescue excavations due to increased construction and related environmental impact assessments (UVP). Most of these are for the construction of wind turbines, infrastructure development, and large scale gravel pits.

Preventive archaeology in Austria is mostly done in relation with the EIAs or the land development plans and zoning process in all provinces. All major building and development projects are subject to an EIA. Obligations for the project’s plan for multi-phase realisation are as follows: the first stage is a thorough research of the archives; based on these results, zones – where archaeological sites can be expected – are defined. The Archaeology Department of the BDA is consulted and gives expertise on those evaluations. The zones are then subject to surveys, geophysical prospecting where needed, and then excavation before the construction/building process can start. Examples over the last ten years include major road construction projects such as the A5 motorway link between Vienna and the Czech Republic in Lower Austria (see in Hofer 2006; Preinfalk, et al. 2015), highways S7 in Burgenland and Styria, S35 and S36 in Styria (see Fuchs & Mirsch 2011; Fuchs 2013), or S1 (Vienna “Aussening”) in Lower Austria, Südgürtel Graz (see Fuchs 2016), as well as new

railroad lines, for example in Lower Austria between Vienna and Sankt Pölten (see Blesl 2006), or the so called “Koralmbahn” linking Graz and Klagenfurt in Styria (see Fuchs 2011; 2014; 2015; Wilding 2015) and Carinthia (excavations are ongoing and therefore not yet published). Results of these large-scale and long-term excavations are similar in nature to the Slovenian motorway excavations which revealed clusters of new settlements and their burial sites from prehistoric to early medieval times that were unknown before. The process of preventive archaeology in combination with EIAs has not only become a very important factor in Austrian archaeological business but also in research, since many of the sites are the only ones excavated employing modern methods and which offer prime material for research, which can be often funded via obligations from EIAs – as shown above with the published examples. A relatively new field for preventive archaeology in combination with EIAs is energy management, whose importance increased rapidly in the last 5 years: construction of large wind turbine ‘farms’ in the lowlands, but also a very important new source for archaeological sites on mountain ranges, namely photovoltaic farms and hydroelectric power plants in Styria and Tyrol.

Land development plans provide a wide variety of possibilities for preventive archaeology via the aforementioned eight different state laws. The example from Styria shows that the Bundesdenkmalamt can determine different kinds of sites – the known and protected site or monument with all its implications, a known but not protected site, and a potential site. For the first category, all implications of the Denkmalschutzgesetz are clear – changing or modifying only with explicit permission of the Bundesdenkmalamt. The other two categories are marked with a symbol on the plots of affected land. Authorities are obliged to invite the Bundesdenkmalamt to give a statement before a building permission can be granted. Thus, the Bundesdenkmalamt can evaluate the specific situation and negotiate the necessary measures in order to either protect the archaeological structure or – if the extent of the site is not yet clear – to act accordingly and begin preventive archaeological measures via a survey, or an excavation in the respective area. Similar regulations are in effect in all other provinces.

## Conclusion

The presented data clearly shows that the restructuring of archaeological heritage management in Austria since 2010 has shown positive effects. The concentration on core competences, the abandonment of directly-involved excavation activity of the Bundesdenkmalamt’s personnel and the assignment of archaeological personnel to each of the respective state departments has intensified the level of regional

supervision and has led to a considerable increase in archaeological measures taking place. Furthermore, the quality of excavation documentation and their data integrity has improved through the introduction of the “Guidelines for Archaeological Measures”.

All these large-scale archaeological projects in preventive archaeology would not have been possible without the structural changes in the Department of Archaeology and the reorganization of the department. As well, only via the “Guidelines for Archaeological Measures” has a certain standard in archaeological methods and documentation been secured. The results of the BDA’s monitoring clearly show an increase in the quality and quantity of archaeological projects. The application of the Guidelines is in effect throughout the whole federal territory, and not only for major projects but also for very small-scale, short-term digs or surveys – both in rescue/preventive and research/scientific archaeology. Preventive archaeology thus at least offers a comparable quality in documentation as a scientific archaeological measure does.

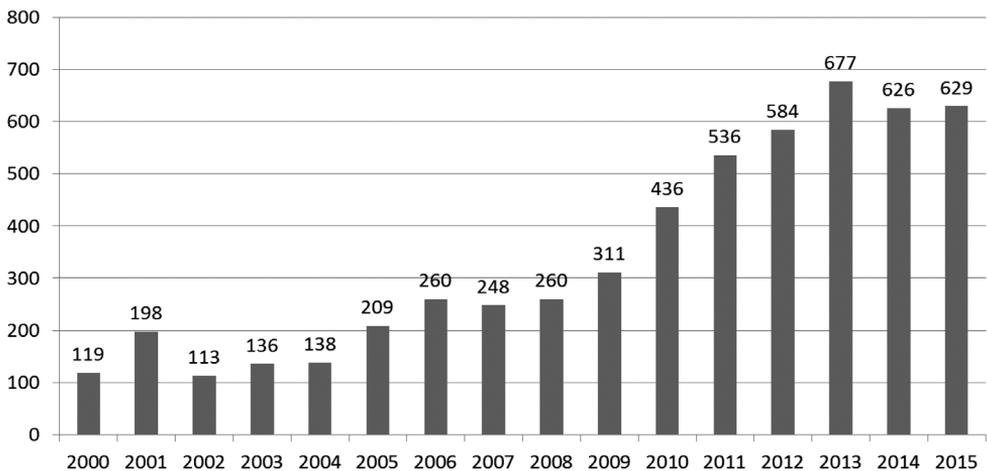


Fig. 1: Number of archaeological measures in Austria, Copyright Bundesdenkmalamt.

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## Short Overview of the Preventive Archaeology in Slovakia After 2000

Milan Horňák, Tomáš Michalík

### *Abstract*

*The very dynamic legal, economic and social changes since the Velvet Revolution in 1989 in the Slovak Republic were also well reflected in the archaeological discipline as a whole and in heritage management in particular. The activities in management that were, formerly fully governed and practiced by the state (academic) Institute of Archaeology and national and regional museums became a much more open field with a variety of different stakeholders, public and private. Although necessary changes were needed and therefore expected, their speed and intensity, and consequences were hard to predict, and caused substantial transformation. From the legislative point of view, all the important laws were adopted after 2000 and the new Act on Protection of Monuments and Historic Sites N. 49/2002 Coll. presents the most important change. This Act transferred the major responsibility for archaeological heritage from the Archaeological Institute of Slovak Academy of Sciences to the newly established Monuments Board of the Slovak Republic („Pamiatkový úrad Slovenskej republiky“). This consists of a central office in Bratislava and 8 regional branches (Regional Monuments Boards – „Krajské pamiatkové úrady“ (KPÚ)). The principal task of the Monuments Board was the administrative and expert protection of heritage and prescribing of the conditions for necessary archaeological research in development-led contexts. On the other hand, the conduct of such research was open to more subjects: museums, universities, private enterprises, civil associations, and two ex lege institutions (the Archaeological Institute of the Slovak Academy of Sciences and the Monuments Board itself). However, to do this, these organizations needed appropriate licences. This regulation strongly affected development-led archaeological research in the next 15 years, during which it was transformed into preventive archaeology.*

**Keywords:** Slovakia, preventive archaeology, legislation, archaeological heritage protection

### *Abstrakt*

*Dynamické právne, ekonomické a spoločenské zmeny na Slovensku po zamatovej revolúcii v roku 1989 sa odrazili aj v archeológii. Mali významný vplyv na archeológiu ako vedeckú disciplínu i na ochranu archeologického dedičstva. Činnosti týkajúce sa ochrany archeologických pamiatok, ktoré boli v minulosti*

vykonávané najmä štátnym (akademickým) Archeologickým ústavom, Slovenským národným múzeom a regionálnymi múzeami, boli umožnené širokému spektru rôznych subjektov, verejných aj súkromných. Hoci zmeny boli potrebné a preto očakávané, ich rýchlosť, intenzita a následky bolo ťažko predvídať a spôsobili zásadnú zmenu. Z právneho uhla pohľadu boli všetky dôležité zákony prijaté po roku 2000. Z novej právnej úpravy je pre naše účely najvýznamnejší nový zákon č. 49/2002 Z. z. o ochrane pamiatkového fondu. Tento zákon previedol hlavnú zodpovednosť za archeologické dedičstvo z Archeologického ústavu akadémie vied na novovytvorený Pamiatkový úrad Slovenskej republiky. Tento pozostáva z centrálného úradu a 8 krajských pamiatkových úradov (KPÚ). Základnou úlohou Pamiatkového úradu je administratívna a odborná ochrana archeologického dedičstva a predpisovanie podmienok archeologického výskumu v kontexte záchranných výskumov. Na druhej strane bolo vykonávanie tohto typu výskumu umožnené ďalším subjektom: múzeám, univerzitám, súkromným spoločnostiam, občianskym združeniam a dvom inštitúciám oprávneným vykonávať výskum *ex lege* (Archeologický ústav Slovenskej akadémie vied a samotný Pamiatkový úrad). Aby to však bolo možné, musia tieto organizácie získať licenciu. Tento predpis výrazne ovplyvnil záchrannú archeológiu na ďalších 15 rokov, počas ktorých sa táto transformovala na preventívnu archeológiu.

The Act on Protection of Monuments and Historic Sites N. 49/2002 Coll. established a completely new structure and bodies in the field of protection of archaeological heritage, the major one of these being the establishment of the Monuments Board of the Slovak Republic. The change was quite substantial since the principal responsibilities were shifted from the Archaeological Institute of the Slovak Academy of Sciences, a purely scientific institution, to the state administration. Figure 1 shows the structure of heritage protection and the Monuments Board as a part of the Ministry of Culture.



Fig.1. The structure of the legislative system of cultural heritage protection in Slovakia

Regional Monuments Boards are the first-contact institutions not only for field archaeologists, but also for landowners, developers or other persons planning activities, which may physically affect archaeological heritage. Regional boards decide on the necessity of preventive or rescue research, its conditions, time frame, as well as on issuing sanctions for potential offences or other illegal activities. The

monitoring of archaeological research is also their responsibility. However, though this was a great leap towards more efficient legal and administrative infrastructure for the protection of heritage, the Regional Boards, employing 2-3 archaeologists and covering territories of 6.000 km<sup>2</sup> on average<sup>1</sup>, were hardly in a position to fully accomplish all the required tasks.

The Monuments Board of the Slovak Republic is the second-stage state authority and it is responsible for making decisions on the complaints against the first-stage decisions of the Regional Boards. According to the Act, the principal tasks of the Monuments Board also includes the development of unified administrative and legal processes for the Regional Boards, and the development of principal research and protection methods and procedures, and in the case of the Archaeological Department of the Monuments Board, also the issuing of expert opinions regarding archaeological research documentation, the submission of which is obligatory for all organizations performing research prescribed by the Board. Unfortunately, as is the case with the Regional Boards, the central state administration also suffers from an insufficient number of staff, because it employs only a few archaeologists.

The Ministry of Culture of the Slovak Republic stands at the top of the administrative hierarchy in the field of heritage protection. It has two important advisory bodies: the Archaeological Council (representing all professional sectors in Slovak archaeology) and the "Licence Commission"<sup>2</sup> which issues recommendations to the Ministry for granting research licences in archaeology. Both important bodies consist of experienced professionals and scholars. The structure of these two bodies is relatively well balanced, taking into consideration especially the institutional background of the members<sup>3</sup>. Archaeologists are also represented in other advisory bodies, mainly in the Monuments Council, dealing with more complex field of cultural heritage protection. It is important to note that there is a substantial difference between the legal regulation of archaeological research and research in other fields of cultural heritage: history of architecture, artistic monuments, and urbanism (Fig. 2). Archaeological research can be performed only by licenced legal entities<sup>4</sup>, while in other fields of cultural heritage licences can be also obtained by individuals. In order to obtain an

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1 When comparing the amount of their workload with the workload of their colleagues at the same institutions – architects or art-historians – the lack of archaeological staff becomes very clear.

2 Its official name is „Commission for the verification of special professional competence for culture heritage research.“

3 Archaeological Council: 11 persons – 4 representatives of the Archaeological Institute of Slovak Academy of Sciences, 2 representatives of the Monuments Board of the Slovak Republic, 2 representatives of museums, 2 representatives of private sector and 1 representative of the universities. „Licence Commission“: 4 representatives from the field of archaeology in the commission as a whole.

4 Currently, there are 40 legal entities licenced to perform archaeological research in Slovakia, 15 of them are private enterprisies.

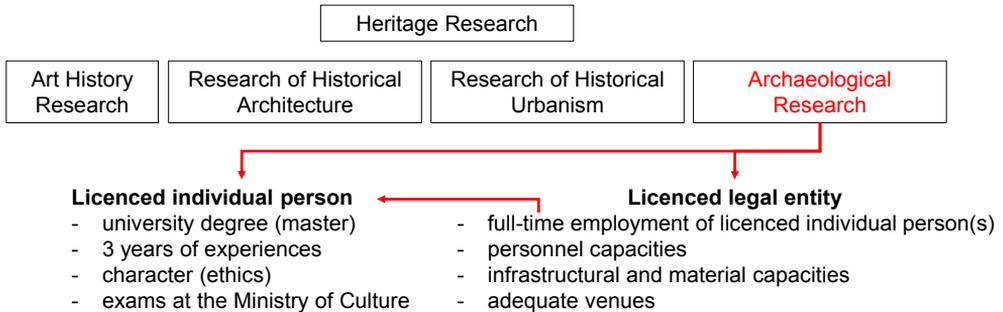


Fig. 2. Structure of cultural heritage research in Slovakia.

archaeological licence, the applicant (individual person)<sup>5</sup> must pass a special examination at the Ministry of Culture in Bratislava, and then, the archaeological organisation must employ such a person full-time in order to be granted the right to perform archaeological research. There are also other legal conditions for the organisations, e.g. adequate personnel, material capacities for conducting research, working facilities and venues, adequate conditions for conservation and temporary storage of movable finds.

The Regional Monuments Boards (RMBs) have a key role in the processes of deciding the necessity of archaeological research. These are public administrative authorities. The developer must submit the project to the RMB, containing detailed information on place of development, scope of construction, construction plans etc., upon which the RMB decides on further steps regarding the archaeological preventive research (size, area, type of research, methods), according to the type and size of threat posed by development. Archaeological research is, in practice, always needed when development takes place in areas with protected monuments or sites (e.g. urban conservation areas, national cultural monuments and protective zones of cultural monuments<sup>6</sup>). The RMB decisions are mostly based on the known (registered) archaeological sites, but also include some elements of prevention regarding the archaeologically unknown areas and potential sites.

Such research can be usually performed in the form of:

<sup>5</sup> The applicant must have the MA level of higher education in the field of archaeology and at least three years of working experiences in the field of archaeological research after obtaining the MA, and „impeccable professional character“ (sic!).

<sup>6</sup> Currently, there are 28 historic reserves (including 18 centres of historical towns and 10 traditional villages), 81 historic zones and ca. 15.000 immovable national cultural monuments in Slovakia.

- archaeological supervision during earthmoving works
- trial trenches
- complete archaeological excavation of the whole area under construction

All the necessary conditions including obligations of the developer and performer of the research are issued in the RMB's research permit. The time schedule of works and the price for completing the research are based on these conditions.

The developer has to select one of the licenced archaeological organizations and sign a contract prior any fieldwork. In compliance with the Act, the archaeological research can only start after signing a valid business contract and shall be reported to the RMB within a period of 5 days. From a legal perspective, the archaeological research is completed by submitting the final report to the Monuments Board. The report (the results and quality of research) is then assessed by a special committee, which issues recommendations to the Monuments Board. This can accept these recommendations or refuse them. The requirements for the final excavation report are regulated in the Ministry of Culture Decree No.. 253/2010 Coll., as amended, and include 11 principal points.

The Act on Protection of Monuments and Historic Sites also deals with archaeological monuments and protection of archaeological sites and evidences in the spatial planning process. The La Valletta Convention was ratified by in 2000 and published in Collection of Laws in 2001. The legal regime for archaeological finds in museums is regulated in the Museums Act Nr. 206/2009 Coll., as amended. In order to combat treasure hunting and other illegal activities, such as the robbing the sites, a lot of legislative work has been undertaken since 2011, when the amendment of the Penal Code was adopted. This strictly and expressly bans the unauthorized use of metal detectors in order to search for archaeological finds.

As it can be seen from this short presentation of the system of preventive archaeology in Slovakia, the major legislative and organizational changes were introduced in the last 15 years. The actual system, based on the 2000 Act and the La Valletta Convention is completely different from the one that existed in the 'Socialist' era. The changes in legislation and protection doctrine boosted several new forms of organization<sup>7</sup> and, at the end of the day, also a free-market in a great deal of preventive archaeology. Never before were so many sites researched due to the development, which had to cover the costs of archaeological research (the polluter pays principle).

However, the new system poses new challenges for archaeological protection and archaeologists in Slovakia. First of all, the state must substantially increase the legal certainty of the stakeholders. At the moment, there are still too many uncertain and

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7 Within the project *Discovering the Archaeologists of Europe* the first analyses of the professional archaeology in Slovakia were made (Fottova et al. 2008; Krekovič et al. 2014). Unfortunately, the authors of both studies did not use updated data, making these analyses less reliable.

vague provisions, used in the act, and too many of their legal duties are still not clear and they are unaware of them. In the preventive phase, especially in researching areas that were not previously subject to archaeological investigation, there is a need to raise the quality of the preventive assessment. Based on current data, there are still too many 'negative' tests. While this may be good for heritage (since it is not threatened on 'negative' sites), it, nevertheless, puts archaeology in an increasingly awkward position and may lead to the questioning its legitimacy. In 2015, out of 534 tests and rescue excavations 272 were negative.<sup>8</sup>

Another important point stressed here should be the obligation of the archaeological organisation to publish (or to make public in some other way) the results of research. Although this issue is clearly mentioned in the La Valletta Convention, it is still missing in the Slovak legislation. Then, there is also an urgent need for standards of the archaeological research which should be adopted with an adequate legal status to be efficiently enforced. The standards must be prepared so to avoid their misinterpretations, and to contribute to higher quality control and transparency of data collection. The standards would also increase the quality in the business competition, and act against financial dumping and downsizing of archaeological research, especially in the cases where they can not be met due to a poorly set budget. Last but not least, the level of institutional cooperation must considerably increase in both the business and expert aspects. The current very formal cooperation should be replaced by highly operative common policies and strategies, in order to increase the legitimacy of preventive archaeology.

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<sup>8</sup> The data were collected as part of the results of the FP7 Marie Curie Action IAPP – Contributing to preventive archaeology: Innovativeness, development and presentation no. 324508.

## Modern Technologies in Polish Archaeology: A Case Study of Central Masovia 2009 – 2014

Mariusz Wiśniewski, Agnieszka Olech-Śliż

### *Abstract*

*The aim of this paper is to enrich academic discussion about broadly understood “modern” or “new” technologies in Archaeology by assigning actual facts and statistical information to various claims and propositions circulating in Academia. Further, to inform exactly how many researches of different types took place in the 2009–2014 period and in each year of this period, which method is most popular, and if there are any general tendencies to be noticed in the usage of particular methods. Authors use as a base for this case study an area of nine counties in central Masovia region (Poland), which is moderately enriched by objects of archaeological importance, yet where a consistently high number of private and public investments causes steady increase in number of archaeological projects to be carried out in recent years. These are conducted on a different scale from one-day watching briefs up to road scheme projects covering large previously underdeveloped areas around the city of Warsaw and are carried out both by local archaeological teams and units from other parts of the country. A common factor is almost exclusively commercial character of work, also an important background is created by the EU funds inspired a boom in infrastructural investments that will most likely be the largest event of such scale for many years to come. Data presented here is collected from all field reports and documentation collected on a basis of art. 31.3 of Polish Monument Care and Protection Act by Masovian Voivodship Heritage Officer Office for the period of 6 years (2009 – 2014). The paper does not aim to discuss the quality of such work or validity of chosen methods for the projects they have been used in – this is a matter for another study. Neither it is the authors aim to qualify, which method is more suitable for future use in the field archaeology in this region. This report should be treated as a factual base for future discussion and an attempt to present the condition of Polish Archaeology in its certain aspect.*

**Keywords:** LiDAR, Photogrammetry, GIS, archaeology, technology.

### **Streszczenie**

*Celem niniejszego opracowania jest wzbogacenie dyskusji akademickiej na temat szeroko rozumianych “nowoczesnych” i “nowych” technologii w archeologii przez dodanie rzeczywistych faktów i danych*

*statystycznych dla poszczególnych założeń i twierdzeń krążących w środowisku akademickim. Ponadto podanie informacji, ile dokładnie, jakiego rodzaju badania miały miejsce w latach 2009–2014 oraz w każdym roku tego okresu, która metoda jest najbardziej popularne, oraz, jeśli zauważalne są jakieś ogólne tendencje w kwestii poszczególnych metod. Autorzy wykorzystują jako bazę do niniejszego studium obszar dziewięciu powiatów w centrum Mazowsza, zawierający statystycznie umiarkowaną ilość znaczących zabytków archeologicznych, gdzie jednak konsekwentnie duża liczba inwestycji prywatnych i publicznych powoduje stałą, wysoką liczbę projektów archeologicznych przeprowadzonych w ostatnich latach. Są one prowadzone w różnej skali od jednodniowych nadzorów archeologicznych do szerokopłaszczyznowych badań wykopaliskowych związanych z projektami drogowymi, obejmujących duże, dotychczas słabo rozwinięte obszary wokół Warszawy i są prowadzone zarówno przez lokalne zespoły, jak i jednostki archeologiczne z innych części kraju. Powtarzającym się czynnikiem jest prawie wyłącznie komercyjny charakter pracy, natomiast ważnym tłem jest swoisty „boom” na inwestycje infrastrukturalne w dużej mierze finansowane ze środków Unii Europejskiej będący wydarzeniem, które najprawdopodobniej nie zostanie powtórzone na taką skalę przez wiele kolejnych lat. Przedstawione tu dane pochodzą ze wszystkich raportów i dokumentacji terenowych [badań archeologicznych] zebranych na podstawie art. 31 ust. 3 ustawy o ochronie zabytków i opiece nad zabytkami za okres 6 lat (2009 – 2014) przez Mazowieckiego Wojewódzkiego Konserwatora Zabytków. Artykuł nie ma na celu omówienia jakości tych prac lub trafności wybranych metod dla projektów, w których zostały one wykorzystane – jest to sprawa dla innej analizy. Nie jest celem autorów kategoryzowanie, która z wykorzystywanych metod jest bardziej odpowiednia do użycia w ramach poszczególnych badań archeologicznych. Raport ten powinien być traktowany jako podstawa faktyczna dla przyszłych dyskusji i próba przedstawienia stanu polskiej archeologii w pewnym jej aspekcie.*

The subject, although very popular and widely mentioned in the academic discussion, remains elusive and not defined. There is no definition of „modern technologies“ in archaeology, yet almost every archaeologist active in commercial or research archaeology or working in heritage protection does insist that he or she is familiar with the term and current state of affairs. For the purpose of this paper, it has been decided, that the best approach is to present a list of most popular technologies and trace their usage (popularity) in a certain region and in a limited timeframe. The information gained should be up to date as much as it is possible, thus only newest projects would be taken into account.

The authors of this paper decided to utilize a unique opportunity created by their workplace. Masovian Voivodship Heritage Officer Office (WUOZ) is a government institution and a part of civil service in Poland, one of 16 such administrative bodies existing within the country. WUOZ is carrying out the duties of Masovian Voivodship Heritage Officer - MWKZ – a person who is personally responsible for protecting monuments in a Voivodeship. His or her duties are described in Polish Monument Care and Protection Act (Art. 89 and 91). MWKZ is, in turn, carrying out duties of Wojewode. There are many departments within WUOZ including Department of Archaeology.

Accordingly to Article 36.1.5 of Polish Monument Care and Protection Act (Dz. U. 2014 poz. 1446 ze zm.) WKZ through his office - WUOZ is, among other duties, issuing permits for every archaeological field research in given region (Voivodship or it's

part if a WUOZ delegacy is created in another part of the Voivodship). Thus the area subjected to this analysis is same as Central Part of Masovian Voivodship with the exception of Warsaw City Area and Żyrardów City Area and is constituted of 9 counties: Nowodworski, Wołomiński, Legionowski, Otwocki, Piaseczyński, Pruszkowski, Grodziski, Żyrardowski (Without the town Żyrardów) and Warszawski Zachodni.

It should be noted that the same Monument Care and Protection Act allows for WKZ to delegate some of his duties to municipal authorities thus local offices have been created by Warsaw City Hall, Żyrardów Town Hall and Nowy Dwór Mazowiecki Town Hall. These offices are responsible for care and protection of all heritage within their municipal borders accordingly to specific treaties signed with WKZ, with the exception of Nowy Dwór Mazowiecki where Archaeology has not become a part of municipal conservator Office responsibility but rather stayed with WKZ.

Archaeological fieldwork is only legal when it is conducted accordingly to a valid permit issued by WKZ specific to given area. Art. 31.3 of the same Act states that a set of documentation is to be deposited to WUOZ after each project. Thus, authors basic assumption is that WUOZ is currently in the possession of field reports and documentation from all research conducted in line with legal regulations within the area, thus the survey of these documents is bound to be as comprehensive as it is possible.

Timeframe to which the analysis is applied - a period of 6 years from 2009 to 2014 is a matter of - to some extent subjective - choice of the authors. Aforementioned Polish Monument Care and Protection Act gained legal power in late 2003 and thus by the year 2009 all research started with permissions issued on the basis of previous regulations would have had ended. Additionally years 2006 – 2008 mark a turning point Polish commercial archaeology. For the reasons that should be a matter for another article, Polish commercial archaeology market truly opened (for good and bad); the number of research has increased but at the same time drastically decreased the number of field projects conducted by traditional large research institutions like museums and University based Archaeology Institutes.

By 2009 already most of the field research was conducted by small private units very often employing just one person. This situation is still “standard” today in 2016. On the other hand, the year 2015 was hard, to sum up since some rare projects still continue today (early November) and the directors do have 6 months to submit documentation after the project is concluded. Authors decided also not to include all the projects for the period after 1989 in order not to be overwhelmed by the quantity of data.

Majority or data used for this particular study comes from reports and documentation of unpublished archaeological research. Although legally archaeologist conducting archaeological research is entitled to present (apart from initial excavation report and set of documentation) a written “study” of fieldwork results and archaeological material this is not the same as a scientific publication.

Reports submitted by different units are far from standardization (some units/institutions carry on their own standards) therefore it has been decided that when citing particular fieldwork we will refer to the administrative decision it was based on and AZP number of site the research was conducted on (if applicable), therefore citation will be uniform throughout the study. Also, copies of aforementioned decisions are accessible within our institution.

For the purpose of this paper, it has been decided, that the best approach is to present a list of most popular technologies and trace their usage (popularity) in described region and in a set timeframe.

Firstly, such a list of methods would by default be subjective since no legal/official definition of „new“ and “modern“ technologies in archaeology exists at the moment.

Appendix II to Ordinance of Minister of Culture and Heritage (14.10.2015) on carrying out conservation, restoration works, works, studies conservation, architectural studies and other activities at the monument entered in the register of monuments and archeological research (Dz. U. 2015 poz. 1789.) is describing what archaeological documentation is constituted of.

Unfortunately, this document, which currently is also a legal base for administrative work regarding archaeology, does not mention any of “modern methods” listed in this article or any modern methods at all. This situation leads to one major implication – all of the attempts at using methods listed in this article are until now by default more than legally enforced standard and somewhat voluntarily conducted by an archaeologist or were specifically called for by MWKZ in earlier stages of the administrative process.

Authors of this article decided that a most comprehensive list would be built by tracing subjects and methods discussed during most recent Computer Applications and Quantitive Methods in Archaeology Conferences (see Campana, Scopigno, Carpentiero & Cirillo 2016). This is especially important when one takes into account that CAA has an active Polish Chapter which focusses the attention of those interested in using and promoting different modern methods in Polish archaeology.

As a basic rule, it has been decided to take into account those methods which can be applied to archaeological fieldwork. It has been decided not to take into account work done within museums, on private collections and work conducted via Internet only.

Thus, following methods/research fields have been selected for monitoring:

1. Drone(s)
2. Near Infrared, UV, Hyper Spectral, Multispectral photography
3. LiDAR (ALS)
4. Terrestrial Laser Scanning (TLS)
5. Photogrammetry

6. XRF, pXRF
7. GPR and other geophysical methods
8. Virtual and Extended Reality
9. Databases (other than spreadsheets)
10. Reflectance Transformation Imaging (RTI) and Polynomial Texture Mapping (PTM)
11. Orthophotography
12. Paperless Archaeology Approach
13. Geographical Information Systems (GIS)
14. Experimental Archaeology and Reenactment as part of archaeological research
15. Computer tomography (CT) and X-Ray (Roentgen) Imaging
16. Metal detectors
17. Physico-Chemical sampling and Analysis (inc. C14)
18. Environmental Sampling
19. Online data repositories and data sharing
20. Computer Aided Drawing (CAD) and other vector based scalable drawing documentation

In 2009 – 2014 period ca. 1500 administrative decisions regarding archaeological research were issued; no less than 1243 out of those were valid research permits for archaeological research. In 445 cases neither initial report nor documentation was presented to MWKZ. Main reasons for this state of affairs are in descending order:

1. Archaeological research has not had started within deadlines stated in the permit and the permit lost legal power. Another administrative decision would usually be issued in such case but only on request.
2. The archaeological research did not take place because of investors decision to resign from planned investment or postpone it beyond the 2009-2014 timeframe.
3. Research did take place but archaeologist and investor failed to comply with their legal obligation to provide report and documentation to WUOZ after research.
4. Investment did take place but investor despite holding valid research permit did not inform the archaeologist in time<sup>1</sup>.

Failure to provide the field report or documentation is a subject of further administrative actions not related to the main subject of this paper. Of 1243 research permits 1% were issued by MWKZ for given area for academic research. The rest is constituted of watching briefs and excavations related to changes in land use (real

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1 Possible in case of watching briefs. It is important to note that in Poland it is investor who is choosing the archaeologist conducting the research before investment. It is also the investor who is issued with the permit for the research, when permit is requested and legal criteria have are met.

estates, roads and other types of construction work). All academic research with valid permits was carried out fully or partially and field reports have been provided (but not all the documentation) for these projects to WUOZ.

Drones – unmanned/remotely controlled or programmable aircrafts have recently found their place in archaeological prospection and documentation of archaeological excavations (see in Prentis 2016; Musson, Palmer & Campana 2013).

Traditional aerial photography is still a go-to method in Polish archaeology in this regard. Also, legal solutions regulating the use of drones in Poland appeared just recently (September 2016). In study area in 2009 – 2014 we can confirm 2 cases of the usage of drones (Decision No 278/2012 from 29.03.2012, AZP 61-66/23 and No 280/2012 from 30.03.2012 AZP 59-61/131;)

Drones, when used in archaeology in Masovia are used on very small altitudes – up to ca. 50m. Usage of drones is an area that, the authors of this paper believe, will grow and become more important in near future. It is an educated guess based on archaeological work being conducted in 2015 and 2016.

Near Infrared, UV, Hyper Spectral, Multispectral photography are popular and very effective tools in archaeological prospection and also play a very important part in the documentation of some of archaeological artifacts and monuments (see in Limp 1989; Wiseman & El-Baz 2007). There is no evidence for use of either of these methods during fieldwork in the study area in 2009 – 2014 period. It is possible that archaeologists potentially conducting research using one of these methods simply failed to mention it in report or report has not been submitted, but it is highly unlikely.

LiDAR (Light Detection and Ranging) also known as (ALS) Airborne Laser Scanning is a recently developed tool used in archaeological prospection across the globe, with great success since early 2000's (Crutchley & Crow 2009; Kamermans, Gojda & Posluschny 2014; Cowley & Opitz 2012; Gojda & Kol 2013). There is no evidence for use of LiDAR during fieldwork in the studied area in 2009 – 2014 period, with one exception.

At the end of 2014, a project conducted by Institute of Archaeology and Ethnology of Polish Academy of Science (Project "Archeologiczne Przywracanie Pamięci o Wielkiej Wojnie"), related to surveying and research of WWI remains has been started. Within the project, LiDAR analysis as a research method is used extensively. The project is still in progress.

MWKZ is actively promoting the method. Some research has been done in 2016 or it is scheduled to be conducted in 2017 due to WUOZ guidelines regarding the planning of new road projects (A2, S79, S8)<sup>2</sup>.

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2 Additional information, training and guidelines on LiDAR, aerial photography, geophysics and multispectral imaging is available via <http://www.arcland.eu>

Terrestrial Laser Scanning (TLS) is a method widely used in documentation of historical architecture and standing archaeological monuments, it is often used during excavations when complex architectural remains are uncovered (Barber & Mills 2011). There is no evidence for use of this method during fieldwork in the studied area in 2009 – 2014 period. It is unexpected since the method is known and widely used in the urban excavation for example in the city of Warsaw, Poznań or Gdańsk.

Photogrammetry is a science of achieving metric information from photographs. Photogrammetry was used in archaeology and heritage management since XIX century, yet at the beginning of XXI century, it is reliving it's renaissance, courtesy of digital cameras and advances in computer software and hardware.

Photogrammetry in its SfM version (Structure from Motion) is currently possibly the most popular method of 3D documentation in archaeology (Remondino & Campana 2014).

This particular method of research is confirmed in case of excavations in Nowe Grocholice (permits No. 601/2013 from 31.5.2013, 663/2013 from 14.6.2013 and no. 1102/2013 from. 27.09.2013, AZP 59-65/12) where evaluation trenches have been set in October 2012 and full-scale excavations conducted on the whole site in spring and summer 2013 before the construction of S-8 road. Photogrammetry has been used to document parts of excavation area as well as single cremation burial in-situ. It is important to note that initial results were obtained with use of a web-based app - 123D Catch - rather than a specific program. Some work has been also conducted on site AZP 53-66/14 Nieporęt (permit no. 288/2011 from 30.03.2011) during the aforementioned survey.

Employees of MWKZ frequently use photogrammetry since 2013 and amount of documentation created with this method within WUOZ surpasses by far all the combined efforts of private archaeologist within the study area (Wiśniewski 2015).

XRF, pXRF are methods of chemical composition measurement and as research methods in archaeology are well documented. XFR is based on the emission of characteristic fluorescent x-rays from a material that has been excited by bombarding with high-energy x-rays or gamma rays. Used for elemental analysis and chemical analysis (see: Sugar & Mass 2012). Polish Archaeologists are not shy from using them in their research (Riegert, Konopka & Kobylińska 2012; del Hoyo-Meléndez, Świt, Matosz, Woźniak, Klisińska-Kopacz & Bratasz 2015) but majority of analyses is either conducted within museums or by Polish specialists on archaeological missions abroad. There is no record of such analysis conducted in field research in Central Masovia. It is possible though, that some of the material excavated will be subjected to analysis in the future since this method does create an opportunity for this.

Ground Penetrating Radar (GPR), as well as other methods of geophysical prospection, are considered standard tools in archaeological prospection of known

sites. Also sometimes these methods are used in order to find previously unknown archaeological sites in areas of archaeological interest. These research methods have substantial literature (compare: David, Linford, Linford, Martin & Payne 2008; Conyers 2012; 2013; 2016; Misiewicz 2006). Different methods of geophysical prospection known and have been used in time period of 2009 – 2014 no less than 3 times. Results come from Cieciszew, (site AZP 60-68/7, permit no. 982/2013 from 29.08.2013) and Arciechów (site AZP 51-67/35) where both electro-resistivity and geomagnetic method have been used. But in both these cases, the survey has been ordered (and paid for) by MWKZ. Also on site AZP 53-66/14 Nieporęt (permit no. 288/2011 from 30.03.2011) during aforementioned survey GPR reconnaissance has been conducted. Other projects utilizing such methods were conducted outside our research area of nine counties. The year 2016 has already generated no less than 3 such projects but data is not yet ready for analysis.

Virtual and Extended Reality are usually seen as methods of disseminating knowledge and presenting fieldwork results (see Barceló, Forte & Sanders 2000; Eve 2012). Their worldwide popularity and hidden potential have caused their inclusion into this study. Unfortunately, neither has been used in fieldwork in the study area in 2009 – 2014 period.

Databases (other than spreadsheets) also have not been used in fieldwork in the study area in 2009 – 2014 period. Quantities data is gathered and recorded in analog form or in excel spreadsheets (if digitally). This is particularly surprising since there is a wide selection of database tools and solutions and benefits of using databases especially during large projects are innumerable (compare Karamalis 2008: 7).

Reflectance Transformation Imaging (RTI) and Polynomial Texture Mapping (PTM) has not been used in fieldwork in the study area in 2009 – 2014 period. From authors personal sources it is known that at least one of the archaeologists working within the studied area is also conducting such documentation, but only while working in Egypt, not in Masovia, Poland.

Both methods are very similar in their premise allowing to view objects under “varying” lighting conditions to reveal surface phenomena and are to some extent similar in execution to photogrammetry (see Earl, Martinez & Malzbender 2010; Duffy 2013). Both of these methods show in authors’ opinion great promise in Masovian archaeology and could be easily implemented<sup>3</sup> only if the archaeological community decides to make the first step.

Orthophotography is largely connected to photogrammetry and requires similar to it work regime (see Verhoeven, Sevara, Karel, Ressler, Doneus & Briese 2013).

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3 Additional information, training and guidelines on RTI is available through <http://culturalheritageimaging.org> website.

Therefore it often accompanies photogrammetry as a documentation method used on the same project. Five cases of the use of ortho-imaging during the archaeological investigation have been confirmed. Aforementioned projects in Nieporęt and Nowe Grocholice have brought ortho-photographic documentation but also in Jesówka, AZP 61-66/46 (permit no. 477/2011 from 29.04.2011) during 2011 excavations or in Raszyn (permit no. 944/2012 from 12.09.2012) during archaeological-architectural research and conservation work in XVIII century “Austria” this method has been successfully implemented.

It is already known that archaeological research connected with S-8 road scheme (2015 and 2016) did increase the amount of such documentation. Method dimed to be popular among Polish archaeologist has been registered in less than 1% of conducted research.

Paperless Archaeology - Approach and Paperless archaeological documentation as an idea<sup>4</sup> is absent in study area in 2009 – 2014 period. Some may argue that the very definition is against current legal regulations (aforementioned Ordinance of Minister of Culture and Heritage of 14 October 2015 on carrying out conservation, restoration works, works, studies conservation, architectural studies and other activities at the monument entered in the register of monuments and archeological research specifically lists that drawings and context sheets are to be made among other forms of the documentation). Nevertheless no attempt has been made to even propose such approach to MWKZ in a research application.

Geographical Information Systems (GIS) - possibly the most important “modern” method of archaeological research, analysis and documentation are almost absent in study area in 2009 – 2014 period (5 cases). Aforementioned projects in Nieporęt and Geophysical Surveys in Arciechów and Cieciszew presented data in GIS-ready form, and IAE PAN project (Bolimów) is using GIS but there is, in general, no GIS tradition despite the fact that the method does not require major investments and is applicable to almost any form of archaeological research (compare Conolly & Lake 2006; Streatfeild-James 2016). What is worth noting is GDDKiA<sup>5</sup> system of soil classification, which requires spatial analysis and vector data. This data is being prepared in form of printouts and presented to MWKZ but again it is not used further as a base to build upon and often stands on its own apart of archaeological drawing created manually on paper. Often, if data is presented during any research, vector form it is simplified to .pdf, printed or given as .CDR file; .shp files are a true rarity.

Experimental archaeology and reenactment has not been a part of archaeological fieldwork in the study area in 2009 – 2014 period and although many among

4 <https://paperlessarchaeology.com> is a valid source of information for anyone interested in the method.

5 The central administration authority for issues related to the national road system.

archaeologist working within the area are actively engaged in reenactment groups and participate in fairs and festivals this aspect of work in all cases is not connected to their fieldwork. Thus there are no open days during excavations and archaeological experimentation is limited in Masovia. Similarly, Computer Tomography (CT) and X-Ray (Roentgen) Imaging has not been a part of archaeological fieldwork in the study area in 2009 – 2014 period<sup>6</sup>.

In study area in 2009 – 2014 period metal detectors have been used. No less than 29 preliminary reports confirm that this tool was a part of the research process. Unfortunately, two problems arise. Firstly MWKZ has reasons to believe that this number (29) does not represent all the cases where the metal detector was used and secondly our case study does not reveal anyone developing a true research method involving metal detectors nor have adopted such method developed in other parts of Europe (or world). Use of metal detectors leads to increase in a number of metal finds during excavations but in our case these finds most of the time carry label “topsoil” without additional information or spatial analysis. Metal detectors are by far the most popular method used in this study but we have to reconsider whether in the current form of their use they are still a part of a scientific method. Many archaeologists use it at their own discretion (Archaeological projects conducted legally often use metal detector as a “backup” – a tool for retrieval of those metal artifacts which could be missed during excavation process especially during topsoil stripping) as they would a pencil or a camera but where the use of pencil leaves a trace in form of a drawing and use of camera produces a set of photographs metal detector requires additional policy for recording the results. GPS devices, GIS tools and plotting the artifacts are obvious choices but are rarely used in conjunction with detectors - so rarely that there are no examples within the study area in 2009 – 2014 period.

A metal detector is a controversial tool in polish archaeology. The device is present in polish archaeological research since the 1980s but it is more famous for its use in illegal “treasure hunting” where non-archaeologists (and unfortunately sometimes also archaeologists) conduct random sweeps of parts of landscapes rich with archaeological and historical artifacts. The impact of this method in archaeology is a source of constant concern in Polish archaeology as it is throughout Europe (see Thomas & Stone 2009). For good and for bad (and ugly) metal detectors change archaeology and affect historic landscapes.

Physico-chemical sampling and analysis (inc. C14 but other than XRF, pXRF). There are seven cases where such methods have been used and their use has been confirmed in reports (Nadma permit no. 1236/2014 from 27.10.201, AZP 54-68/57;

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6 To the authors knowledge, a substantial amount of work is beeing currently done within the museum collections in Warsaw and surrounding counties (personal communication).

Czersk, permit no. 849/2009 from 3.8.2009; Adamów, permit no. 1197/2007 from 24.08.2007 and permit no. 271/2008 7.3.2008 on AZP 58-62/1; Adamów, permit no. 1284/2008 from 2.10.2008, AZP 58-63/56; Góra Kalwaria permit 563/2014 [8 sites]; Nieporęt, permit no. 258/2012 from 22.03.2012, Sigismund III Waza Manor House/residence; S-8 road Paszków - Opacz, permit no. 1012/2012 from 25.09.2012, several sites). More results are on the way due to work done in 2015 and 2016 but the results have not been made accessible in full yet. Authors main concern is that this number (7) still does not represent full 1% of conducted research despite the fact that physico-chemical sampling and analysis may be viewed as one of the basis of archaeological investigation (see Rink & Thompson 2015; Pollard 2008).

Environmental sampling is a term describing various techniques used to recover, quantify describe and analyze vertebrate remains, macroscopic plant remains, wood and charcoal, pollen and spores, insects, snails and shellfish, parasite eggs and cysts, phytoliths, starch granules, foraminifera, biomolecules, soil micromorphology etc (compare Campbell, Moffett & Straker, et. al. 2011; Canti, Heathcote, Ayala, Corcoran & Sidell 2015). There are twelve cases where such methods have been used and their use has been confirmed in reports (aforementioned Czersk; Michałowice Wieś, permit No 602/2013 from 31.05.2013, AZP 58-65/17; and again the same site on permit no 1101/2013 from 27.09.2013; aforementioned Sigismund III Waza Manor House research in Nieporęt; Pruszków, permit No 909/2014 from 11.08.2013, AZP 58-64/8 [enforced by MWKZ during research]; aforementioned S-8 Paszków – Opacz project; and later five sites from this project researched separately – Puchały permit no 599/2013 from 31.05.2013, AZP 58-65/52; Nowe Grocholice, permit No. 601/2013 from 31.05.2013, No. 663/2013 from 14.6.2013, and 1102/2013 from 27.09.2013, AZP 59-65/12; Wypędy, permit No. 603/2013 from 31.05.2013 and No. 1082/2013 from 23.09.2013, AZP 59-65/11; Stare Babice, permit No. 358/2012 from 20.04.2012, AZP 56-63/11, nr AZP 56-63/27 and nr AZP 56-63/53;

Online data repositories and data sharing as an idea are absent in studied area in 2009 – 2014 period. Although individual archaeologists do share their publications using widely known websites like academia.edu or researchgate.net sharing unpublished data is generally unpopular in academia but in the case of commercial archaeology, it could be taken into consideration especially since many among archaeologist have no intention to publish their results. Online data repositories should be seen so far in Masovian archaeology as an interesting premise but one, which was never (so far) considered by the archaeological community.

Computer Aided Drawing (CAD) and other vector based scalable drawing documentation. Similarly to metal detectors, CAD applications are more a tool than a research method (see Andrews, Bedford & Bryan 2015). Within researched

area and period it is possible to confirm 133 cases of use of CAD like application. One general issue is the medium in which the documentation is submitted – print. MWKZ is rarely handed original .dxf or .dwg files. In most cases, files are printed to .pdf format or physically printed on paper. It is not against current legal regulations but limits the usability of such documentation and prohibits MWKZ from including this kind of documentation into GIS database.

The second issue is connected with specific types of use of CAD in archaeology – quality of work is varying from one individual to another. CAD is often used in a most rudimentary way as a method of digitalizing manual drawings done in the field. In authors opinion, CAD is a method where a great potential is wasted. It is important to note that digital files with .cdr extension accompanied no less than 56 reports from the researched area, from the period of 2009 – 2014. Corel Draw is the most popular non-CAD application for vector graphics in archaeology in the study area. This situation also creates problems. Regardless of the quality of the program itself and quality of drawings .cdr files are proprietary thus use of these files is limited. Secondary the files specifications can change with next versions of the program and thus older documentation is even more difficult to access. Also, in light of this study, it is important to note that when dealing only with paper prints it is very difficult to decide whether drawing has been created in AutoCAD or other CAD application, CorelDRAW or other vector graphic programs. Thus authors apologize for any possible inaccuracy in data cited in the last paragraph.

Conclusions after revising available data – 798 field reports - are not optimistic. While all academic research projects within studied area in the 2009 – 2014 period incorporated one or more of above-mentioned methods one has to remember that purely academic research constitutes ca. 1% of all research done in central Masovia. One can argue that within commercial part of Masovian Archaeology “modern” methods are virtually non-existent since only environmental sampling has been used as a method in more than 1% of projects and most popular metal detectors and CAD applications are more tools than research methods.

The most obvious reason for current situation would appear to be so-called “cutting corners” due to a very small profit margin, low price race and lack of business background among archaeologists - small archaeological units (it has been suggested that polish commercial archaeology is done by ca. 500 individuals employed by ca. 350 private archaeological units other than museums and universities<sup>7</sup>) are unable to invest in training, hardware, software, and data. And it is small archaeological units that dominate the market at the moment. One should also notice the lack of promotion

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7 Information from paper “Zawód archeologa w Polsce. Stan obecny i perspektywy” presented by A. Jaszewska and H. Pilcicka-Ciura during session 11 of first Congress of Polish Archaeology, Warsaw 19-21. 09.2013. Unpublished.

of modern technologies in the most universities' programs and foremost lack of legal solutions enforcing and/or promoting new/modern methods in archaeology.

Commercial archaeology is focusing on achieving legally required minimum. This minimum is unfortunately also a current standard. In authors' opinion, it should be our common goal as a professional community to heighten this minimal level by promoting modern methodologies to lawmakers since only legal regulations are enforceable on investors and contractors. One should also notice that it is individuals who generate most work in the area of "modern methods in archaeology"; the majority of archaeologists does not use any "new" method bar digital photography. In this respect, we should remember that new generations of archaeologists - those studying now - live in a digital culture since school. It is authors' hope that for "them" some "modern methods" in archaeology will be a natural choice in the same manner in which digital photography is a natural choice for photographic record.

A good parallel to this is a digital transition in photography. In this regard, world did not wait for archaeologists to decide whether digital photography is an acceptable method of documentation. Within last 15 years, digital photography has steadily become more popular to the point in which it is almost the only option for photographic recording in archaeology (with film and professional photo labs becoming increasingly more difficult to locate). This process took place regardless of the opinion of the archaeological community. Similarly, some of the discussed methods may become widespread and popular outside archaeology due to rapid sociological, economical and technological changes of present time. Drones, photogrammetry, virtual and extended reality, databases, paperless data acquisition, GIS and online data repositories are already a popular part of our everyday lives outside archaeology.

It is the authors' believe that change will come, remains only the question for Polish commercial archaeologists whether they are, as a community, willing to participate in bringing it forth or rather to be "dragged" into it by the rest of the world with the help of their colleagues from Academia.

This paper has been presented during TH2-10 session of EAA conference in Vilnius. Session "After 1990: a turning point in the guiding principles of rescue excavations and its impact on scientific research" was aimed "to discuss changes in archaeology before and after 1990" which was unfortunately not feasible for the authors of this study due to the amount of data. For the reasons outlined in the beginning of this paper, authors decided to evaluate 2009 – 2014 period but this work may be continued. In authors opinion, next stage of research is to incorporate data from other periods for the same area. We have so far not committed ourselves to this task, but knowing the subject can outline these proposed timelines to investigate. In authors' opinion one should investigate following periods: Before WWII and WW II; Past WWII until 1962 [first monument protection act established], 1962 until 1975 [territorial reform

in Poland]; 1975 until 1989 [regime change in Poland]; 1989 until 1999 [territorial reform in Poland]; 1999 until 2003 [current monument protection act established]; 2003 until 2009 [early commercial archaeology in Poland] and - Past 2014.

Authors' educated guess is that the amount and quality of projects using "modern" methods have fallen after 1989 and especially in the 1990s but it is also our feeling that we have reached a stable base from which Polish archaeology can only go "upwards". Computer methods, Internet, and a new generation of archaeologists show a great promise for the future. And new projects conducted in 2015 and 2016 are something that authors are looking forward to seeing completed.

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## The System of Organisation of Czech Archaeology and the Protection of Archaeological Heritage

*Jan Mařík*

### ***Abstract***

*The first legal measures for the protection of archaeological finds in the regions of Bohemia and Moravia (the historical regions of the Czech Republic) were already taken in the first half of the 19<sup>th</sup> century. The real regulation, however, arrived only with the state decree issued in 1941. The current law entered into force in 1987. The fundamental political, as well as social transformations that occurred in the Czech Republic two years later brought much higher demands on conducting rescue archaeological fieldwork. Even though the law was created in the conditions of Real Socialism with the centralized and state-subordinated economy, it is still, after more than twenty-five years, valid and applied in a democratic state and in free market conditions. Adaptations of the law in the new social and economic conditions were in most cases adopted with the approval of all involved parties. A series of regulations has been adopted that are more-or-less generally respected. Though the regulations are, generally, respected, their real enforcement still relies more on moral and ethical appeal rather than on the word of the law.*

**Keywords:** *legal acts, Czech Republic, archaeological heritage protection, contract archaeology*

## Introduction – Pre-WWII foundations

Foundations of the current archaeological heritage protection system were laid in 1919 when, shortly after establishment of the independent state of Czechoslovakia, the State Archaeological Institute was formed in Prague. This new state institution was subordinate to the Ministry of Education. Its major aim was conducting systematic archaeological fieldwork, focusing mainly on more extensive excavations that were beyond the capacities of regional museums. The State Archaeological Institute was intended as the leading authority in the field of quality of scientific work, and its tasks was also included the education of amateur associates in the archaeological departments in individual regional museums (see in Niederle, 1919).

However, in the period between the two World Wars, these goals were only partly achieved. The development of the Institute was significantly restricted due to two major factors: a shortage of funds prevented the employment of a sufficient number of specialists, and an absence of a legal framework, which would determine not only regulations for conducting archaeological fieldwork and treatment of archaeological finds, but also the status of the Institute. The level and quality of archaeological work remained rather low, and it was mostly due to the numerous enthusiastic amateurs, museum collaborators and various brief reports in the daily press that new discoveries were presented.<sup>1</sup>

### State Decree Nr. 274/1941

In spite of the gradual increase in the number of archaeological excavations since the 1930s (see Sklenář, 2011: 47), a law which would consolidate the approaches of participants dealing with archaeological finds, was not adopted during the entire interwar period. Among the most vociferous opponents to any regulation regarding archaeological fieldwork were mainly private collectors, who also quite often conducted excavations themselves. The State decree Nr. 274/1941 represented, in this respect, the principal turning point, since it also provided, among other things, the first legal definition of archaeological finds and clarified the status and tasks of the State Archaeological Institute. According to this law, the Institute was the only organisation that was legally entitled to conduct archaeological fieldwork and was also appointed as the major institution for the protection of archaeological monuments. Museums had frequently conducted archaeological excavations in the past, and could continue their activities, but only with the approval of the State Archaeological Institute, but

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1 Based on these fragmented and widely scattered reports, an archive was gradually built up in the Institute, until it subsequently became the most extensive professional (archaeological) archive in the Czech Republic (see in Rataj et al. 2003).

they had to employ professionally educated archaeologists. The decree also specified that the owner of archaeological finds, obtained in the course of archaeological fieldwork, is the state (at that time the Protectorate of Bohemia and Moravia).

Nevertheless, the mainsprings behind this decree are still not completely understood. From the historical evidence, it may be concluded that the Protectorate government probably followed similar ideas and intentions to those of the Dutch state, which passed similar Decree in 1940 (see Willems, 1997). Thus, the State Archaeological Institute that was not completely controlled by the Nazis, unlike the University in Prague, obtained some legal means allowing a certain degree of supervision over archaeological works of the German occupying power and its organisations such as e.g. Ahnenerbe (Vencl 2002).

### **Post-WWII development – Act Nr. 20/1987 on state landmark conservation**

The provisions of the State decree Nr. 274/1941, regarding archaeology, were almost completely adopted in the new monument protection law (Act Nr. 22/1958 on cultural landmarks) in 1958. The only significant changes that have appeared since are those Act Nr. 20/1987 on state landmark conservation, which is still in force. The law was regarded as being very modern at the time of its adoption. It actually included several elements that were stipulated in the Valletta Convention, which was accepted five years later, in 1992 (see more in Mařík & Prášek, 2014).

The authors of the law could not predict the major political and economic transformations in the Czech Republic after 1989, and fall of the Communist regime. Paradoxically, a law created in the conditions of the totalitarian state suppressing all private civil and business activities, is still in force, after almost thirty years of democratic government and market economy. Despite a series of attempts to pass a new legal norm, only several partial amendments (mostly technical) have been adopted. Though the law was progressively adjusted to new social conditions, its limits have gradually become increasingly more visible, the foremost being weak control and sanction measures.

### **Institutes of Archaeology**

In 1953, the State Archaeological Institute lost its 'state' designation and became the Institute of Archaeology incorporated into the newly established Academy of Sciences of Czechoslovakia, which centralised the majority of non-university research institutions. According to the 1987 Act, the Institute still has, in some respect, the position of the state administrative authority. All information regarding archaeological

fieldwork from the moment when application for development that could threaten archaeological finds, from reporting the launching date of the excavation to the final excavation report<sup>2</sup>, are all addressed to the Institute of Archaeology. The Academy of Sciences also obtained new powers: it is the only institution with the authority to submit proposals for designation of an archaeological site or a significant find as cultural monument, and it has the power of veto in the process of obtaining a license for conducting archaeological fieldwork.

The original detached departments of the Prague Institute of Archaeology were gradually transformed to individual Institutes of Archaeology in Brno (1983) and in Nitra in Slovakia (1953). Currently, two Institutes of Archaeology are active in the Czech Republic, the Prague Institute in Bohemia and the Brno Institute in Moravia and Silesia. Both Institutes are independent and have equal legal status.

Even though the territorial division is based on good reasons, there are some serious problems in the practical fulfilment of obligations required by the law. Probably the most significant case is the absence of a unified information system for recording archaeological fieldwork and its results.

Currently, the Institutes of Archaeology and the Czech Academy of Sciences are often criticised for their role in the process of granting licences for archaeological fieldwork, as being in a conflict of interests, obstructing free competition and distorting the market environment. This criticism, however, is based on a misunderstanding of the existing archaeological heritage law and also ignores some other legal regulations. Relations of the Institutes of Archaeology with other authorised organisations can be characterised as 'primus inter pares'. According to the law, the Institute of Archaeology is the only organisation directly entitled to conduct archaeological fieldwork, while licences to other organizations should be granted only in the case of need. The supposed application of free market principles (i.e. commercial archaeology) also represents a problematic issue. Archaeological fieldwork is not considered a business enterprise according to the Trade Act and it is not permitted to generate profit.

## **Licensing and licenced organisations**

In addition to the Institutes of Archaeology, other organisations or natural persons (individuals) are also entitled to conduct archaeological fieldwork, based on the authorization (licence) issued by the Ministry of Culture of the Czech Republic. To obtain the licence the applicant has to employ at least one person with an MA

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2 Obligatory structure of the Excavation report: [http://www.arup.cas.cz/wp-content/uploads/2010/11/Osnova\\_NZ\\_2008.pdf](http://www.arup.cas.cz/wp-content/uploads/2010/11/Osnova_NZ_2008.pdf).

degree in archaeology and a minimum of two years of working experience. The applicant also has to meet some other conditions, such as suitable facilities for the temporary storage of archaeological finds, and other equipment. However the latter is not specified in the Act.

Unlike the situation in other countries, the National Heritage Institute does not have such an important role in the organization of archaeological heritage management. The National Heritage Institute was founded by the Ministry of Culture as an expert institution, which primarily takes care of protected monuments, maintenance of inventories and preparing of expert opinions. As such it has no executive powers.

The licence to conduct archaeological fieldwork can be issued by the Ministry of Culture of the Czech Republic only upon the approval of the Czech Academy of Sciences. Approval of the Czech Academy of Sciences represents one of the most powerful regulatory measures that can influence authorisation. In its decisions, the Czech Academy of Sciences takes into account two major factors: the scientific intent of the organisation (mainly in the case of the university departments) and if there is a need for another licensed organisation in the system of archaeological heritage protection. New

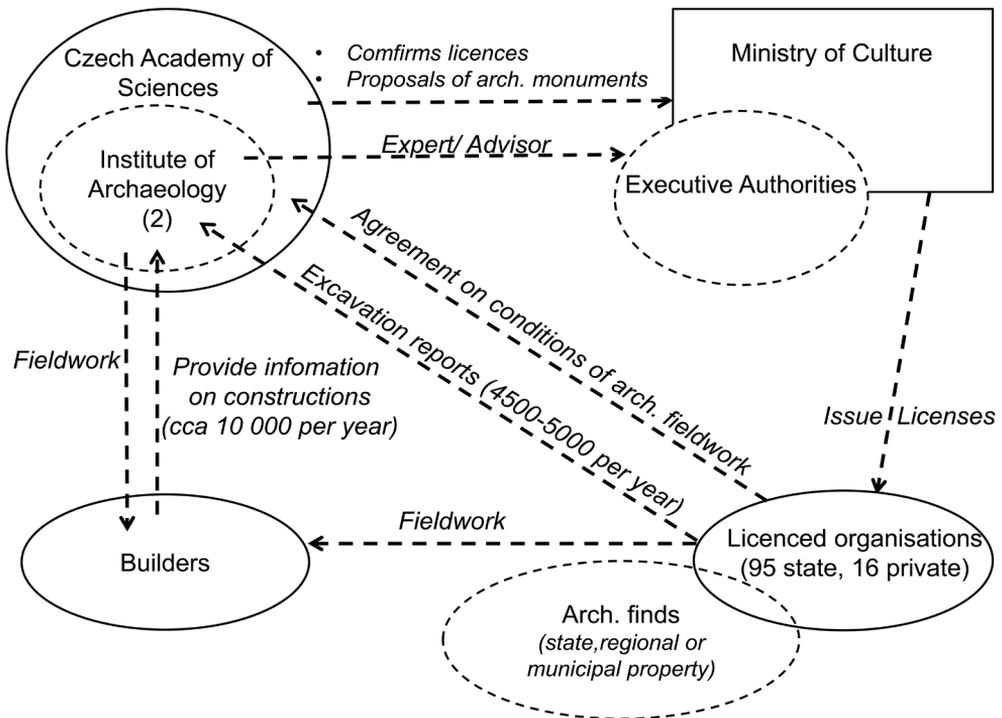


Fig. 1. Organisation of archaeological fieldwork in the Czech Republic.

licences are issued mainly for Regions where development activities and other interventions (e.g. coal mining, forest cultivation, specific agricultural works...) threaten archaeological heritage and there is not enough archaeological capacity to meet the demands for preventive works. Since, according to the law, archaeological fieldwork cannot be a profit-making activity, the licences are issued only for non-profit organisations.

When the applicant obtains the licence, he is obliged to make an agreement with the Czech Academy of Sciences, which specifies the conditions and extent of archaeological fieldwork allowed. This agreement usually designates the specific geographic area (district, region) where the licensed organisations are entitled to conduct the excavations. This agreement also specifies in more detail other obligations of the licensed organisation, which are only generally described in the Act (e.g. the responsibility for Excavation reports, which are then archived in the Institutes of Archaeology of the Czech Academy of Sciences) (Fig. 1).

Termination of the agreement by the Czech Academy of Sciences and, consequently, the revocation of licence, represent the only real sanctions. In practice, however, these terminations occur very rarely and only in the cases of long-lasting and repeated violations of the agreement by the licensed organisation. It should be also noted that almost no immediate sanctions for poorly conducted archaeological excavations exist.

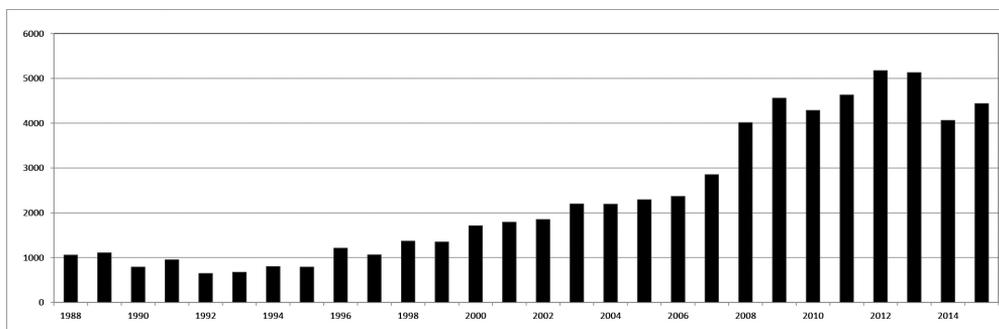


Fig. 2. Participation of licensed organisations on archaeological fieldwork in the Czech Republic since 1988.

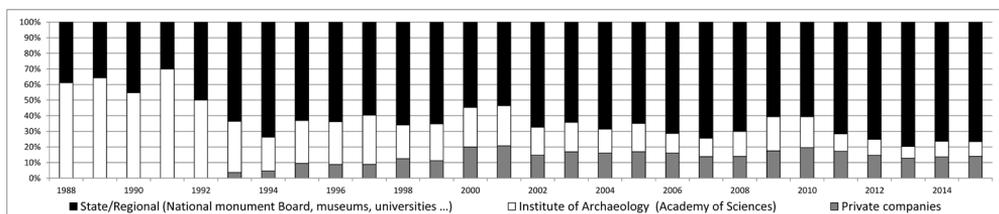


Fig. 3. Number of archaeological fieldworks in the Czech Republic since 1988.

The rather rapid development of private enterprises that occurred in the 1990s was associated with significant increase in development activities, which could not have been met by the state heritage protection organisations. The emergence of private enterprises to fill this gap was a logical solution in such situation (Fig. 2). Thus, private societies have gradually become an integral part of the system of archaeological heritage protection. In the last years, their annual share in the volume of archaeological excavations conducted has reached the level of 15–20 percent. However, the majority of excavations are still mainly conducted by regional museums (Fig 3). Altogether, 111 licensed organisations exist in the Czech Republic, of which 15 organisations have status of private enterprises.

### Conducting the archaeological fieldwork

Since the 1990s most of the archaeological departments of regional<sup>3</sup> organisations (museums and departments of archaeological conservation) were almost completely dedicated to development-led investigations. There has been a fourfold increase in the number of archaeological investigations since the end of the 1980s. Such a transformation of the social environment could not have been anticipated by the authors of the 1987 Act. In fact, the Act was relatively benevolent regarding the description of methods used in rescue excavations, with no strictly defined terms, rights and obligations and, last but not least, with a minimum of sanctions.

According to the Act, the archaeological excavation is initiated by a notice released by the developer wishing to develop within the ‘area with archaeological finds’ (legal term in the Act<sup>4</sup>). The notice should be delivered to the responsible Institute of Archaeology of the Czech Academy of Sciences, in Prague or Brno. Even though definition of the term ‘area with archaeological finds’ is not included in the Act, in practice, a relatively extensive reading was applied: it represents an area where the occurrence of archaeological finds cannot be completely excluded, such as in the case of the open cast mines and similar areas (they do not represent an ‘area with archaeological finds’).

The obligation to announce any intervention in the ground is one of the positive characteristics of the otherwise outdated law. Although it is often overlooked by builders, more than ten thousand interventions in the ground are announced each year. Not all of the interventions develop into more extensive archaeological fieldwork.

3 Czech Republic is divided in higher-level territorial self-governing units, thirteen regions (kraje) and one capital city (hlavní město).

4 It is not only land with positive evidence of archaeological finds but also land where archaeological finds cannot be excluded.

Archaeological finds are discovered only in 15-20% of cases. The remaining part is recorded as archaeological fieldwork with negative results. The data obtained can also be used in local planning or in verifying the risks of the encountering archaeological finds by private or public developers.

Due to rather limited capacities of the Institutes of Archaeology of the Czech Academy of Sciences notices are frequently transferred to licensed organisations active in the given regions. Notices regarding building and other activities, conducted in areas with archaeological finds that were submitted either to the Institutes of Archaeology of the Czech Academy of Sciences, can be accessed by any licensed organisation on the Internet portal The Internet Database of Archaeological Fieldwork (IDAF) (see in Mařík (2015)).

Based on the notice, the Institute of Archaeology or any other licensed organisation can sign a contract with the developer for conducting rescue excavation. The licensed organisation is obliged to report the starting dates of excavations to the Institutes of Archaeology and, consecutively, also to deliver Excavation report.

Contracting parties for rescue excavations are, according to law, the developer and authorised archaeological organisation. When the agreement cannot be reached then the right to determine the conditions for rescue works is passed to the responsible regional authority. In practice, this is very rarely the case because the involvement of the government may cause several months of delays. Once the contract is signed, the state cannot control its implementation, what may have many negative effects and consequences.

Although the conduct of archaeological fieldwork cannot be considered business enterprise, the costs of archaeological fieldwork play a key role. Price dumping and underestimated costs frequently occur. As a result, there may be a reduction in quality of the fieldwork or an escalation in the costs during the fieldwork campaign. On some large scale development-led projects in the last three years, up to a threefold increase in the originally calculated costs has taken place. The situation was not caused, by rare finds, but due to the abuse of circumstances, when the developer was under considerable time pressure and was forced to accept the unethical approach of the other side. The absence of enforceable rules and effective supervision in the course of archaeological fieldwork represent a considerable problem not only to the archaeological heritage, but it also undermines the reputation of archaeology in public..

Under the current conditions the quality of fieldwork can only be evaluated from excavation reports, which are usually drawn up three years after the completion of fieldwork. The content of the find reports represents an integral part of the agreement between the authorised organisations and the Czech Academy of Sciences.

In 2010, the Institute of Archaeology CAS in Prague in co-operation with other licensed organisations developed a document entitled as 'Rules of archaeological

fieldwork<sup>5</sup>. It represents a summary of basic rules that should be followed in the course of archaeological research. However compliance, with this document cannot be enforced. Currently, the developers have begun to apply the 'Rules of archaeological fieldwork' and incorporate them into contracts. Thus, compliance is required by the builders, but not for reasons of archaeological heritage preservation, but mainly for concerns about the increase in control over the ongoing fieldwork and its costs.

## Funding of archaeological fieldwork

It may seem strange that the Socialist government (Act 1987) had already included the 'polluters pay' principle for rescue works. According to the Act, expenses of rescue work should be paid by all developers with only one exception. Cost of rescue excavation caused by the non-profit project of a private individual (usually family house, garage, swimming pool, etc.) should be paid by the organisation conducting the fieldwork. A special fund was created for these cases by the Ministry of Culture (100.000 - 370 000 €). However this fund covers only about 50% of the real costs and the rest is paid from budgets of the Regions, Institutes of Archaeology and also private organisations.

This exception is currently understood by the majority of archaeologists as a certain type of relief for less wealthy developers. In fact, this is an example how the Socialist law was adapted to the market environment. Originally the authors of the Act did not presume existence of any legal person, which was not owned by state and they wanted only to differentiate the sources of the state finances that would be used for covering the fieldwork expenses. The state-owned enterprises should pay the rescue work directly, while the expenses of excavation caused by a private individual would be paid from budgets of state-owned organisations, such as museums and Institutes of Archaeology.

The total volume of expenses for conducting rescue archaeology is very hard to estimate. The contracts between developer and licensed organisation are not publicly accessible and annual reports of licensed organisations only give a general overview. The annual costs of archaeological rescue fieldwork in Czech Republic are estimated at 74 million €.

## Archaeological heritage and its evidence

Currently, the Czech Republic protects eight archaeological reserves and 1309 archaeological sites as cultural monuments or national cultural monuments (see in

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5 Rules of archaeological fieldwork: [http://www.arup.cas.cz/?attachment\\_id=8154](http://www.arup.cas.cz/?attachment_id=8154).

Tomášek, 2011). Considering the fact that more than three-quarters of protected archaeological sites were proclaimed prior to 1958 and the archaeological reserves were established between 1961 and 1966, it seems quite clear that the Valletta Convention, especially Article 2, did not have any significant influence on the preservation and protection of archaeological heritage in the Czech Republic. More significantly, evidence and protection of archaeological heritage have been affected by the implementation of electronic information systems that were launched in the 1990s. Two similar projects were launched. The first project, the 'List of Archaeological Sites' in the Czech Republic was created at the National Heritage Institute between 1995 and 2003 (see in Krušinová 2002; 2004). This project was originally aimed at obtaining digital maps of archaeological sites in the Czech Republic and creating an information system with assured continuous data updating. Currently, the List of Archaeological sites records more than 30 000 archaeological sites identified in the Czech Republic. The second project, the 'Archaeological Database of Bohemia' catalogues excavation reports on the results of archaeological fieldwork that are required by law to be submitted to the archives of the Institute of Archaeology of the Academy of Sciences of the Czech Republic, Prague (see in Kuna, 2015). Currently, the archive keeps almost 94 000 records of archaeological fieldwork. The major weakness of this database is, however, the fact that it only covers the region of Bohemia (approximately 70% of the Czech Republic) while no similar evidence system has been created for the regions of Moravia and Silesia.

A new project entitled The Archaeological Map of the Czech Republic (AMCR) aims at closing this gap in information systems. This project focuses on the creation of the backbone information system of Czech archaeology and covers administrative, as well as scientific aspects of archaeological fieldwork. Within the AMCR framework, it will be possible to monitor the progress of archaeological fieldwork from the time of notification by the developer up to the submission of the find reports. Procedures for data collecting and their archiving are harmonised for the entire territory of the Czech Republic (see in Kuna et al., 2015). The expected launch of the AMCR is in the second half of 2017.

## **Use of Metal Detectors**

The Czech Republic, as well as other European countries, have had to deal with the widespread illegal use of metal detectors. At the beginning of the 1990s, a significant increase in a number of the metal detectors in private sphere occurred. According to unofficial estimations, more than 20 000 metal detectors have been sold in the Czech Republic (Mařík 2013). Treasure hunting of any kind was clearly forbidden already in

the law issued in 1987; however, metal detectors were not explicitly mentioned in this law. In the Czech Republic, penalties for private individuals can reach up to approximately 80 000 € and concealment of valuable archaeological finds may be punished by a fine up to eight years in prison. However, in spite of severe penalties, the legal adjustments have had a minimum impact in practice. Based on the the number of metal detector users, we may assume that tens of thousands of archaeological finds are found yearly and only a few reported to the state.

In the past few years, a positive development in the co-operation between metal detector users and professional archaeologists can be traced. Based on the survey conducted among more than half of the licensed organisations in 2015, there are more than 500 volunteers participating in both rescue and research archaeological fieldwork. They comprise both individuals and organised associations, who wish to pursue their hobby on a legal basis. The aforementioned survey has also shown that the interest in this form of co-operation is significantly larger on both sides; it is limited, however, by the personnel and the financial possibilities of the licensed organisations. Based on the existing results we can, without much doubt, state that utilisation of the potential of voluntary collaborators can be an enormous asset for the protection of archaeological heritage.

### **Storage of archaeological finds**

Storage of moveable archaeological finds represents an extremely contentious problem in Czech archaeology. According to the existing Heritage Act, only the state, regional authority or municipality can become the owner of moveable archaeological finds. The legal status of the organisation conducting the archaeological fieldwork and status of its founder are the decisive criteria. The majority of regional museums were founded by regional authorities and finds as regional assets are stored in their collections. The situation is similar in the case of the centrally-administered museums such as the National Museum and the Moravian Museum (the finds became property of the state). Problems arise in the cases of organisations, which do not keep and maintain their collections. In the cases of private companies the finds they have collected are owned by the regional authorities, while in cases of state-founded institutions (e.g. universities) the owner is the state. Even the Institutes of Archaeology do not have their collections.

Most institutions holding collections have not been able to adequately respond to the rapid development boom of the 1990s and do not have sufficient space to store tens of thousands of boxes filled with archaeological material. A significant part of these finds is 'temporarily' stored in provisional and not entirely satisfactory

conditions; that are threatened by moisture, rodents, and by the lack of fire or flood protection. Given the highly fragmented structure of owners, no systemic nationwide-based solution can be expected in the short term. Unfortunately, the issue of the storage of archaeological finds is not a priority, even at the regional level. We can expect a fundamental change in attitude only in the event of the catastrophic destruction of one of the significant find archives.

## Conclusion

If the national heritage protection laws from the Post-Communist countries of Central and Eastern Europe are compared, the Czech law represents a rather unique case. Even though it was created in the conditions of Real Socialism with the centralized and state-subordinated economy, it is still valid, after more than twenty-five years. In this period, the overall conception of the law has not significantly changed. As far as protection of archaeological heritage is concerned, the only amendments were mostly of technical character. The real enforceability of the current archaeological heritage legislation relies more on moral appeal, than on the letter of the law. Generally speaking, the current state of archaeological heritage care system can be defined as extremely fragile and unsustainable from a long-term perspective

Even though a whole series of attempts at a fundamental amendment of the existing law or preparation of completely new Act have occurred since 1987, these activities have not been, for various reasons, successful. For the time being, the last example represents a bill on national heritage protection that has been in preparation since the year 2012. One of the positive elements of this bill is an attempt to incorporate in the law various structures, as well as approved mechanisms that are currently valid, but without support in the valid law.

Besides the obvious, the above-mentioned mechanisms include a concept of central evidence of archaeological fieldwork, or the principle of reporting, as well as observing of all actions threatening archaeological finds. Among negative, but logical consequences of this effort is a significant increase in bureaucratic duties. Even though a series of other problems can probably be described, approval of the current bill can be considered a prerequisite, as far as archaeological heritage protection is concerned. According to the plan of the Government of the Czech Republic, the new law could come into force in the year 2018.

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**Web links**

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## Towards a new Horizon: development-led large scale excavation policy in Hungary post-1990's

Szabolcs Czifra, Szilvia Fábíán

### **Abstract**

*This paper gives a brief review of the changing national concept of large-scale excavations in Hungary during the last 25 years. After 1990 the upswing of motorway constructions and private industrial developments forced Hungarian archaeology to apply new approaches, develop or adopt new methodologies and management strategies for preventive excavations. A new, integrated cultural heritage legislative framework had been coined in the spirit of the La Valetta Convention 2001, which was later refined, modified and changed several times. Beyond a need for a uniform protocol for the archaeological process, one of the main issues for Hungarian archaeology is the function of the preventive archaeological system, which underwent on radical legislative, financial and institutional changes in the past five years. These turbulent central acts highlighted several other important questions: e.g. the role of market-based companies in archaeology, quality management, publication deficit and open access. We attempt to summarize the status and practice of preventive archaeology in Hungary emphasizing achievements (without hiding negative cases) and to reflect on actual challenges, which reverberate throughout European discussions in preventive archaeology.*

**Keywords:** changing concepts, centralisation, sustainability, protocols, quality control, Hungary

### **Kivonat**

*A tanulmány a nagyfelületű feltárások magyarországi gyakorlatát tekinti át az elmúlt 25 év távlatából. 1990 után az autópálya építések és magánberuházások felfutása szemléletváltásra készítette a magyar régészetet, továbbá a megelőző feltárások elvégzéséhez új módszertan és irányítási stratégiák kifejlesztésére vagy átvételére ösztönözte. Az új, integrált örökségvédelmi törvény a La Valetta-i Egyezmény szellemében fogant 2001-ben, amit a későbbiekben többször finomítottak, módosítottak és megváltoztattak. Az egységes régészeti protokollokon túlmenően a magyar régészet egyik legfontosabb kérdése a megelőző feltárások rendszerének működése, ami az utóbbi öt évben radikális törvényi, pénzügyi és intézményi változásokon ment át. Ezek a mélyreható állami intézkedések sok egyéb*

*fontos kérdést is felszínre hoztak: pl. a magánvállalkozások szerepét a régészetben, minőségbiztosítás, publikációs deficit és nyílt hozzáférés. A megelőző feltárások magyarországi gyakorlatát az eddig elért eredmények kihangsúlyozásával (ám a negatív jelenségeket sem elfedve) kíséreltük meg összefoglalni, és igyekeztünk reflektálni az örökségvédelemről folytatott európai diskurzus során megfogalmazott új kihívásokra is.*

## Introduction

The early 1990s mark a milestone in the history of Hungarian archaeology. Following the collapse of the communism, the country took initial steps toward democratic legislation and a free-market based economy. Additionally, the Hungarian government set up a new, grandiose nationwide infrastructural programme, which required intensive continuous archaeological cooperation. Although the motorway programme aimed at a nationwide planning and construction process, Hungarian archaeology lacked this centralised approach after 1990'. Practically, the former centralised museum network was broken down into county level autonomous institutional units by this time, which posed managing difficulties (Szabó et al. 2006: 244–245; Raczky 2007: 6; Wollák 2007: 73–74). Public institutions, created in the old era, already had had some limited experiences in managing large-scale excavations, but as we have pointed out, many actions done by museums were performed by a relatively small number of experts and proceeded continuously for decades. New state funded construction resulted in excavation areas of an extent much greater than anything previously, which required new methodology, documentation processes and management approaches from county museums (and the Budapest Historic Museum), which had a monopoly on preventive excavations (Ernyey 2003: 420; Vékony 2003: 21; Wollák & Raczky 2012: 115–116).

## Renewal of the Hungarian archaeology

The Hungarian archaeological approach to preventive archaeology is essentially based on two major principles: 1) archaeological artefacts found in the ground are state property; 2) it is of public interest to protect and excavate the archaeological heritage under threat. This 'socialist' or 'public' model (Willems & Dries 2007: 3) means, that everything has to be excavated and at a higher price (Wollák & Raczky 2012: 120).

The implementation of the European Convention on the Protection of the Archaeological Heritage (La Valetta Convention from 1992) was undertaken in

2001 in Hungary and revised several times. These regulations essentially transformed the existing legal background and forced it to accept that anthropogenic imprints in the natural environment are worth protecting. Moreover, with the introduction of cultural heritage impact assessment, as compulsory documentation prior to large developments, archaeology was integrated into the planning process. The 'polluter pays' principle was a fundamental element of the legislation. Practically, it meant that at least 0.9% of all investment costs were projected for archaeological works (Wollák 2007: 73–75; Raczky 2007: 6). The new system was a unique mixture of county museums with a monopoly over (contract) archaeology, supplemented by a centrally organized administrative system of quality control and fairly strong monitoring. The administrative authority (Cultural Heritage Directorate) was established following, but never fulfilling, the professional model of the English Heritage in 1997. Later it was trusted with additional tasks and functioned under a new name (National Office of Cultural Heritage) from 2001 (Nagy 2003; Bozóky-Ernyey 2007: 105–115; Wollák 2007: 75).

Parallel with large-scale excavations, museums and other public institutions, such as the Archaeological Institute of the Hungarian Academy of Sciences, and universities with archaeological departments, interested in preventive archaeology, began the methodological modernisation of archaeological fieldwork and inventory systems, as well as the development of GIS-based databases. The Institute of Archaeological Sciences of the Eötvös Loránd University (Budapest) played a key role in this standardization process. Its well crafted integrated methodology consisted of six phases (Raczky et al. 1997; 2002; Raczky 2007: 7–8), which became a basic fundament for any later protocols. However, it only remained a recommendation due to the lack of a centralised archaeological strategy and the regionally scattered institutional background. It must be mentioned, that most of the museums developed their own coherent systems, but these parallel developments resulted in different, hardly comparable schemes and digitizing solutions (Raczky 2007: 10; Wollák & Raczky 2012: 123–124, 129).

Despite great achievements in legislation and fieldwork modernization by the mid-2000s, the problem of a lack of clearly defined excavation budgets, predictable time and financial consequences led to conflict with investors. Moreover, excavation budgets were used in other areas of museum development (or maintenance), rather than for proper financing of preventive archaeological fieldwork and post-excavation processing (Wollák & Raczky 2012: 119). Indeed, the Archaeological Committee of the Hungarian Academy of Sciences suggested a centralised project and financial control over excavation budget, related to the large-scale developments (Szabó et al. 2006).



*Fig. 1. Details of the preventive excavation at Perkáta: a medieval church with surrounding cemetery  
(Photo: G. Rákóczi, © Hungarian National Museum)*

### **Peekaboo of centralisation**

The answer to these challenges was the establishment of the Field Service for Cultural Heritage in 2007, as a state-run organization responsible for the protection of national cultural heritage (Bozóki-Ernyey 2007: 119; Raczky 2007: 12; Bánffy & Raczky 2010: 83–84). Although the Field Service was trusted with a wide range of cultural heritage works (such as monument and historic garden research etc.), it specifically performed large development-led archaeological excavations and excavated ca. 1.5 million metres<sup>2</sup> between 2007 and 2010 (Wollák & Raczky 2012: Fig. 9.11). Adopting and improving fieldwork and documentation protocol proposals of the Institute of Archaeological Sciences of the Eötvös Loránd University, the Field Service provided professional principles and standards which became nation-wide archaeological guidelines for contracted public institutions and private organizations. The Field Service had well developed scientific and conservation laboratory, collaborated

in planned excavations and international research projects, and fostered dissemination of research on international forums. Additionally, the Field Service frequently participated in cultural heritage events, museum exhibitions and organized open-days on archaeological excavations. The institution made a huge effort in publishing results of archaeological excavations, preliminary processing of data and interdisciplinary researches on large developments to the scholarly and wider public (through various publications such as annual work reports, specialists yearbooks, monographs and conference publications, which were fully accessible on the internet). Finally, the Field Service provided a transparent and itemized price list for archaeological services.

The introduction of a new centralised archaeological organization faced enormous protests from county museums, as it deprived them of the income from large developments projects (Bánffy & Raczky 2010: 86; Wollák & Raczky 2012: 132). The archaeological budget from such projects became an essential interest during the economic crisis, as it was gradually and totally integrated into museum budgets. Thus museums launched a full-scale offensive against the Field Service in the press and in professional forums, which was also politically supported by counties governments. Finally, the county museums' lobby also met the investors' interests and forced the Hungarian government to modify the fairly strong regulation system. This resulted in major shifts in the national concept and dozens of regulations at different levels since 2010.

First of all, the museum's 'traditional' archaeological privilege was partly restored in 2010, although some elements of the centralized system, such as coordination of archaeological works spanning over several counties, producing complex cultural heritage documentations prior to major developments and developing and publishing national archaeological standards, were preserved and ordered to the Hungarian National Museum. Practically, this meant that the Hungarian National Museum coordinated the preparation phases related to the large investments through one of its departments (called the Hungarian National Protection Centre), and provided a complex *Preliminary Archaeological Documentation (PAD = ERD in Hungarian)*, which contained the identified cultural heritage elements, suggested action plans and financial calculations for archaeological tasks. According to the PAD guidelines, it was county museums that conducted large-scale excavations.

In 2011 radical time and financial limitations were forced on preventive archaeology by Hungarian Parliament (effectively at the end of 2012). In the case of large investments, all preventive archaeological works were given 30 days for trial excavations, while rescue excavations were limited to a maximum of 30 workdays on the entire project. Moreover, the total costs of archaeological fieldworks could not exceed 1% of the project budgets, or even capped at 200 million Hungarian Forints (approximately 650.000 Euro). The law introduced recovering technique in case of sites which cannot be explored due to budgetary constraints. These changes evoked great

protest from the Hungarian archaeological community, and even the president of the EAA expressed his strongest concerns regarding the modifications (Gyucha & Bánffy 2011). The plan of these radical changes summoned Hungarian archaeological specialists, who elaborated and submitted an alternative legal concept through the Association of Hungarian Archaeologists. The Association together with museums also organized a special exhibition (called the 'Rescued Heritage – Treasures from the heart of Europe') to promote archaeological achievements related to motorway excavations in order to make a pressure on decision-makers. But these slightly delayed efforts did not reach their target. Waves of cultural-political changes reached the National Office of Cultural Heritage too: its regional units were merged down into the local administration system, which was a heavy loss for the cultural heritage policy.

Although these modifications largely echoed investor's interests, they moved Hungarian archaeology towards non-destructive, GIS-based site identification methods (Reményi & Stibrányi 2011; Mesterházy 2013). Additionally, the extending develop-friendly approach resulted in the appearance of predictive archaeological models, which offer a handful and cost-effective tools to estimate archaeological costs (Padányi-Gulyás et al. 2013). Following the high-scale application of remote sensing, a significantly large number of scientific forums emerged for promoting and consulting technological possibilities, however, geophysical survey instruments and Total Station or GPS equipment are beyond most museum budgets in Hungary.

These new (2012) rules also affected the appearance of a complex Preliminary Archaeological Documentation for large investments which contains the identified cultural heritage elements, suggested action plans and financial calculations.

## Archaeological application of new regulations

Excavations related to the construction of the Motorway M4 were planned and conducted according to this new system except for two major modifications. The state-controlled National Infrastructure Development cPLc., the corresponding organization for planning and construction procedure, agreed to neglect budgetary constraints and accepted archaeological arguments to estimate excavation time on the basis of monthly progress of 5.000 square.

The *Preliminary Archaeological Documentation* for the motorway construction had been undertaken on the previously mentioned standardized protocol by the HNM National Heritage Protection Centre. The preliminary phase is aimed at creating a comprehensive spatial database, suited for integrating and evaluating general topographic data, historical maps, the parameters of the planned motorway section and various levels of archaeological information. Information from the archaeological

archive for the region affected by the motorway construction, combined with data from literary sources aimed 14 more or less known sites.

The results of intensive field survey were supported by aerial photography using special cameras with measuring equipment.<sup>1</sup> At the end, 30 sites were located as visible anomalies, and most of them could be interpreted as archaeological sites. Systematic field walking covered a 100 m wide band along the planned route of the motorway. During this field survey, all conventional methods of archaeological topographic work were applied in an effort to pinpoint sites as precisely as possible and identify particular archaeological periods (Reményi & Stibrányi 2011). The geophysical analysis was carried out on 453,588 m<sup>2</sup> including 15 archaeological sites, 2 sites discovered by aerial photography and 2 locations with possible archaeological relevance (chosen on the basis of their topographical position). Initially, the geophysical investigation was planned before the trial excavations, in order to select the best position for test trenches. Unfortunately, this logical order was mostly overruled by the tight schedule. Finally, trial excavations were carried at 19 locations on 22,641.5 m<sup>2</sup>. The aim of the small-scale excavations was to verify the archaeological involvement of the selected locations, to refine their spatial extent and to clarify stratigraphic, cultural and (if possible) chronological position of the sites. Site No. 19 (Tiszapüspöki – Karancs-háromág-dűlő) was an already well known and partly excavated multi-period archaeological site, which made further testing unnecessary. Sites were subject to metal detector survey prior to mechanized topsoil removal. Collected information was channeled into single documentation (PAD), which contained GIS data of the sites, the area to be excavated, financial calculation and time estimate.<sup>2</sup>

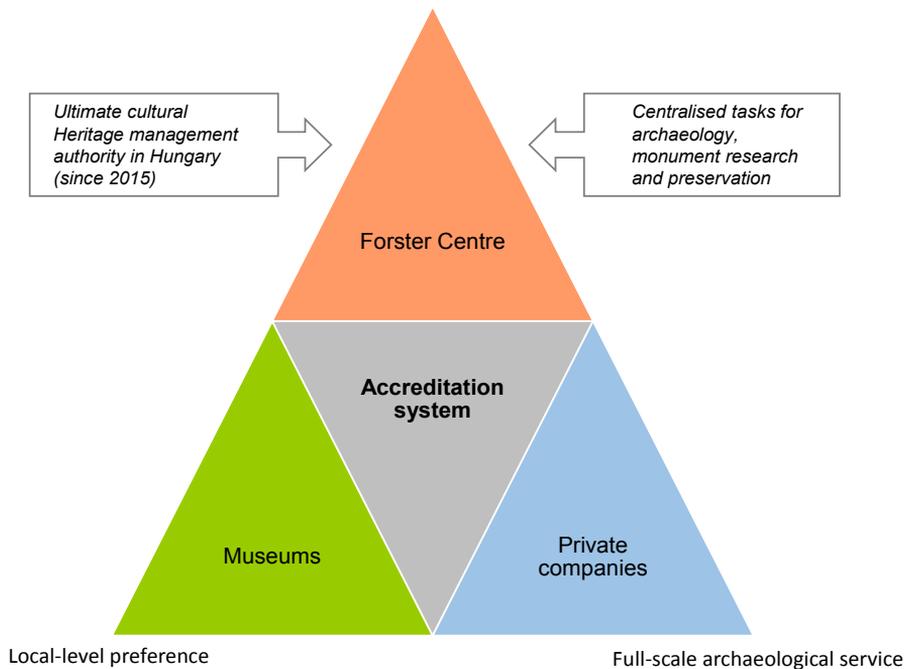
The Hungarian government intended to foster and accelerate investments with all possible means by removing administrative obstacles and modifying legislation regulations. Archaeological experience of the previous two years (2012–2014) had been distilled into new cultural heritage regulations, which had four major impacts.

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1 Aerial photography was undertaken by Zoltán Czajlik, associated professor of the Institute of Archaeological Sciences of the Eötvös Loránd University). The field survey was carried out by the HNM National Heritage Protection Centre in cooperation with the local János Damjanich Museum. Geophysical surveys were mainly performed by the HNM National Cultural Heritage Protection Centre (coordinated by Gábor Mesterházy), while 2 sites were surveyed by a commercial company (ArcheoData 1998 LP). Used equipments were Overhauser Type 19 and Sensis Magneto®MX. Metal detector research was conducted by Gábor Váczi, research fellow of the Institute of Archaeological Sciences of the Eötvös Loránd University).

2 Although archaeological preparation and fieldwork were undertaken according to the standardized protocols and maintained in several phases by the János Damjanich Museum and the Hungarian National Museum, the construction of the M4 motorway, as well as archaeological fieldwork (accomplished ca. 80% by that time) were halted due to financial problems in spring 2015. Following recommendations by the European Commission, the Hungarian government modified some elements of the project and partly redesigned the route plan and schedule.

1. Under investor pressure, the government finally realized that extremely low budgetary limit (200 million HUF) in archaeology was a misguided decision and this impractical regulation made it impossible to carry out preventive excavations especially in the case of infrastructural projects.
2. Recognizing possibilities of centralized network systems, a new national cultural heritage authority (Gyula Forster National Centre for Cultural Heritage Management) was established in 2012, which inherited main tasks of the HNM in the field of large-scale excavations from 2015. Supervision of the cultural heritage policy was moved to the Prime Minister's Office.
3. A third interesting element of the new regulation was the introduction of the Accreditation System, which affected 'opening up' the field of preventive archaeology to controlled commercial competition between licensed municipal and private organizations.
4. In the case of excavations related to infrastructural developments with national priority, several exceptions had been made to assure fast and continuous archaeological work: e.g. the possibility of involvement non-licensed organizations in archaeological works.



*Fig. 2. Schematic diagram of the accreditation system.*

Barely one year after launching the Accreditation System the cultural heritage regulation was modified again. The Forster Centre will cease to exist on 1<sup>st</sup> January 2017 and its tasks will be moved to other government-led organizations. Administrative functions will be incorporated into the Prime Minister's Office, while the future of the archaeological tasks and responsibilities is uncertain. The consequences of such rapid and deep changes adversely impact and threaten the entire cultural heritage system.

Summing up the events, it is clear, that the concept of the Hungarian national heritage policy displays regular repetition. According to the history of Hungarian archaeology and cultural heritage protection (Nagy 2003), ideas of principle approach have circled from the earliest times. Challenges post 1990's accelerated this process and affected the adoption of short-lived solutions without real debate, which had never enough time to fulfill expectations. Although this is probably an over-simplification, it has the virtue of focusing our attention on fundamental principles and their role in shaping the environment of Hungarian preventive archaeology. Modifications in cultural heritage mostly generated solutions benefiting developers, which was recently crowned by switching primary responsibility for the entire scope from the Ministry of Human Capacities to the Ministry of Interior, and then, in 2015, to the Prime Minister's Office (Inkei 2015). The modernisation of the Hungarian infrastructural network (especially the road network) imposed very difficult expectations on archaeology, which led to the appearance of a project management approach, standardization of protocols and rethinking of fieldwork practice. Nowadays, the Hungarian government is determined not only to preserve this dense traffic system, but also to enhance its infrastructural network. In addition, the number of private developments is also increasing. These facts resulted in a huge and continuously growing pressure on archaeology: approximately 10 million square meters have to be investigating annually. A possible solution to this issue would be the existing use of modern site diagnostic tools, which would be beneficial for both developers and for cultural heritage protection (Bánffy & Raczky 2010: 83–84). As the archaeological endeavors in the modernisation of current conventions and professional codes of conduct are acknowledged by investors (who want a stable legal background and predictable costs), there is a real opportunity to convince the government to undertake some legal modifications, which would result in a better working model and improve public acceptance of cultural heritage actions. Moreover, as the interest of society and question of 'user satisfaction' is already on the radar throughout Europe, 'governments need to re-think how they support culture to stimulate public participation and the potential of culture as an engine for jobs and growth' (Dries 2016).

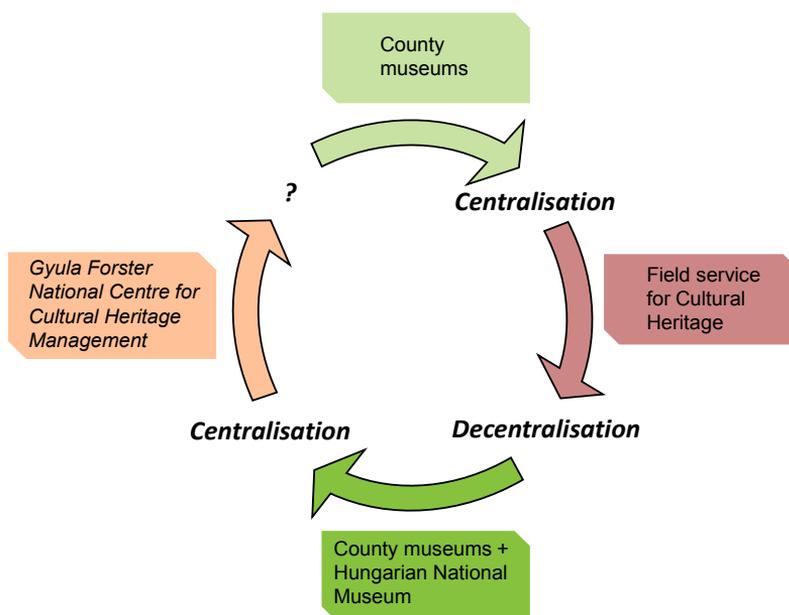


Fig. 3. Shifts in preventive archaeological policy in Hungary post 1990's.

## Summary

The implementation of 'developer pays' principle of the La Valetta Convention ultimately changed Hungarian archaeology and led to a significant increase in research (summarized recently by Wollák & Raczky 2012). Fieldwork and post-excavations processes were initially organized through a network of licensed public institutions (museums, Archaeological Institute of the Hungarian Academy of Sciences and universities with archaeological departments). However, commercial companies were soon incorporated into the mechanism, but their work was largely limited to machine topsoil removal, organizing field assistants, non-professional employees, special expertise, and consultancy. Modifications of the cultural heritage legislation in 2015 changed this situation and resulted in controlled competition between licensed public institutions and private companies. Larger commercial organizations gained accreditation for the whole country and started to improve their infrastructure, build up professional project management and offer a wide range of research capacity. As this process has its parallels in several European countries (Aitchison 2009: 660–661; Kristiansen 2009: 646; Demoule 2012: 618–619), it is very probable, that this symptom is a direct consequence of rapid infrastructure expansion, which has hit traditional institutions. The economic crisis pointed out vulnerability of the commercial systems

in an European context (Aitchison 2009: 668; Willems 2009: 668–669; Schlanger & Aitchison 2010) which led to the assumption that sustainability is another important element in cultural heritage policy and that public institutions are more stable in the long run (Demoule 2012: 619; Ravn 2013: 648).

Knowledge production is another aspect of the existing models of preventive archaeology. Most of the researchers prefer public (previously defined as ‘socialist’) models and emphasize that only public involvement can guarantee research-based archaeology, which leads to new knowledge (Kristiansen 2009: 647; 2016: 10; Demoule 2012: 618–619; Ravn 2013: 649–650). Based on the experiences of English and Dutch archaeology, other scholars (Thomas 2007: 39–40; Dries 2011: 598–599) argue that a capitalist model is also a type of solution and that it does not by definition lead to fact-producing. Both parties stressed the importance of quality control, which makes results comparable beyond professional standards, ensures academic standards and provides knowledge production (Schlanger & Rossenbach 2010: 42–43; Dries 2011: 598–602; Kristiansen 2016: 11). These arguments are also found in Hungarian academic debates (Wollák & Raczky 2012), although everyday practice is not necessarily following ideas: e.g. even the results of large, scientifically based, long-term archaeological campaigns of the previous era are not fully published. Our personal viewpoint is that the majority of the publications related to preventive excavations were stimulated by the individual enthusiasm of archaeologists in Hungary, rather than following academic research agendas. The Hungarian National Museum, following ethics of open source archaeology (Lake 2012; Wilson & Edwards 2015), contributes to the AR-IADNE programme and disseminates project outcomes related to more than 1800 preventive excavations (<http://archeodatabase.hnm.hu/>). This project realizes the potential value of digital data and supports new synthesis through exploration of old data and multiple datasets. Finally, it aims to develop a national database. Thus the immense grey literature accumulated over the last 25 years in Hungary will be channeled into the international scientific network and ultimately will find its way to the public.

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## Legal and Institutional Framework of Preventive Archaeology in the Past Twenty Years and Today's Reality in Hungary – a Brief Overview of the Tendencies<sup>1</sup>

*Katalin Bozóki-Ernyey*

### **Abstract**

*In Hungary, after the historic turn of 1989, paradigm shift got started in archaeological heritage protection also, and it was during the third government (1998–2002), that archaeological heritage protection really gained ground in state administration and in national (development) politics. The years between 2001–2006 and 2007–2009 mark the 'Golden Age' of archaeology. From 1997 onward, the legislation stipulated that registered sites should be excavated prior to the development and the funds for the archaeological works (the total costs of the excavation at the level of at least 0,9% of the total investment costs) have to be secured by the investor. On the contrary, in 2011 time and financial limits were introduced in case of large development-led excavations. Today, the discretion of archaeology is becoming much more narrowed, being judged, for various of reasons, as a factor which hinders investment projects of national benefit. Together with legal tools, the heritage administration is under continuous reform, in order to 'rationalise' bureaucracy. Why we have arrived at this point, how heritage protection can evolve in this context? The author describing the past situation tries to answer these questions.*

**Keywords:** *Hungary, preventive archaeology, heritage protection, large-scale excavations*

### **Kivonat**

*Magyarországon a rendszerváltoztatást, 1989-et követően, a régészeti örökség terén is megkezdődött a paradigmaváltás, amely 1998–2012 között, a harmadik parlamenti ciklusban teljesedett ki. A régészeti örökségvédelem mind az államigazgatásban, mind a nemzeti (fejlesztési) politikában kiemelt szerepet kapott. A*

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<sup>1</sup> This paper was commented by Katalin Wollák independent heritage consultant also here I would like to thank her for her important notes. The original title of the paper at the EAA conference was: Preventive archaeology from 2010 onwards in Hungary – legal background and the reality.

2001–2006 és még a 2006–2010 közötti időszak is a régészet „Aranykora” volt. 1997-től törvény mondta ki, hogy amennyiben nem lehet elkerülni a régészeti lelőhelyet a beruházással, akkor azt előzetesen fel kell tární és az ásatás költségét a beruházónak kell fedeznie, minimum a beruházás teljes bekerülési költségének kilenc ezrelékéig. Ezzel szemben 2011-ben a kormány maximálta az ásatásra fordítható időkeretet és meghatározta a maximálisan az ásatásra fordítható összeget. Jelenleg a régészet mozgástere igen beszűkült, különböző indokokkal, a régészetre, mint a nemzeti fejlesztéspolitika egyik hátráltatójára tekintenek. A jogszabályi környezet mellett, a régészeti hatósági intézményeket is folyamatosan átszervezik a bürokrácia-csökkentés jegyében. Miért jutottunk el idáig és ilyen körülmények között milyen lehetőségei vannak a régészeti örökség-védelemnek, a szerző az előzmények rövid bemutatásával próbál választ adni ezekre a kérdésekre.

## Preface – international conference on preventive archaeology

It was twelve years ago, in Vilnius, that under the aegis of the Council of Europe Directorate of Culture and Cultural and Natural Heritage, the Lithuanian Academy of Cultural Heritage, the French National Institute for Preventive Archaeological Research (INRAP), and the Hungarian National Office of Cultural Heritage staged an international conference – with participants from 18 countries and the attendance of two professional organizations, the *Europae Archaeologiae Consilium* and the European Association of Archaeologists – on preventive archaeology (Bozóki-Ernyey 2007) connected to the Council of Europe’s monitoring and observation activities on the European Convention on the Protection of the Archaeological Heritage (Revised) Valletta, 1992 (hereafter: La Valletta Convention).

It was in Vilnius at the 22<sup>nd</sup> Annual Meeting of EAA, that we could share ideas on preventive archaeology, in three sections, such widely again.<sup>2</sup> The topics and problems discussed are still relevant: our heritage protection structure, the legislative background which is under continuous changes and under pressure, especially in the last years. From this perspective, foreign parallels, best and worst practices are all very important for us.

## Hungarian institutional, legal system at the end of the 1990s

The significant social, political and economic changes of the historic turn of 1989 in Hungary required the reconsideration of the protection of historic monuments and the functioning of museums, as well as the new legal regulation of archaeology. The

2 It has to be mentioned that meanwhile the *Europae Archaeologiae Consilium* completed a triptych of debates on the true effects of the Valletta Convention on European archaeology (EAC Occasional Paper 9., 2014.; EAC Occasional Paper 10., 2015.; EAC Occasional Paper 11., 2016.) And there is a volume on its own (EAC Occasional Paper 6., 2012) dedicated to large-scale preventive excavations.

explanatory statement of the Act CXL of 1997 *on the protection of cultural property, museum institutions, public library services and cultural education* issued in 1997, already stressed the challenges for archaeology set by the investment projects in the new political system. The Act provided for the setting up of the first self-contained central state authority, the Cultural Heritage Directorate (hereinafter: KÖI), mainly for archaeology, but also for protected cultural goods on private property as of the 1st July 1998<sup>3</sup>. KÖI took over several official tasks so far entrusted to the Hungarian National Museum, but it was, however, short-lived.

In keeping with the government resolutions of 1996, 1999<sup>4</sup> aiming to make administration simpler and client-friendly, it was fused with the so-far independent National Board for the Protection of Historic Monuments, producing a large institution with a staff of some 300, the National Office of Cultural Heritage (hereinafter: KÖH). The professional model was the English Heritage, but during its functioning, it fell way behind its model, particularly in strategic planning, public awareness and research.

## The structure of archaeological heritage protection 2001–2006

The new integrated institution found itself in a new legal environment, separated from the special areas of museums, cultural education and libraries, when the Act LXIV of 2001 *on the protection of cultural heritage*<sup>5</sup> was passed, – this was the first time that in the title of an act the phrase ‘cultural heritage’ has appeared (compare to Erdősi & Sonkoly 2004) – the act is still in force but has been continuously amended.

2001 marks the beginning of a relatively peaceful period lasting until 2006. It was a great achievement that archaeological administration was established and considered current, the circle of licensing procedures in which it was compulsory to involve the cultural heritage administration as consenting authority, and a growing number of preventive elements were included in the legal rules. These ensure site evaluation, archaeological planning in investment projects, the integration into spatial planning, etc.

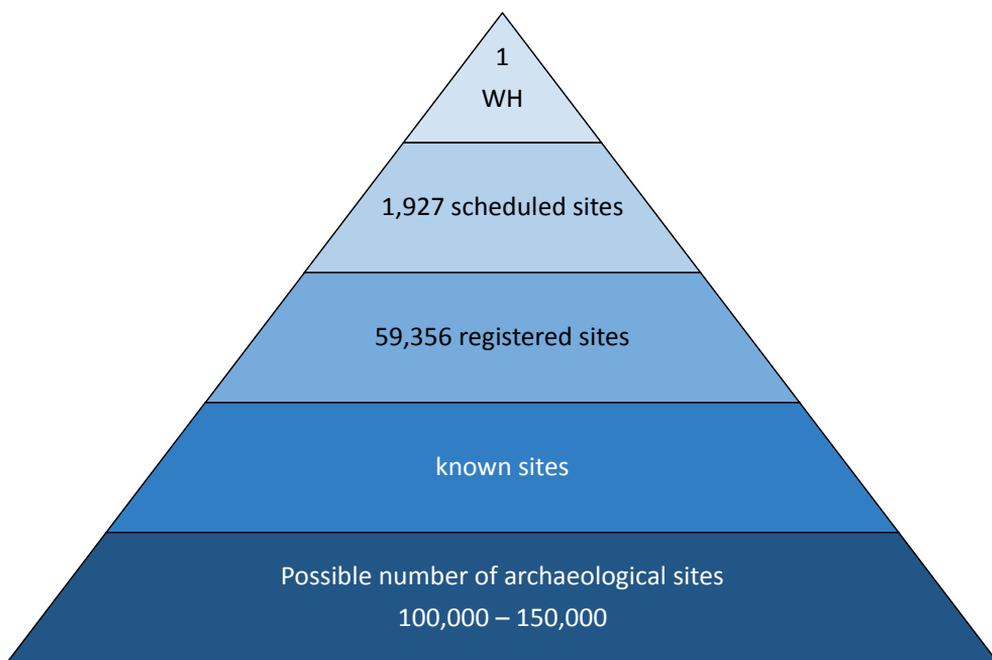
This period was a ‘Golden Age’ of archaeological research. From 1997 onward, the legislation stipulated that registered sites<sup>6</sup> (see Fig. 1.) should be excavated prior to the development and the funds for the archaeological works have to be secured by the investor. These included the total cost of the excavation, archaeological impact

3 The founding document is: 29/1998. (VI. 11.) MKM Order *on the Cultural Heritage Directorate*.

4 1100/1996. (X. 2.) Gov. Decision; 1052/1999. (V. 21.) Gov. Decision – according to the explanatory part of Act LXIV of 2001 (see further) – although with an erratum in it, noted by Wollák, K.

5 The Act was adopted by the Parliament on the 19 of June 1999 and it came into force on the 8 of October, with the exception of the Annexes, those entry into force was the day of promulgation.

6 On the inventorying of archaeological sites see more in details Bozóki-Ernyey (2013).



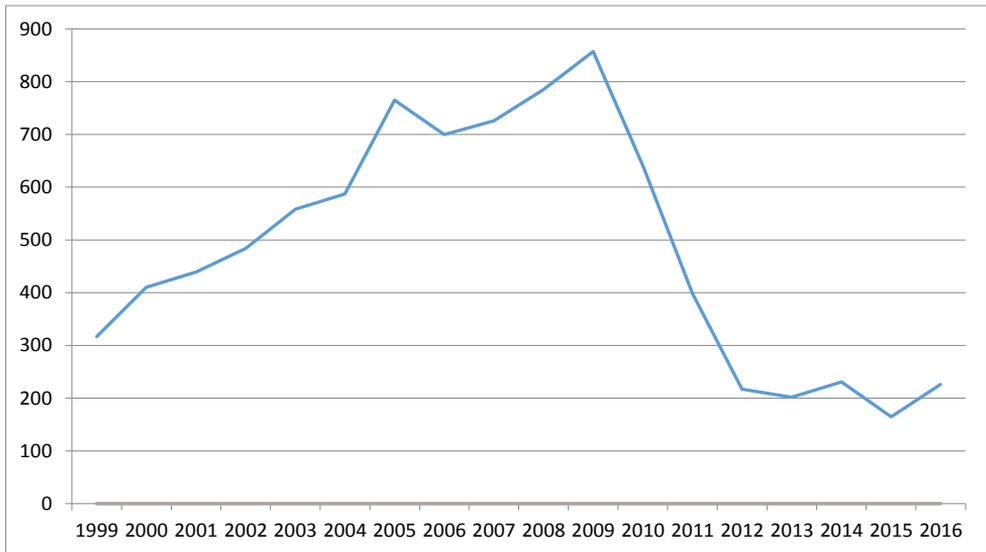
*Fig. 1. Number of archaeological sites. On the top, there is one World Heritage (archaeological) site; the scheduled sites are the sites protected by ministerial order (actually); registered sites are sites inventoried in the national electronic database (on 11.25.2016). It is supposed that there are 1–1,5 sites/km<sup>2</sup> in Hungary (Wollák & Raczky 2012:123). (The idea of current diagram is based on ppt. of Újlaki Zs., Wollák 2009:56, EAC Occasional Paper 3.)*

study, trial trenching (from 2001), watching brief (from 2006), documentation, primary find conservation (also primary find processing from 2001), and the extraordinary expenses of the placement of finds. At least 0,9%<sup>7</sup> of the total development budget have to be secured for preventive archaeology.<sup>8</sup> Between 1990 and 2007 just for motorway constructions nearly 7,700,000 m<sup>2</sup> were excavated containing 700 sites!<sup>9</sup> (Fig. 2.)

7 In Bozóki-Ernyey (2004) on p.115, the number of '9 thousands' unfortunately was mistyped; the correct is, as above: 0.9%.

8 Compared to Raczky (2007), although Valletta Convention was enacted by the Hungarian Government only in 2000 – Government Order No. 149/2000. (VIII.31.) –, it was together with the *Convention Concerning the Protection of the World Cultural and Natural Heritage* (UNESCO 1972) that served much before 2000 the scientific, legal and political background for creating such a modern heritage law on a European-level.

9 Compared to Raczky (2007:14), the exact numbers are: total length of roads 1.064,133 km, total excavated area 7.688.603 m<sup>2</sup>, number of excavated sites 696. Later in English: Wollák & Raczky (2012: tables 1–3).



*Fig. 2. The number of excavation licence applications in the last 18 years. The number of excavations increased till 2009, than the delayed effect of economic crisis is shown, but the differences are also due to legal changes as some activities. From August 2010 (for fieldwalking and, detection of sites by different instruments) and from May 2012 (for trial trenching in case of large-scale development-led excavations) authorisations were not required any more.*

*(Sources: 1999–2004 see in Bozóki–Ernyey (2004:112); 2005–2010 see in Wollák & Raczky (2012:127), data from 2006 is estimated; 2011–2012 information is based on the database of licence applications from ppt. of Wollák K.; 2013–2016 August data is provided by Forster Centre based on the database of licence applications compiled by Horváth C., Eleki N., Mészáros M.)*

At that time, the development-led excavations could only be conducted by the county museums (19 in total) and the Budapest History Museum, within their territorial jurisdiction. The Hungarian National Museum, universities having faculties of archaeology, the Archaeological Institute of the Hungarian Academy of Sciences, and the mushrooming private archaeological firms could only be involved in the process as subcontractors of the county museums. In the new economic situation – when, for example, per capita support kept dwindling – several county museums were forced to keep up the institutional system from such income. According to the law, each county museum had the right to decide on the professional and financial terms of excavations within its jurisdiction, freely concluding a contract with the investor. The competent authority had no power to supervise the contract submitted appended to the permission for excavation. By the middle of the 2000s, it became clear that there were intolerable regional differences both in terms of professional standards

and of financial conditions, especially in large-scale projects between the different counties. The county museums themselves also tried to remedy the price differences, bringing about the Association of County Museum Directorates (founded in 2003)<sup>10</sup> and working out e.g. a recommended price for field evaluation and surface excavation for the whole country. The first detailed protocols of site detection and of the way of accounting were developed by archaeologists for the National Motorway Co.<sup>11</sup> The self-consciousness of archaeologists is also shown by the fact that at the end of 2005 the nationwide Association of Hungarian Archaeologists was founded aiming to foster the professional's community enhancing also quality control, aiming to become chamber – that has never happened.

### **Centralisation attempt: establishment and termination of state archaeological field service 2007–2010**

As a solution to the problem of regional differentiation and the pressure of increasing number of developments and development-led excavations, a handful of professionals recommended also the setting up of a single, central excavating agency, independently of the county museums. The idea received political support and in line with the introduction of the legal category of 'large investment project', in 2007 the Cultural Heritage Field Service (hereinafter: KÖSz) was established<sup>12</sup>. The tasks of the Service ranged from e.g. explosive objects disposal, through excavation to publication and presentation in case of all large investment projects. The model was INRAP and similarly to the French example, an archaeological tax was also considered (compared to Bánffy & Raczky 2010), but later discarded. With its regional offices and laboratories, KÖSz soon grew into the ever largest archaeological institution in Hungary with an employment over 300. Its establishment elicited enormous protests from the county museums and county governments as it deprived them of a large deal of funds needed for their existence – the great income from large-scale projects, and of scientific challenges. The emergence of KÖSz remoulded the labour market, lured several archaeologists away from the museum network and many fresh graduates without experience were entrusted to direct excavations. Primary find processing, conservation of unearthened finds were left in abeyance; the specialists worked on contracts of the prefixed deadline and started one excavation after another at different places of the country. A positive outcome could

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10 In Bozóki-Ernyey (2004) on p. 117, the datum was based on oral information, now written source is available at: [http://magyarmuzeumok.hu/tema/639\\_uj\\_neven\\_magyar\\_videki\\_muzeumok\\_szovetsege](http://magyarmuzeumok.hu/tema/639_uj_neven_magyar_videki_muzeumok_szovetsege).

11 These protocols were later accepted and required also by KÖH.

12 18/2001. (X.18.) NKÖM Order was amended by 21/2007. (III. 26.) OKM Order.

be registered by 2009–2010: the excavation methods became more or less unified all over the country, the documentation was in a set system, the contracts and price lists were standardized, there were new publications, the involvement of the public started.

KÖSz was founded on a professional basis but with definite political intervention and in the same way, its failure three years later in 2010, was caused in part by professional motives – its quality of work and financial operating was under continuous debate during the years – and moreover, by political decisions. Unfortunately, there are no comprehensive, analytic publications on the ‘real story’ of KÖSz, its past activity. So in 2010 KÖSz was dissolved and the right of large investment-led excavations went back to the county museums, with the obligation that also locally competent museums, out of the county museum system, had to be involved by law. The restoration had its difficulties, of course. KÖSz efforts in processing the finds were interrupted, a great part of the contracted persons were dismissed, one part of it, named as National Heritage Protection Centre was attached to the Hungarian National Museum (hereafter MNM-NÖK) as a branch.

Although KÖSz was terminated, it was obvious that there is a need for a kind of centralisation. As a first step, it became the MNM-NÖK that was responsible for producing – besides guidelines e.g. for preliminary archaeological documentation – directives for the calculation of archaeological expenses, a list for recommended (not approved) prices and a contract model. It became the task of MNM-NÖK first to coordinate between the museums and large project developers, from 2013 also to compile the preliminary archaeological documentation (introduced in 2010) which included later the excavation project plan as well, while the field work (evaluation, trial trenching, etc.) which formed the basis of it was still done by the county museums.

However, the termination of KÖSz in 2010 was only the beginning of a series of measures in the course of which the central government fundamentally redrew the institutional and legal frames of heritage protection, giving room to new priorities. Some of the reforms were part of a more comprehensive transformation of the state administration and the network of local governments other changes were goal-directed. The author of a social study tagged the period between 2010 and 2016 ‘the defeat of heritage protection at systemic level’ (Viskolcz 2016).

### **Restrictions 2011–2016 – institutional reforms**

The regional agencies of KÖH were severed from the centre and integrated into the county government agencies<sup>13</sup> as of 1 January 2011, then parallel with the formation of the district

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13 324/2010. (XII. 27.) Gov. Order. Nine heritage offices were established, the area of competence of a heritage county office could cover 2, 3, 4 counties.

administration system as of 1 January 2013, into the districts<sup>14</sup> – within the administration systems with shrinking decision-making potential, – while the appealing heritage authority was incorporated in the capital's government agency. As of 21 September 2012 KÖH in its original function was practically extinguished: the core – where scientific research of protected monuments, inventory of archaeological sites and protected monuments and authority work on the private protected cultural property (not discussed in this paper) – was divided into three parts. Two of them vanished integrated into the capital's government office and the Interior Ministry, showing the 'power' of the problems, respectively<sup>15</sup>. The profile of the remaining fragment changed fundamentally. Rumour spread that the long-planned transformations were triggered off by the unjustifiably large – actually misunderstood – budget proposal for preventive excavations of a large-scale private project (Mercedes-Benz). By merging it with the National Trust of Monuments for Hungary, they brought about a gigantic organization, named Gyula Forster National Centre for Cultural Heritage Management (hereinafter: Forster Centre), whose task became mainly the development of special national heritage programs, the management of state-owned listed buildings, the restoration, investment works of these monuments mainly under the aegis of the National Mansion and Castle Program.<sup>16</sup> 'Suddenly', the Forster Centre had billions at its disposal!<sup>17</sup> However, since 2012 three directors took turns at the helm of the Centre, this clearly indicates the difficulties in its functioning.

Further, for the first time, fundamental changes from the point of view of the excavating organizations took place. A new reform of the regional and local government system took place eliminated the county museum network. Summarizing very briefly, nearly all museums, with some special exceptions, after a brief transitory period, turned to be maintained by municipalities instead of the county governments.<sup>18</sup> But the challenges of large investment-led excavations were, generally speaking, entrusted to the county competent town museums, practically to the same museums that were responsible for it before, but under new financial circumstances.

The really fundamental changes happened in 2015 when the compilation of the preliminary archaeological documentation in case of large investment projects was relegated to the Forster Centre (together with fieldwork), enforcing it with the partial integration of MNM-NÖK, creating again a giant agency of some 300 employees. Looking at the

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14 393/2012. (XII. 20.) Gov. Order. Twenty-one district heritage offices were established, the area of competence of a district heritage office covered the territory of a county, in case of Budapest, Pest or Buda.

15 266/2012. (IX. 18.) Gov. Order (in force: 09.21.2012).

16 Képviseleti Információs Szolgálat, *infójegyzet*, 2016/26. (19.05.2016.)

17 The project is financed by the state and from European sources. From the budget of Economic Development and Innovation Operational Programme – 7.1.1-15 there are 106 million EUR (33 billion HUF) for this project.

18 1094/2012. (IV. 3.) Gov. Decision.

future one cannot build on upon this structure neither; this year (2016) the Government decided on the abolition of some 70 central institutions<sup>19</sup> in accordance with red tape reduction, and the Forster Centre is also closed! As of 1 January 2017, the Forster Centre is to fuse, in the authority-tasks with the Prime Minister's Office, because in the meantime the heritage protection supervisory body from the Interior Ministry was transferred to the Prime Minister's Office. The maintenance of the Architectural Museum will be held by the National Art Academy and the preventive archaeology tasks and management of state-owned monuments will be taken over by a non-profit, state-owned, company<sup>20</sup>.

### **The delayed effect of the economic crises, legal restrictions 2011–2016**

From 2010, in the media and in the Government's communication, it has been voiced with increasing frequency that archaeology and heritage protection should not be the hindrance to development, especially to the investments of major importance to the national economy. The legal frames have been changed in this spirit.

For the first time, in 2011, due to direct pressure of the actors from the economic sphere, time and financial limits were imposed on preventive archaeology. The maximum amount to be spent on the large investment-led excavations was set at 1% of the total costs of the investment, but no more than 645.000 EUR (200 million HUF). Only the Government was entitled to give exemptions in individual cases. It was also legally fixed how long the excavation could last: 30 days for the test excavation and 30 days for the excavation of the entire surface. A new 'heritage-protection' term – 'covering' – was introduced which had to be resorted to when there was no more time or money to complete the excavation of the site in question. This change of paradigm elicited extensive resistance in the profession. Hungarian and international petitions together with official protest letters were written but in spite of all the efforts the situation did not change.<sup>21</sup> (Fig. 3).

Since 2011 this framework has been slightly changed with some additions or withdrawals. However, the 645.000 EUR-limit (200 million HUF) turned to be more a disadvantage than an advantage for the investors, also because the restrictions had to be applied to the ongoing projects as well creating delays in several projects of major importance owing to the complicated permit procedure. Being impractical, the limit of 645.000 EUR was finally removed from the Act in 2015. The minimum

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19 The official explanation is the completion of the easier structure and cost effective public administration.

20 1312/2016. (VI. 13.) Gov. Decision.

21 A very good summary of all these initiatives in English, can be read in the electronic Newsletter I./3. of the Association of Hungarian Archaeologists [http://www.regesztet.org.hu/wp-content/uploads/2012/05/AHA\\_summary\\_of\\_Hungarian\\_archaeology20120511.pdf](http://www.regesztet.org.hu/wp-content/uploads/2012/05/AHA_summary_of_Hungarian_archaeology20120511.pdf)



*Fig. 3. An effort to change political attitude: The Association of Hungarian Archaeologists and the Association of County Museum Directorates organized travelling exhibition 'Rescued heritage – Treasures from the heart of Europe' in the Parliament in 2012. The exhibition was arranged around three topics: results of development-led excavations from the last 15 years, civil engagement, responsibility of the public in heritage protection, and the wide variety of archaeological heritage in Hungary, modern methods of discovering. (Source: <http://megmentettorokseg.hu/>).*

1% remained with the additional comment that the investor may undertake a higher amount. A separate budget of 0,35 % of the total cost of the investment was required for preliminary archaeological documentation. The July 2015 amendment introduced, instead of the recommended, the approved price's concept, clarifying that the numbers mean the highest possible prices.

In 2015, a new concept appeared in the law: all excavating organizations (state institutions and private enterprises) wishing to take part in preventive archaeology in large development-led projects must be accredited<sup>22</sup>. The clear aim of decision makers was marketisation of preventive archaeology. But there is no free market in archaeology yet because the circle of organizations entitled to lead such excavations remained the same: they are all state organisations (the museums, universities having MA courses in archaeology, the Archaeological Institute of the Research Center for the Humanities (as it is called now) of the Hungarian Academy of Sciences and the Forster Center, in special case). There are two lists of accreditation<sup>23</sup>, the list of state organisations and another list with private firms that can only work as subcontractors to the state organisations. The accreditation in this current form is only a sort of guarantee for the developer that if e.g. the county museum fails to complete the large development-led excavation, there will be another accredited organization which can automatically take over the job without loss of time. Also, the accreditation of private

22 14/2015. (III. 11.) MvM Order.

23 See: <http://www.kormany.hu/hu/miniszterelnokseg/parlamenti-allamtitkar/regeszeti-akkreditalt-intezmenyek-es-szervezetek-jegyzeke>.



*Fig. 4. There was an example already from 2015 summer on applying the rule of 9 days, when ruins of a Middle Age church was found at Bonyhád, covered by loess sludge, so in relatively good conditions during road construction. As a result in part it was excavated, thanks to heroic voluntary work during about a week, in part it was covered by new the road (using protective layers) and in part the investment itself was replaced. It was a difficult situation also for the heritage authority and the case triggered off an uproar among both professionals and the public at large. (Source: [http://index.hu/belfold/2015/10/06/bonyhad\\_gotikus\\_templomrom\\_uteptes/](http://index.hu/belfold/2015/10/06/bonyhad_gotikus_templomrom_uteptes/), Photo: Huszti I.)*

firms helped this aim, making public procurement much easier. If we look at the current list of accreditations, there is only one single county museum which failed to get accreditation, but its case is very special. At present, there are five accredited private archaeological enterprises, two of them with competence in the whole country.

In view of these modifications one can't help noting that legal provisions concerning archaeological activities are increasingly tightening. Especially the accelerated high-priority transportation infrastructure developments are becoming harder. The legislation makes it clear that it shall not slow down the execution of such a project when during its implementation the watching brief happens to find a site or object unexpectedly. Briefly, it is up to the minister to decide whether he permits the excavation or not; if not, the project must be continued nine days after the notification. (Fig. 4.)

There is also another new element, that in these infrastructure projects the investor can charge the costs of ensuring the excavation for days beyond the legally set number of days. In the execution of such extra archaeological work and in certain special archaeological activities also the non-accredited institutions or organizations can be involved.

About a year later, in July 2016, it was further specified that these extra costs can be charged up above the maximum of 1% of the total development budget. Also, the category of large investment project was again redefined, now designating: 1) development projects above a total gross costs of 1.609.000 EUR (500 million HUF), 2) development projects managed by the National Infrastructure Development Co., 3) construction of ramparts, dykes, flood relief reservoirs of floor area above 2500 hectares, or 4) investments for public benefit for which legal expropriation was carried out.

Our legislation is like a *beta* version software finalized without a test run. In our case, the test-run goes live.

### **Political background, summary**

After the historic turn of 1989, it was during the end of the second government, that paradigm shift got started in archaeological heritage protection and during the third one, between 1998–2002, the archaeological heritage protection really gained ground in state administration and in national (development) politics. It is emblematic that a synthetic and symbolic volume of 500 pages with noted authors was prepared by the Ministry of National Cultural Heritage, entitled ‘Hungarian Archaeology at the Turn of the Millennium’ in this period (Visy 2003).

The Hungarian laws and institutional frames for heritage protection were on the strong side in European perspective, the challenges of large-scale investments reached a magnitude in the early 2000s that began to burst the frames built on the traditional network of museums. In the new free-market system, the preventive archaeology remained the ‘monopoly’ of the state, more precisely, the monopoly of the counties. During the fourth government (2002–2006) the situation kept deteriorating, the pressure from large-scale projects was constantly increasing, particularly after Hungary’s entry into the EU in 2004. In 2006 during the local government elections, the representatives of right-wing parties came out victorious, while the left-wing still got the mandate for central government again. In this situation, a concept that was worked out by a handful of archaeologists to set up a state archaeological service for preventive archaeology – opposite the county museum system and which would also cut down the weight of the counties and boost central revenues – came in very handy for the state government. KÖSz, a new state agency, became responsible for preventive archaeology in the case of

large investment projects in the whole country. The model might have worked well, but KÖSz was dissolved by its 'rivals' at the first given chance. The right-wing politicians elected to power in 2010 'gave back' the 'large investment-led projects' to the counties who supported them, but the pre-2007 model was no longer feasible at that time.

As the settlement of large investment-led excavations was particularly urgent in the light of the global crisis of 2008, the state launched a quick salvaging operation after an unsuccessful attempt at central coordination. In 2011 drastic restrictive measures were taken: the amount of money and time to be spent on a large investment-led excavation was maximized, and the category of 'covering' archaeological sites and building on upon without excavation, was introduced, but the institutional licenses were not yet disrupted. The restrictions formulated in 2011 grew increasingly stricter and more sophisticated until 2014, but had no results, often expressly hindering the development contrary to their goal. In the meantime, the Government has transformed the state administration, the institutional network of museums and eliminated, or at least set on quite a different orbit, the heritage protection.

In January 2015 similarly to the model of 2007, the legislators entrusted again a central state agent to manage preventive archaeology on the country-level. New concept was a finer version of the 2007 model including more compromises: the 'new' institution, the Forster Center became in charge 'only' for the preliminary archaeological documentation (including the evaluation, trial trenches, and forming financial plans for further preventive steps), while, generally, the county museums remained responsible for the excavations. The restrictions as to the budget and the duration of excavation became 'reasonable' regarding the 2011 ones. It was a political intention to introduce the system of accreditation for large investment-led excavations. But the accreditation in this current form is only a sort of guarantee for the developer that if the locally competent county level town museum fails to complete the large investment-led excavation, there will be another organization, according to the law, available to take over the job without loss of time. The accreditation of private firms – helps this also – making much easier public procurement. Probably this was only the first step toward a wider liberalization.

The scientific processing of the unearthed finds was not touched in this paper, also due to the fact that there were hardly any legal provisions concerning it, although it is known that today the crucial question of excavations is the elaboration of the finds. From 2015 there is some progress from the legislative point of view, e.g. the rules of primary find processing and the final placement of the finds will be legally specified in a new order by the minister in charge of cultural matters. Negotiations are going on.

Finally, it must be stressed that the discretion of archaeology is becoming visibly ever narrower, being judged – for a variety of reasons – a factor that hinders

investment projects of national benefit. State administration included heritage administration, is under continuous reform in order to ‘rationalise’ bureaucracy. The legal framework, in general, is under continuous change. In 2016 alone, until August, nearly 70.000 pages of new laws were published in the Hungarian Official Gazette. In this context, it is difficult to produce any alternatives, but I think it is a problem also that there are no intellectual forums, a periodical, neither electronic, to speak about the problems<sup>24</sup>, there are no detailed analyses. Unfortunately after nearly 20 years of the first ‘new’ act, in part archaeological heritage, was announced the culture of the study of archaeological heritage administration, management is still not developed in Hungary.

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24 E.g. the Hungarian Association of Archaeologists could get such a forum, but during the years, its attempt has failed. It was the Teleki László Foundation that started the study of the phenomenon of cultural heritage, but the research project was terminated, compare to Erdősi & Sonkoly (2004). Nearly more articles are published in foreign language than in Hungarian on archaeological heritage management.

## The La Valletta Convention and Preventive Archaeology: The Croatian Perspective

*Filomena Sirovica*

### **Abstract**

*European Convention on the Protection of the Archaeological Heritage (Revised), adopted by the Council of Europe in 1992, had a significant influence on the practice of archaeology in Europe. The attitude expressed in the Convention considers prevention as a prerequisite for the preservation of archaeological heritage which can be conducted through the active participation of experts in the early stages of planning procedures. After the ratification in 2004, the Convention became an important factor in the development of archaeological practice as a direct participant in the planning of spatial and infrastructural development in Croatia. Although the changes were significant, they did not include the full range of requirements needed for the successful practice of preventive archaeology. As Croatian archaeology is still not turning in that direction, this paper is focused on consideration of factors which can fulfill the requirements for implementation of efficient preventive archaeology, but also the ones which are currently preventing Croatian archaeology from changing attitude towards sustainable archaeological heritage management.*

**Keywords:** *Valletta Convention, Croatian heritage legislation, preventive archaeology, rescue archaeology, in situ preservation*

### **Sažetak**

*Europska konvencija o zaštiti arheološke baštine (revidirana), koju je Vijeće Europe usvojilo 1992. godine, imala je značajan utjecaj na europsku arheološku praksu. Prema stavu iskazanom u Konvenciji prevencija je preduvjet očuvanju arheološke baštine, a provodi se aktivnim sudjelovanjem stručnjaka u ranim fazama razvoja prostornih planova. U Hrvatskoj je Konvencija nakon ratifikacije 2004. godine postala značajan čimbenik razvoja arheološke prakse kao direktnog sudionika u planiranju prostornog i infrastrukturnog razvoja. Iako značajne, promjene nisu obuhvatile sve zahtjeve potrebne za provedbu uspješne preventivne prakse. Kako se hrvatska arheologija još uvijek ne kreće u tom smjeru, ovaj je rad usmjeren na razmatranje čimbenika koji mogu ispuniti zahtjeve za provedbu učinkovite preventivne arheologije, kao i onih koji trenutno sprečavaju preusmjerenje hrvatske arheologije prema održivom upravljanju arheološkom baštinom.*

## Introduction

The revised version of the European Convention on the Protection of the Archaeological Heritage, adopted by the Council of Europe in 1992, had a significant influence on changing the public, but also professional attitude towards archaeological remains. Most of the authors who considered these changes agree that ratification of the Convention and its implementation in legislation brought about drastic changes in the practice of archaeology in many countries. The attitude expressed in the Convention considers prevention a prerequisite for the preservation of archaeological heritage and, rather than through rescue archaeological excavations, acts through active participation in the early stages of planning procedures. This process requires a developed set of tools which enable informed decision-making on the treatment of archaeological remains. The development of this new approach introduced various novelties in archaeological practice by which archaeology was no more a mere academic discipline and became a part of the planning process of social and economic development (Kristiansen 1989: 28-29; Carman 1996: 3-6; Groenewoudt, Bloemers 1997, 121; van Marrewijk, Brandt 1997, 74; Willems 2007, 57-58; 2009).

Croatian ratification of the Convention in 2004 had a significant influence on the practice of archaeology in Croatia.<sup>1</sup> Although some of the required procedures were already regulated through national legislation, with the ratification of the Convention archaeology truly became an active participant in spatial and infrastructural development. In the following years, most of the field work started taking place in the context of contractual obligations and the share of public funding in annual costs of archaeological activities is now substantially reduced. At the same time, the performance of archaeological field work was partly commercialized and the number of employed archaeologists has increased significantly.

But, although the changes covered a great deal of archaeological practice, they did not include the full range of requirements needed for the successful practice of preventive archaeology. This is especially noticeable when field work has to be conducted prior to any activities that lead to disturbance of the archaeological record. Then it becomes observable that decisions about archaeological heritage are made only with the emergence of a direct threat, i.e. in the late or final phases of development projects, and therefore without the possibility of proper utilization of mitigation strategies. In that situation *in situ* preservation is not and cannot be the primary option, and procedures, instead of being preventive, are conducted in the manner of rescue archaeology.

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1 Croatia signed the Convention in 2001 and after its ratification in 2004 it entered into force in 2005 (Narodne novine – međunarodni ugovori 4/2004).

Prevention, on the other hand, is a desirable way of dealing with archaeological heritage and represents a treatment which can be provided only through high-quality and on-time evaluation. As Croatian archaeology is still not turning in that direction, the intention of this discussion is the consideration of factors which can fulfill the requirements for implementation of efficient preventive archaeology, but also the ones which are currently preventing Croatian archaeology in changing attitude towards sustainable heritage management.

### Meaning and significance of preventive archaeology

The fate of archaeological remains no longer depends exclusively on the will and interests of archaeologists. Today, archaeology is a part of a wider debate between several interest groups and archaeologists now represent only one segment of potential interests, usually the one which is in conflict with political and economic interests designed in the form of development plans and economic progress. For this reason, any statement about the value ultimately becomes the justification of financial costs within the public or private development projects (Young 1994: 198; Grenville, Ritchie 2005: 213).

As a part of the same process, the concept of care and protection of archaeological monuments is replaced with an approach directed towards the management of archaeological heritage where the main focus is placed on the issue of long-term sustainability and thereby the issue of *in situ* preservation of archaeological heritage. This attitude requires the inclusion of archaeology in the early stages of planning procedures, which enables prevention rather than rescue archaeological excavations. The justification of this attitude can be found in its focus on future generations which arose from major infrastructural projects, conducted especially in the 1980s in west European countries (O'Keefe 1993: 406; Trotzig 1993: 414; Willems 2007: 59). These brought to light, but at the same time destroyed a significant amount of archaeological remains. As this situation is usually followed by the lack of published research, the problem became even more acute.<sup>2</sup> In accordance with the idea that archaeological remains are limited in quantity and size, experts started emphasizing the destructive character of archaeological excavations and began to develop the ideas of prevention and preservation (Carman 1996: 3-5; 2000: 5-6).

As, of course, preserving everything is not possible, this problem leads to the development of procedures for selection of archaeological remains which contain

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<sup>2</sup> After more than a decade of major development projects followed by archaeological field work, this became the situation with which Croatian archaeology can very much relate to.

sufficient value to be legally protected for long-term preservation. This, now the most important factor in creating a representative inventory of archaeological remains, required the development of appropriate selection strategies based on clear evaluation system which includes the analysis of scientifically and socially relevant values (Darvill 1987: 169; 2001: 192). The ultimate goal is to enable the creation of value assessments and value statements that define the most valuable part of the archaeological record, the part which is worth preserving.<sup>3</sup> After the procedure is completed, the selected material can be included in the management process which should ensure its protection and long-term preservation, sustainability of its value and its intact transmission through time. This approach gives heritage appropriate treatment and complies with the Convention's requirements for archaeological practice directed towards prevention and *in situ* preservation of archaeological heritage.

### Croatian heritage legislation and the La Valletta Convention

The system of heritage management includes laws, regulations and guidelines related to the procedures for identification, evaluation, inventory, protection and conservation (McManamon, Hatton 2000: 6), so preventive approach to archaeological remains can be properly defined and adequately employed only within a meaningful legal framework. As legislation is concerned with all aspects of heritage management, from conventional research methods, through the methods of presentation, interpretation, preservation and rejection, to the very rights of access and active inclusion (Soderland 2010: 130), considerations of a legal framework represent a prerequisite for understanding the characteristics of heritage management process on a national level.

Protection and preservation of cultural heritage in Croatia is under the jurisdiction of the Directorate for the Protection of Cultural Heritage of the Ministry of Culture (*Uprava za zaštitu kulturne baštine Ministarstva kulture*) and its 22 regional units. Archaeology is conducted in accordance with the Act on the Protection and Preservation of Cultural Objects adopted in 1999 (*Zakon o zaštiti i očuvanju kulturnih dobara*; Narodne novine 69/1999, 151/2003, 157/2003, 87/2009, 88/2010, 61/2011, 25/2012, 136/2012, 157/2013, 152/2014, 98/2015). Besides the

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3 On the other hand, uncritical implementation of the ideas expressed in the Convention is causing significant resistance and criticism which demands re-evaluation of the adopted paradigms (Groenewoudt, Bloemers 1997: 139; Carman 2000: 13; Burström, Elfström, Johansen 2004: 136; Tainter, Bagley 2005: 58; Willems 2009: 97; 2010: 218-219). However, new theoretical approaches are not yet developed and preventive archaeology based on policy of *in situ* preservation still represents an optimal management system for archaeological heritage.

Act, archaeological activities are governed by the Ordinance on Archaeological Research (*Pravilnik o arheološkim istraživanjima*) which was first enacted in 2005 (Narodne novine 30/2005)<sup>4</sup> and then again, with minor modifications, in 2010 (Narodne novine 102/2010). The Ordinance defines archaeological activities, licensing requirements and the conditions for conducting archaeological research.

The currently valid law is based on the Act on the Protection of Cultural Monuments from 1965 (*Zakon o zaštiti spomenika kulture*; Narodne novine 32/1965, 55/1965, 50/1966, 7/1967, 13/1967, 31/1986, 47/1986, 47/1989, 19/1991, 26/1993, 52/1994), which was the basic cultural heritage protection act in the Socialist Republic of Croatia, but also valid in the years after the dissolution of Yugoslavia.<sup>5</sup> The old Act prescribed the obligation to report any accidental discovery of archaeological finds, the procedure for registration of cultural monuments and regulations for archaeological activities, procedures for supervision of such works as well as the fines for non-compliance with law provisions. In addition, it included obligation for developers to finance archaeological activities through development schemes budget when works were planned on registered archaeological sites and required the cooperation between regional departments for the protection of cultural monuments and the authorities responsible for spatial and urban planning.

Similar obligations are imposed by the currently valid law under which all goods which are presumed to have the capacity of a cultural object and which are located or found in soil, sea or water are the property of the Republic of Croatia and are considered a national treasure. Like the previous law, it includes the obligation to report archaeological finds and sets conditions for archaeological works and their supervision, as is envisaged by the La Valletta Convention. In addition, the 'polluter' or 'developer pays' principle is extended to all work performed on the surface or below the surface, in soil, water or sea, if archaeological finds are discovered. The law defines the procedures of cultural heritage registration in the Cultural Objects Register of the Republic of Croatia, which consists of three lists: the List of protected cultural objects, the List of cultural objects of national importance and the List of objects subject to preventive protection. It also demands recording of immovable cultural heritage in the cadastre and land register, and regulates their relationship with spatial planning documents.

Brief overview of the last two cultural heritage laws provides an insight through which it becomes evident that Croatia has a long tradition of integrated protection which is reflected in fifty years of legally demanded participation of cultural heritage

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4 Before the enactment of the first Ordinance on Archaeological Research, a special ordinance had only regulated underwater archaeological activity (Narodne novine 94/1998).

5 Review of the development of legislation see in Antolović (2009) and Deranja Crnokić (2014).

experts in the development of urban and regional spatial plans. This topic was already under consideration through the analysis of professional documents created in Yugoslavia between 1960 and 1980 (Rukavina, et al. 2013).<sup>6</sup> The authors of this paper concluded that in the period in question the reflection on the principles of integral protection was well developed in Croatia. Although considerations presented in these documents were not fully incorporated in legislation, they are an important indicator of compliance with the trends that were taking place at the international level at the same time. However, after the dissolution of Yugoslavia and the change of political system, the subject was not discussed in professional documents at the national level (Rukavina, et al. 2013: 320–321). In the long run, this has certainly prevented closer cooperation between the sectors of spatial planning and heritage protection, but it can be presumed that it also prevented the development of considerations on preventive archaeology as reorientation of interests towards the long-term and sustainable preservation of archaeological heritage.

In this context, it is also important to note that the phrase preventive archaeology is not mentioned in Croatian legal documents, but also that the concept is not present in the Croatian translation of the La Valletta Convention. The cause of this situation is a translation of the Convention from English text, which is not fully identical to the French version. Willem Willems has already warned about this problem in 2007, noting that while in the Article 6 the French version of the Convention (Council of Europe 1992a) speaks about *l'archéologie préventive*, the English version (Council of Europe 1992b) uses the phrase 'rescue archaeology' which is, as Willems rightly points out, exactly what the Convention seeks to prevent (Willems 2007: 64). Unfortunately, this important issue is often overlooked when the relationship between the La Valletta Convention and preventive archaeology is considered, especially because this alone can disable the construction of proper legal foundations and their implementation in practice.

In Croatian text of the Convention 'rescue archaeology' is translated as *zaštitno arheološko iskopavanje i istraživanje*, which literally means protective archaeological excavation and research. The phrase 'rescue archaeology' (*spasilačka arheologija*) has not yet entered the Croatian archaeological terminology, and in this context, the clumsy and unsuitable term 'protection' (*zaštita*) is generally used. As terminology necessarily reflects the understanding of certain issues within the discipline, this phrase essentially implies that in Croatia archaeological excavations are still primarily perceived as a form of protection of archaeological remains. However, the basic ideas of preventive archaeology are indicated in Article 5 of the Act on the Protection and Preservation

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6 The analysed documents are not dealing with the specific issue of archaeological heritage protection, but with the protection of cultural heritage in general (Rukavina, et al. 2013: 320).

of Cultural Objects (Narodne novine 69/1999; 136/2012), which among other things says that the purpose of cultural heritage protection is its preservation in an unaltered and original condition, as well as prevention of any actions that could alter its characteristics, form, significance, and appearance, thus jeopardizing its value. Therefore it is possible to argue that the basic legal framework for implementation of preventive archaeology exists, but it seems that in practice the provisions of Article 5 are the least related to archaeological heritage. As prevention today represents the preferred method of dealing with archaeological heritage, with its primary goal directed towards avoiding unnecessary destruction, upgrade of legal provisions requires a clear redirection of emphasis to *in situ* preservation and the development of evaluation system which can support its implementation.

### Final remarks

In the context of preventive archaeology, the process of systematic evaluation provides a clear insight into the reasons for protection of archaeological heritage. The evaluation in this context is understood as a procedure of creating a statement about the value of archaeological remains which promotes the understanding of their attributes as the main precondition for decisions about their management. In the background of this procedure is the basic premise of *in situ* preservation created from the recognition that archaeological remains are under constant threat and that we cannot preserve all of them but that we have to, at one point, start choosing those which should not be subjected to excavation. So, the main objective of the evaluation becomes defining the remains that are worth preserving and the establishment of the appropriate treatment procedures for those that do not meet the set requirements. Consequently, this area of archaeological activity gains central importance and becomes formulated by the terms of conscience and responsibility of the discipline and needs to be implemented in every practice which tends to be preventive.

Of course, this is not possible without state and legislative support that will take the responsibility of registration and documentation, protection and conservation, but also the obligation of setting a quality control system based on predefined standards. Unfortunately, in Croatia, no formal or legal provisions have been made for this goal to be achieved. There is also a lack of activities in everyday heritage practice which would lead to the application of this kind of basic provisions derived from the La Valletta Convention. On the other hand, changes in this type of procedures are not possible without the support of a wider scientific community which still has the most influence on disciplinary structure and practice of archaeology in Croatia. Thereby it has the ability to change our understanding of prevention in archaeology and the

ability to enable successful implementation of requirements which are put in front of the national legislation by the La Valletta Convention. These include legal obligations that provide possibilities for active participation in the early stages of planning procedures, redirection of priorities towards *in situ* preservation and with that to non-invasive methods as preferred methods of archaeological research and desirable way of approaching the archaeological remains. This, of course, must be followed by the development of practical knowledge and skills of employees in the field of archaeological heritage management which will enable them to make informed and timely decisions on the treatment of archaeological remains.

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## **Preventive Archaeology in Romania Between Negotiation and Myth: some thoughts**

*Andrei Măgureanu, Despina Măgureanu*

### ***Abstract***

*Known as rescue archaeology before 1989 and then as preventive archaeology after the collapse of communism, this kind of archaeology has flourished in response to the many investment projects developed in Romania in the last 25 years. While its legislative basis does comply with European legislation, it is not being properly applied and there is a lack of proper management of cultural resources. In this paper we try to briefly outline some of the problems faced by preventive archaeology in Romania.*

**Keywords:** *preventive archaeology, Romania, legislation, education*

### ***Rezumat***

*Cunoscută înainte de 1989 drept arheologie de salvare și ulterior căderii comunismului ca arheologie preventivă, această formă de cercetare nesistematică a înflorit datorită proiectelor investiționale dezvoltate în ultimii 25 de ani în România. Bazele sale legislative, preluate din legislația europeană, au eșuat în aplicare, lipsind un corect management al patrimoniului. În lucrarea de față încercăm să discutăm succint câteva dintre problemele arheologiei preventive din România.*

More than 10 years ago a meeting European Preventive Archaeology was held in Vilnius (Bozóki-Ernyey 2007) in an attempt to address the basis of today's issues in preventive archaeology: the relationship between private or public investments and archaeology, where the latter was viewed as the guardian and not the destroyer of heritage. Now it is time to look at the facts anew. We should point out from the outset that our discussion of the less-than-inspiring situation faced by Romanian archaeology is merely an attempt to provide an example that could help others to avoid our problems – and help us to resolve them. We, therefore, do not intend to present examples of successful excavations or modern methods used, the databases we have worked on or the books published on preventive archaeological excavations, as all those things are part of the program of archaeology, which is not our direct concern here. We cannot save the patients if we do not know their problems.

### **Before 1989: legislation and practice**

In the Communist period, there was no proper legislation relating to rescue archaeology, let alone preventive archaeology, and there were no sanctions against the destruction of sites through unauthorized excavation (Borş 2014: 79). But it is also true that many monuments were destroyed before any archaeological investigation could be conducted (Cătănciu 2007: 347).

It was said that pre-1989 was an era of rescue excavations and that no preventive research was conducted, but that picture is not quite right. During the first years of Communism in Romania, there was an interest in identifying new archaeological sites to produce a complete archaeological map of Romania. For example, in 1946, the National Museum of Antiquities conducted a series of surveys in the regions of the Căinelui, Burdei, Tecuciului and Cotmeanei și Vedei rivers (Petrescu-Dâmbovița 1953, p. 523, Fig. 1).

The 1950s were, indeed, a positive decade for preventive archaeology, mainly due to the Bicz hydrowater plant project which planned to flood more than 30 villages. The Ministries of Electricity and Industry came to an agreement with the Romanian Academy that allowed the area to be studied before it disappeared. Archaeologists, historians, ethnographers, anthropologists, folklorists, art historians, demographers, and geographers were all involved. Between 1955 and 1958 there was a 'large-scale campaign to study the area from the archaeological and other points of view (Nicolăescu-Plopşor & Petrescu-Dâmbovița 1959: 45–60). Another large state investment, the Dunăre-Black Sea Canal, triggered an enormous effort on the part of archaeologists to save information from the construction sites. Starting with land surveys in early 1950, archaeological investigations continued with small-scale excavations, such as

those made by Berciu and Morintz in the region of Cernavodă (Comşa, et al. 1951; Comşa 1957: 325–334).

Rescue excavations were carried out not only in the case of large construction projects but also in cases of smaller-scale projects such as sand or stone quarries (Zoltán 1957: 149–161), or in cases where water destroyed archaeological sites (Dumitrescu 1957: 189; Barnea, Mitrea & Anghelescu 1957: 156–157). Another very important situation that called for archaeological intervention was the quarrying of Roman or medieval fortifications for modern buildings (Florescu, Bujor & Matrosenko 1957: 103–104). In places like Valea Lupului, strict archaeological surveillance of construction activities all over the area affected was organized alongside rescue excavations (Dinu 1957: 161). At that time it seemed that the rule was to make small-scale excavations covering the entire individual archaeological site in order to obtain as much information as possible before the builders destroyed it, rather than to fully excavate the whole area affected.

The 1970s brought new (but again not unique) cases of preventive archaeology: one example was the Iron Gates Projects (Roman 2010), where, once again, a team of archaeologists, historians, ethnographers, anthropologists, folklorists, art historians, demographers and geographers tried to gather as much information as possible about a large area that was to be submerged underwater.

Preventive archaeology was less common in the 1980s, replaced by rescue archaeology conducted through personal efforts and through connections between archaeologists and those constructing large-scale infrastructure projects.<sup>1</sup> Once again, however, there was no legislation that mandated the presence of an archaeologist on site.

## After 1989

No specific legislation on preventive archaeology was brought forward between 1989 and 2000 (Angelescu 2005: 53; Cătănciu 2007: 342). This meant that archaeological heritage remained unprotected in this period, as the legislation passed under communism had been abolished in the meantime (Borş & Damian 2014: 14). The first legal protection was provided by Government Ordinance No 43/2000 on the protection of archaeological heritage, with amendments and additions introduced by Law

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1 The chronicle of archaeological activities around Bucharest has numerous entries such as ‘builders reported’, ‘builders caught’, with archaeologists being in place after the builders had started to excavate. (Consemnări arheologice pe şantierele de construcţii. *Cercetări arheologice în Bucureşti* III, 1981, pp. 265–284). However, there were some projects where archaeologists were first to the site (see Schuster 2015, p. 254 for details of the archaeological activities conducted along the lower section of the River Argeş 1986–1989).

No 378/2001, which promulgated Ordinance No. 43/2000, and Law No 462/2003.<sup>2</sup> From that point on, the preventive archaeology rose<sup>3</sup> to become the major archaeological field activity, with programmatic/systematic archaeology being outgunned in terms of money, finds made and the quantity of excavated sites. As Irina Oberländer-Târnoveanu (2007: 168) noted, in four years (2002–2005) the number of preventive excavations almost doubled (from 212 in 2002 to 395 in 2005),<sup>4</sup> while the number of systematic (academic) excavations declined (from 285 in 2002 to 216 in 2005). In 2015 there were only 113 systematic research projects, over 326 preventive excavations and 440 watching briefs.<sup>5</sup>

## The art of negotiation

### Archaeologist vs. investor

‘Developer-pays’, which is derived from the ‘polluter-pays’ principle, is based on the idea that the investors must expect to pay for preventive research if they are to destroy heritage. But, is the developer obliged to pay for everything the archaeologist asks for? How? The developer is a businessman who, naturally, wants to make a profit. In Romania, this means constant negotiation between archaeologists and investors. Sometimes the state is the investor, and it acts like a *proper* investor: refusing to pay for things that it considers unnecessary or time-consuming, such as preliminary non-invasive investigations or an archaeological ‘crypt’ in which the results of the archaeological investigation can be exhibited *in situ*.

We have legislation, of course. The law stipulates that ‘preventive and rescue archaeological research is part of sustainable development strategies, and of economic and social, tourist, urban and town planning development, at the national and local level’.<sup>6</sup> In reality, this is ignored, even by the state organizations because of the incomplete nature of the legislation (Micle 2014, p. 445), and because of the many ambiguities regarding the protection of archaeological sites and the possibility of avoiding the archaeological discharge procedure. Similarly, negotiations between

2 For a corpus of legislation, see Borș (2014) or the online resource at <http://cimec.ro/Legislatie/Legislatie-culturala.html>.

3 As we have pointed out, there was some preventive archaeological research before 1989. Claims that ‘a new type of archaeological research, defined as preventive archaeological research and different to rescue excavation, was necessary [after 1989]’ (‘este nevoie de un nou tip de cercetare arheologică, definită ca *cercetare arheologică preventivă*, diferită de *arheologia de salvare*’, Marinescu-Bilcu, Andreescu, Bem, Popa 1996–1998, p. 93) are therefore not entirely correct.

4 This is the result of the adoption of the Valletta Convention in Romanian legislation and a boom in construction activities (Angelescu 2005: 61).

5 Data from the Ministry of Culture, online resource at <http://arh.cimec.ro/ListCercetare.aspx?key=public>.

6 Government Order No 43/2000, art. 2.2.

archaeologists and investors on the incorporation of newly discovered archaeological evidence into the budget of development project have to be replaced by clearer and stricter legislation.<sup>7</sup>

### Archaeologist vs. the state (political pressure)

In 2009 an argument started between the Ministry of Transport and the Ministry of Culture. The issue was the presence of too many archaeological sites along motorway routes. At that time, minister Radu Berceanu exclaimed: 'I do not know how, but there are dozens and dozens of archaeological sites precisely along motorway routes like Dacians knew where we will do highways,'<sup>8</sup> thereby making the accusation that those sites had possibly been invented by archaeologists. In fact, as a recent study proves, situations requiring preventive archaeological research have accounted for fewer than 8% of the surface area of the motorways constructed (Colțeanu 2015: 94). Given that, on the basis of field diagnoses, builders are free to build in areas where there are no archaeological sites, but under archaeological surveillance; the argument that archaeologists are blocking investments has no ground.

As this example shows, political factors exert huge pressure on archaeologists' field activities, a fact also noted in the Report of the Presidential Committee<sup>9</sup> and provides builders with the perfect excuse for justifying delays. One idea for avoiding such situations is to integrate archaeologists into the teams responsible for conducting project feasibility studies.<sup>10</sup>

### The myths of preventive archaeology

Rescue archaeology, which starts from the idea that the minimum is better than nothing, appeared as a concept in the early 1950s, with rescue archaeologists arriving after the builders had already begun their work. By contrast, preventive archaeology is meant to take place before the arrival of the builders and to protect rather than 'save'

7 From the investor's point of view, he provides the finances for archaeological excavation, which he believes entitles him to impose his wishes and exert greater pressure on the archaeologist.

8 <http://www.ultimelestiri.com/berceanu-reproseaza-ministerului-culturii-ca-dacii-ii-saboteaza-autostrazile-paleologu-spune-ca-el-159417.html>.

9 *Raportul Comisiei Prezidențiale pentru Patrimoniul Construit, Siturile Istorice și Naturale*, 2009, p. 54 (<http://old.presidency.ro/static/rapoarte/Raport%20CPPCSINR.pdf>)

10 There is a new attempt by the Romanian National Company of Motorways and National Roads to implement this, but there is either no required funds (the archaeological institution has to have its own funds, and is later refunded by the state) or no access to the field, with most of the land being private.

archaeological sites. Prevention requires a set of measures which involve preliminary identification by non-destructive methods, complemented by invasive (diagnostic) investigations, followed by exhaustive research if the construction could not avoid the site.

### The La Valletta Convention means something in practice

How can the La Valletta Convention, which came into force in 1998 in Romania,<sup>11</sup> be put into practice and by what means can it make developers fall into line? Archaeology has entered into a market economy that it does not understand well and the actors on this stage are competing for the lowest price (Colțeanu 2015: 95). This situation is generated by gaps in the legislation, by the current financial status of archaeologists and their institutions and, on occasion, by personal scientific interests of individual archaeologists or of others who desire to carry out research no matter what.

A report by the Presidential Committee for Heritage noted: 'In Romania, rescue archaeological excavation is pressed into the service of economic investment only and not that of preserving the national archaeological heritage'.<sup>12</sup>

The tree-like structure of the state system of archaeology in Romania includes the Ministry of Culture, a consultative National Archaeological Commission and 41 Regional Directorates for Culture, Religious Affairs and Cultural Heritage. It appears to be a logical and complete scheme that starts from the legislative level and builds up towards practice. In fact, the ministry does not provide the proper legislation, the Commission does not have any control and the directorates do not have adequate staff. No action is taken against preventive archaeological projects that do not comply with preventive legislation or with international or national stipulations regarding the budget and the minimum steps to be taken in order to possibly avoid the archaeological sites or to document the diverse archaeological situations as accurately as possible.

The directorates have a director, a financial department, a driver and other staff, but no archaeologist<sup>13</sup> and no control of what takes place in their territory.<sup>14</sup> The National Archaeological Commission meets once a month and has one day in which has to

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11 For details on how the Convention has been incorporated into Romanian legislation see Angelescu (2005: 56–58 (table)).

12 *Raportul Comisiei Prezidențiale pentru Patrimoniul Construit, Siturile Istorice și Naturale*, 2009, p. 52 (cercetarea 'de salvare' în România este pusă exclusive în slujba investiției economice și nu în slujba apărării patrimoniului arheologic național).

13 In 2014 only 17 directorates had an archaeologist among their employees (Borș & Damian 2014: 15).

14 *Raportul Comisiei Prezidențiale pentru Patrimoniul Construit, Siturile Istorice și Naturale*, 2009, p. 137.

discuss over 150 items (reports, projects, etc.);<sup>15</sup> it has no budget to make inspections in the field or, indeed, to meet more than once a month.

It was noted 10 years ago that there was ‘a lack of specialists in urban archaeology, medieval archaeology, underwater archaeology and modern survey’ (Oberländer-Târnoveanu 2007: 177) but nothing has changed since then because the university system provides no room for such specializations.<sup>16</sup> It was said at the same time that we did not have enough archaeologists for the territory and their means of monitoring were limited by modest financial resources and poor equipment (Oberländer-Târnoveanu 2007: 177), but the ministry has done nothing to change this: an archaeologist from a regional directorate for culture, religious affairs, and cultural heritage is paid less than 250 euros a month and has no financial resources to travel through and supervise his area.

### Archaeology has a preventive role<sup>17</sup>

From the idea of prevention, several archaeological resource management programs have been developed for rescue or preventive archaeology under different names and with different emphases. They involve making an inventory of all archaeological situations in order to protect them against possible future urban planning or infrastructural projects, working from the premise that, once the sites are known, we can prevent future projects from affecting them in order to integrate and preserve archaeological heritage.

Unfortunately, there are no active projects under way at the Ministry of Culture or any other public institution to identify, classify or make inventories of archaeological and historical heritage. There is, however, a project called National Archaeological Record of Romania (RAN),<sup>18</sup> created under the stipulation of the La Valletta Convention (Articles 2 and 7), that aims to gather all information about archaeological sites on present-day Romanian territory.<sup>19</sup> The project has been successful, with almost 16,000 archaeological sites being collected in the project’s database; but there is

15 During the meeting on 30.9.2016, the Commission debated more than 170 cases. (<http://cultura.ro/page/239>).

16 Fortunately, there are in fact some preventive archaeology syllabuses: e.g. in Timișoara (Dorel Micle) and Cluj-Napoca (Mihai Bărbulescu).

17 For warnings about the ambiguity of the legislation see Cătănicu (2007: 344). The report of the Presidential Committee for Heritage (*Raportul Comisiei Prezidențiale pentru Patrimoniul Construit, Siturile Istorice și Naturale*, 2009, p. 118) states that ‘preventive research is conducted in order to produce an archaeological discharge certificate, which pushes back the main purpose of preventive research – saving archaeological sites’ (‘cercetarea preventivă se face cu scopul de a da avizul de descărcare de sarcină arheologică, ceea ce trece în plan secund scopul principal al cercetării preventive – salvarea siturilor arheologice’).

18 <http://ran.cimec.ro/sel.asp?Lang=EN>.

19 In fact, there is no field activity, which means that large areas of Romanian territory have still not been surveyed (Cătănicu 2007, p. 344).

nothing relating to the geographical location of the area or the protection perimeter of any archaeological site,<sup>20</sup> which means that it cannot be used to relocate investment projects at the outset of the feasibility study. Local authorities, investors, and architects are unable to use this database or its Cartographic Server,<sup>21</sup> since most of the sites were simply located in the centers of the closest villages, far from their actual position, and are represented as dots, with no clues as to their real limits.

Mayors do not include archaeological sites in their landscape plans because those plans are provided by architects and urban planning specialists, who do not supply money for an archaeological survey of the territory of a city or commune. It is disheartening to note that even several years after the ministry provided handheld GPS systems and GIS programs, many regional directorates for culture, religious affairs and cultural heritage are still not using them, instead relying on old paper maps on which sites are marked with a large pencil line. No one, in fact, knows the real limits of a particular site.<sup>22</sup>

The idea for an Institute for Preventive Archaeological Research came about in 2009<sup>23</sup> in response to the fact that numerous archaeological sites were being discovered during field diagnosis along motorway routes,<sup>24</sup> and to the arguments between the Ministry of Transport and the Ministry of Culture. The main aim of this institute would be to study all archaeological sites before investments of public interest affected them. The purpose appears to be closer to what we mean by 'prevention', i.e. that it will be to the benefit of the heritage rather than that of the development projects. In fact, the reality is somewhat different: the intention was not to protect a site and to relocate an investment project if necessary, but to gain more time for research, as the secretary-general of the Ministry of Culture at that time, Mircea Staicu, explained.

The purpose of preventive archaeology, from the authorities' point of view, is clear from the text of Common Order No 653/2010 of the Ministry of Transport and the Ministry of Culture and National Heritage, which contains the following definition: 'Preventive archaeology means archaeological research and excavations carried out in areas affected by investment projects and landscaping, as well as for commercial or industrial projects in various areas with archaeological potential'. All the details from the annex to the Order support the notion that investments

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20 *Raportul Comisiei Prezidențiale pentru Patrimoniul Construit, Siturile Istorice și Naturale*, 2009, p. 54.

21 <http://map.cimec.ro/Mapserver/?strat=localitati&cod=11861#>.

22 [http://urbanism.pmb.ro/Informa%C5%A3ii%20publice/Planul%20Urbanistic%20General/\(partea%20scris%C4%83\)/Regulament%20local/delimitarea%20siturilor%20arheologice.jpg](http://urbanism.pmb.ro/Informa%C5%A3ii%20publice/Planul%20Urbanistic%20General/(partea%20scris%C4%83)/Regulament%20local/delimitarea%20siturilor%20arheologice.jpg).

23 This was suggested, following the French INRAP model, by the Presidential Committee for Heritage report (*Raportul Comisiei Prezidențiale pentru Patrimoniul Construit, Siturile Istorice și Naturale*, 2009, p. 119 and quotation 245).

24 <http://www.autostrada-transilvania.ro/articole/gandul/art84.htm>.

(e.g. road construction projects) are more important than the protection of archaeological sites, or that planners should seek to avoid sites or limit the impact of the development on sites.

Perhaps this situation derives from the fact that the terminology is not quite clear, preventive archaeology often being understood as a synonym for rescue archaeology (Anghelinu 2006:134) or contract archaeology (Burlacu 2013: 41, quotation 9). However, the confusion has more likely been generated by the fact that what we do is rescuing archaeological information before the builders destroy them entirely. It appears that the difference lies in the moment at which archaeologists intervene in the field, i.e. before or after the builders have begun work, with the end being the same - no more archaeological structures/issues in the excavated area. In other words, destruction of the archaeological site cannot be prevented. The 'preventive' nature of archaeology, therefore, appears to be understood as the prevention of unscientific destruction by an investor or builder (Marcu 2014: 27 to quote one of many examples).

It has recently been stated that 'Preventive archaeology, in its true sense, assumes that the currently feverish archaeological efforts on motorways already under construction are actually being generated at sites situated in areas that will be affected by future major projects' (Dragoman & Oanță-Marghitu 2013: 282). This is the same idea again: the meaning and purpose of preventive archaeology is not to protect the archaeological site and to make efforts to relocate the investment projects but to study the site from a more reasonable time perspective. The idea is to have time and not to be hurried by the investor to finish more quickly, and not to compel the archaeologist to make a selection of what to study in the field, leaving some archaeological features unexcavated, or to research the area insufficiently and thereby fail to collect all the information. But does more time mean more accuracy, more quality? Can time be seen as a positive and as the only criterion that can make a difference between good and bad archaeology, whatever that means?

It is from this perspective that we must approach the issue of the preventive archaeology management, which is the major problem in Romania. The concept of the 'management of cultural resources'<sup>25</sup> – sounds good but it is definitely missing in Romania – seems to be understood as nothing more than the production of high-quality research only (Burlacu 2013: 42). On the contrary, in our opinion, this 'management' must work not from the premise of 'scientific destruction' but as

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25 Another aspect of the *management of cultural resources* is the definition of what has to be managed. Here we are specifically referring to how Romanian society regards monuments that commemorate the recent past: industrial landscapes from the 19<sup>th</sup> and 20<sup>th</sup> centuries, or communist symbols (statues or other structures). The idea that 'we do not need them anymore' or that they are a 'painful reminder' are not good arguments. (see Dragoman, Oanță-Marghitu 2013: 33, 37).

part of efforts to protect the site/monument by *in situ* evaluation, and to make the general public conscious of its cultural value. It is, after all, better to have a history than nothing at all.

From this perspective of cultural management, there are three main factors relating to the current legislation:

The first concerns the European Union funds for interventions on a historical monument and its surrounding area. Projects with no (or almost no) previous archaeological research are accepted for funding, but of course, European funds cannot be used for archaeological works. Therefore, these funds go to the beneficiary, which is either the state or a private entity with no financial resources (or is not willing to use them). The archaeologists become aware of the construction intervention after the building permit has been granted by the authorities and tries to do his best with minimal financial support. If they are good diplomats,<sup>26</sup> they will secure sufficient time and money to carry out excavations and maybe change the project in response to new data found in the field. But again, this involves a great deal of personal effort under very real threat of losing European funds, which attracts negative public reactions regarding archaeological activities.<sup>27</sup>

The second factor is related to major (and not only infrastructural) projects, where the presence of the archaeologist is ignored in the initial phases (the feasibility study). The archaeologist is faced with a situation which cannot be changed: the engineers show him a project and the constructor waits to start. The archaeologist is powerless to prevent the destruction of the site and has no room to do so. One of the most important principles of the concept of preventive archaeology is therefore completely circumvented.

The third factor relates to that part of preventive archaeology called 'the management of archaeological resources'. From this point of view, we see that the law, alongside with the obligation to carry out archaeological excavation, allows local authorities to permit any investor to build on archaeological sites. Why? Because local authorities need money from taxes and a new investor means more money for the local budget. As previously pointed out, local authorities have neither a correct nor a complete map of archaeological sites, and therefore no interest in protecting the sites – even if they perhaps understand the importance of doing so. Thus, they allow more and more buildings or other kinds of project to affect archaeological sites, all in the name of developing their community.

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26 The archaeologist as a diplomat with the ability to negotiate with different landowners where to excavate next year in order not to affect the crops is an image with a long history (Dumitrescu 1957: 115).

27 This situation is often encountered when archaeological activities interfere with the interests of the citizens: 'blocking' their habitual walks, 'blocking' their access to a certain place of worship etc. This reveals another great problem: public education regarding historical and archaeological heritage.

## Preventive archaeology produces no academic knowledge

Preventive and systematic archaeology differ in terms of time constraints (which prevent the use of refined data-recovery techniques), terrain-related constraints (the strict delineation of an area) and financial constraints. Temporal, spatial and financial limits do, indeed, exist, but all of them, with the exception of time, can be abolished. No one can refuse to allow an archaeologist to conduct systematic research on the remaining part of a site untouched by the initial project, which means that the spatial criterion is not a valid one. Financial criteria do appear, at first glance, to be a major difference, but in fact, the opposite is true: today, more money is invested in preventive than in systematic research. One recent example is the 10,000 € invested in a systematic excavation at the extremely important site of the Greek-Hellenistic and ancient Roman town of Histria, the amount of money was similar to the budgets for preventive research of individual sites on the motorway routes.<sup>28</sup>

The criterion of time is by far the one most often used to show that preventive archaeology cannot provide academic results. Indeed, preventive archaeology has to be carried out in a limited period of time and cannot be undertaken over centuries (there is some systematic research, for example, that began in the early 20<sup>th</sup> century and is still going on). But this disadvantage can be abolished through the proper management of resources and, especially, by engaging a research team of sufficient size and quality.

Preventive archaeology has the same obligations as systematic archaeology: that all stages of archaeological research, consisting of inventory, diagnosis, excavation, supervision and processing of the archaeological material, should be undertaken using all the methods, techniques and specific practices considered necessary to obtain maximum information on the archaeological heritage of the area being researched.<sup>29</sup>

We should also not forget that the results of the preventive archaeological research have been published in numerous books, articles and Ph.D. theses, which does suggest that preventive archaeology can be a viable source of information (Marcu 2014: 28). With this in mind, we believe that preventive archaeology, when done properly, can provide knowledge and information useful to the academic world.

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28 Given that funds are provided from a single source (the Ministry of Culture), almost no archaeologist attempts to obtain funds from other sources. For more on this see the list of academic research projects financed by the Ministry of Culture at <http://cultura.ro/articol/1087> (the figures for each site are in the Romanian national currency, current exchange rate 4.5 lei = 1 euro).

29 Ministry of Culture Order No 2518/2007, art. 15.

## Preventive archaeology is a fruitful discipline and the proper place for experiments

Preventive research, which is subject to an unprecedented mobilization of financial and human resources in Romania,<sup>30</sup> should be the locus of dialogue between different traditions or of experiments using different methods of archaeological excavation. In general, preventive archaeology should be an opportunity to formulate new questions concerning the theoretical perspective of archaeology in Romania (Dragoman & Oanță-Marghitu 2013, p. 281).

Preventive archaeology is, therefore, a kind of laboratory in which you can conduct experiments, apparently without the pressure of applying the wrong method – unlike research-oriented excavation, where is no room for error. It is a playground for experiments that can be used in academic archaeology after they have been attested by preventive archaeology.

The idea that preventive archaeology has access to large financial resources (Dragoman & Oanță-Marghitu 2013; Borș & Damian 2014: 21) and that it is ‘richer’ than academic archaeology is a common one and one that appears to be borne out by current situation, where 10,000 euros was made available for a single campaign of systematic research at an extremely important site. In fact, preventive archaeology has access only to a more ‘instant’ source of money negotiated on a case-by-case basis. For academic archaeology, a researcher (or his institution) can apply for different types of financial resources, such as grants, sponsorship, state programs or money from central or local authorities. These are resources for which preventive archaeology is ineligible, at least from one point of view: that one simply does not have the time to apply for these financial resources. From this perspective (financial resources, the time factor and the fact that the weather conditions are friendlier to research-oriented archaeology), it is perhaps more appropriate to think that preventive archaeology can hardly be the place for experiments. However, preventive archaeology must be the place where an archaeologist does everything he can to protect the site and, if the investment cannot be relocated, to collect all possible data in any way available.

## Conclusion

This paper has attempted to briefly summarize what we consider to be the main problems relating to how preventive archaeology is viewed in Romanian legislation

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30 It must be said that this human and financial mobilisation it is not programed and supported in legislation. It has nothing to do with the state, the archaeologist are forced to constant negotiation with either the builder or the investor.

and practice. There are a great many gaps, both in legislation and practice, that need to be removed quickly. While it is true that the archaeologist must enjoy better support from the authorities that control and impose the law, he must, at the same time, talk to and educate the public; only in this way will the public accept his efforts and understand the necessity of preserving traces of the past. Problems indeed exist, as do myths and terminological confusions, but they can all be resolved. Currently, works on Code of Heritage are under way. Perhaps this is the first step in the right direction.

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## Motorways and Archaeology: What does it mean to be a contractual archaeologist in Romania?

Mihaela Simion

### Abstract

*This paper aims to provide an overview of the current situation in Romania regarding infrastructure projects and constraints and obligations relating to the heritage protection. At present, the archaeological permits are source of frequent complaint among contractors in the road-construction sector. The challenges with preventive archaeological projects stem from three sources: lack of clarity in the legislation; capacity constraints among project promoters; and institutional incentives related to the financing of such work. These premises and a number of other factors, have made that, in the last years, in Romania, preventive archaeological research is seen rather as an obstacle to the implementation of infrastructural development and not as an extraordinary opportunity for research and capitalization of the heritage. At the same time, these premises generated a series of possible abuses or unprofessional attitudes from all the actors involved, with important consequences on the perception of the concept of archaeological heritage.*

**Keywords:** Romania, motorway archaeology, preventive archaeology, archaeological diagnostics, permits

### Rezumat

*Actuala procedură de avizare, în cazul proiectelor de infrastructură, amână practic cercetarea arheologică preventivă până târziu, în faza de execuție a proiectului, deci după emiterea Acordului de Mediu. Suprapunerea cercetărilor arheologice cu etapa de execuție a lucrărilor de infrastructură a generat diverse probleme, unele dintre ele cu potențial de a afecta determinant absorbția de fonduri europene și programul național de dezvoltare a economiei. Aceste probleme pot avea, la rândul lor, o serie de efecte colaterale suplimentare dintre care amintim:*

- *abordarea și execuția superficială a cercetării arheologice preventive, ce poate conduce la daune majore asupra patrimoniului arheologic protejat;*
- *o lipsă de înțelegere reciprocă și de colaborare între organismele guvernamentale responsabile, de obicei, Ministerul Culturii și Ministerul Transporturilor (acesta din urmă fiind principalul promotor de proiecte cu impact semnificativ asupra patrimoniului arheologic). Acest lucru, la rândul său, duce la acuzații reciproce legate de responsabilitatea întârzierilor proiectelor de interes național.*

In Romania, two the most complex permits required for development and preventive archaeology are the Environmental Impact Assessment (EIA) and the Archaeological Permit (AP). Both take months to be completed though they are normally carried out in parallel, and both are governed by complex and detailed legislation. The effective delays in the permit-granting process lead to a number of problems, one of them being the overlap of archaeological research and the execution of construction works that may cause various problems. These problems can, in turn, have additional knock-on effects:

- circumstances in which archaeology-related procedures are rushed potentially lead to severe harm being done to legally protected heritage, and
- lack of mutual understanding and collaboration between the responsible government bodies (e.g. the Ministry of Culture and Ministry of Transport, the latter frequently being the principal investor of projects with significant impact on archaeological heritage). This, in turn, leads to reciprocal accusations and mutual blame for delays.

In other words, the Ministry of Transport and Infrastructure, through its bodies, has the responsibility of ensuring safe and efficient road and railway infrastructure but the development of this communication network has a particular impact on archaeological heritage which should be otherwise considered as unrenovable national resource. The role of guarantor regarding compliance with all legal constraints regarding the heritage protection is given to the Ministry of Culture. These two ministries are, indeed, the main parties involved in a problem in which, for the last 25 years, we have all been striving to ensure a precarious equilibrium between large infrastructure development projects and greate opportunities for historical and archaeological research. Unfortunately, even upon a selective analysis of the facts, things still seem to have become stuck in a more or less unrealistic projecting phases in which the rules are made by the two parties which do not have even a minimal desire to listen to each other. The consequence of this pseudo-dialogue is a state of tension, along with institutional and professional frustrations, with dramatic effects on responsibilities assumed by the respective parties.

In theory, the granting of an EIA depends upon the resolution of all heritage-related problems and the extent to which archaeological heritage is affected, while the granting of all notices, including the permit to remove the archaeological heritage (e.g. excavations) is the task of the Ministry of Culture. Interventions that could affect the heritage are strictly forbidden without applying certain preliminary procedures advised and overseen by the Ministry of Culture. Romania ratified the La Valletta

Convention in 1997 and adopted the principle of ‘integrated conservation’<sup>1</sup>, and the Ministry of Culture was given the task of detailed examination of the possible impact of any development on the archaeological heritage.

But, in practice, the procedure of issuing an EIA runs parallel to, and, one might say, independently of the Ministry of Culture’s permit-granting procedure. In this administrative ‘vortex’ (Fig. 1) archaeological activities are defined as part of research. If they would have been timely accomplished and not confused or replaced with the ‘desktop evaluation’, they would have produced benefits for both parties in terms of deadlines, costs, technical specifications and the quality of the research. In Romania, these activities are referred to as ‘archaeological diagnostics’.

The problem of the Archaeological permit requires special attention for at least three distinct reasons:

1. The process of obtaining a permit is long and is a frequent cause of delays and financial problems. Over the course of time, this has generated a very large number of complaints by developers and, in equal measure, by heritage protection professionals.
2. Regarding the duration of the procedure and the long- and short-term effects, the Archaeological Permit is placed in the first two stages of the environmental impact procedures.
3. The permit-granting procedure becomes redundant due to collision with other permits needed for the development.

To obtain the permit of the Ministry of Culture, the developers must, therefore, comply with conditions laid down by a series of legislative acts.<sup>2</sup> While procedures linked to the archaeological heritage are as complex as those linked to the environmental issues, the associated legislation is not comparable from the point of view of coherence and interpretation. While the environmental legislation provides a consolidated institutional framework which clearly establishes the measures that must be undertaken by the developer, the archaeological heritage protection legislation often lacks similar clarity and concision. In practice, the developers frequently do not

1 The concept of integrated conservation first appears in the text of the 1985 Granada Convention for the Protection of the Architectural Heritage of Europe.

2 Government Order No 27/1992, Government Order No 68/1994 and Law No 11/1994, Law No 5/2000, Government Order No 43/2000, Law No 422/2001, Law No 378/2001, Law No 311/2003, Law No 462/2003 (introduces the notion and definition of preventive archaeological research), Law No 258/2006 (refers to the principle of integrated conservation, realising specific archaeological works within in the context of environmental impact evaluation), Order of the Minister of Culture and Cults No 2071/2000, Order of Minister of Culture and Cults No 2426/2005, Order of Minister of Culture and Cults No 2066/2007, Order of Minister of Culture and Cults No 2103/2007; Order of Minister of Culture and Cults No 2518/2007, Order of Minister of Culture and Cults No 2260/2008, etc.

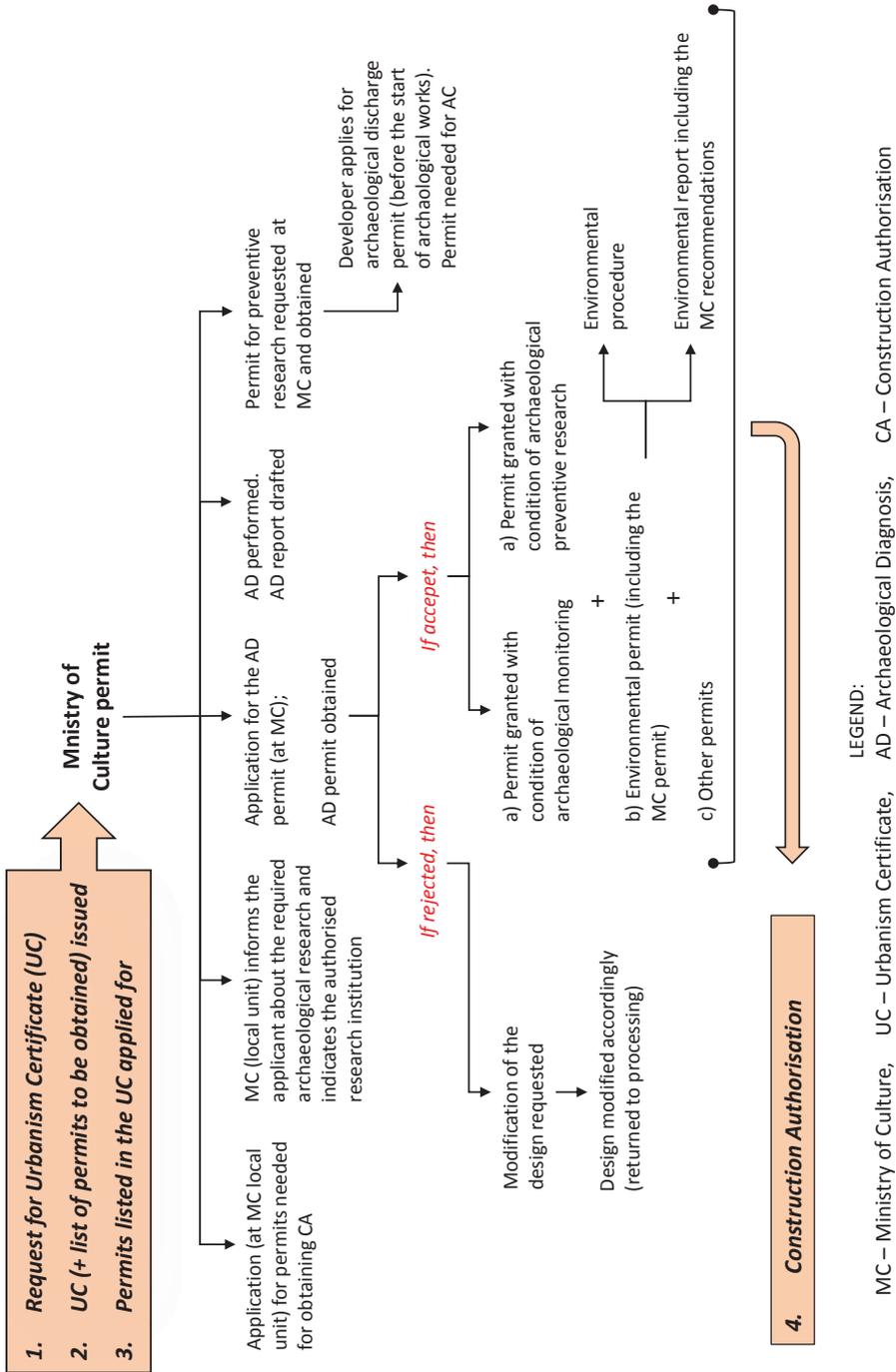


Fig. 1. Procedures diagram in process of obtaining permits for development and preventive archaeological research.

follow the procedures for obtaining Ministry of Culture permits in the feasibility study phases, even if the legislation is sufficiently clear.

In the feasibility study phase, the developer receives a 'Principle Agreement' from the Ministry of Culture only if the Ministry of Culture permit is solicited through the Urban Planning Certificate. This usually consists of a simple declaration by which the Ministry of Culture signals that it will not oppose the project if all statutory archaeological research procedures are performed. This permit is sometimes based on a desktop study which includes preliminary archaeological observations, but it can be issued also without it. However, the 'Principle Agreement' can be used by the developer to obtain the environmental approval, and, consequently, also the Construction Authorisation. The Principle Agreement is, therefore, *de facto* considered as an equivalent to the final permit issued by the Ministry of Culture. As a result of this procedural outlet, once the Construction Authorisation is issued, the Ministry of Culture can still (and frequently does) modify, extend, and even change the initial permit completely.

The permit-granting process delays the final decision until the execution phase of the development project, i.e. after the Environmental Agreement, so that activities linked to the heritage protection (i.e. archaeological diagnostics and preventive research) end up being carried out in parallel with the construction works. This has generated various problems, some of which have the potential to decisively affect the absorption of the European funds for the national development programme. This perpetuates a lack of mutual collaboration between the two ministries and ends in one side accusing the other of delaying the projects.

Therefore, the desktop evaluations in the feasibility study phases are frequently placed in protected zones in which there is no real archaeological potential, and which were frequently designated as such only on the basis of archaeological information from literature, without proper georeferencing and control in the field. In some cases, such designations were based on archaeological finds in secondary deposits. Based on such data alone, the correct diagnostic becomes impossible and it does not allow adequate planning of the time, logistics, requirements for specialist staff personnel, and, obviously, the costs. There were also cases of the disparity between the data used for obtaining the 'Principle Agreement' and the real situation in the field (Fig. 2).

It is clear that the lack of adequate archaeological diagnostics in the feasibility study phase, or at least in the project-planning phase, raises a series of problems regarding the archaeological preventive research:

- the costs of archaeological works are not adequately calculated and are not properly considered neither in the cost-benefit analysis nor in the final budget of the development project. In some cases, these costs may significantly affect the total budget and the project timetable and may generate a series of other problems in reimbursement

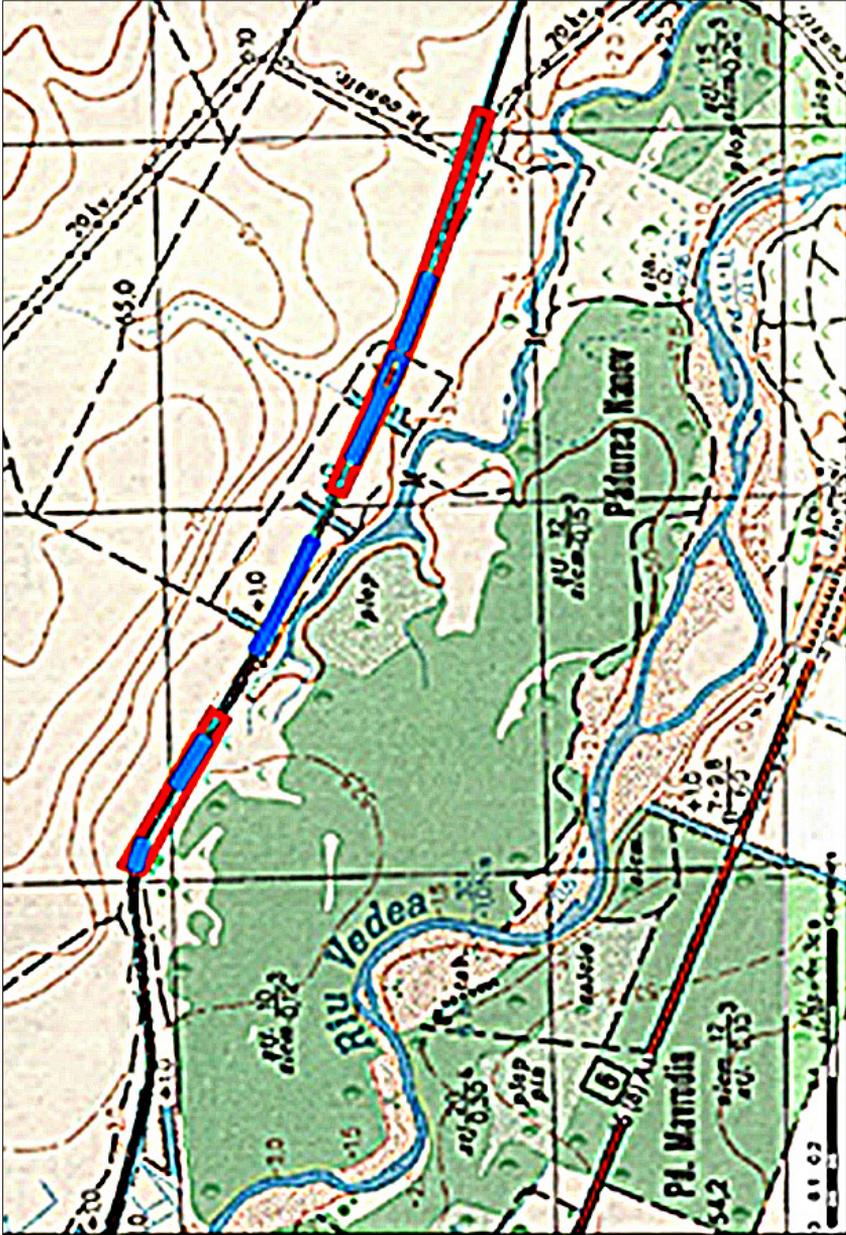


Fig. 2. Alexandria Bypass, an examples of inconsistencies between the archaeological potential reported through theoretical evaluation and the real situation ascertained through archaeological diagnose in the field (GIS – Florela Vasilescu). Red – theoretical evaluation, blue – real situation after archaeological diagnose.

- inadequate management of archaeological works by the developers whose priorities and interests lie not in preserving archaeological heritage but in respecting the contractual agreements, deadlines, and turning a profit
- the demands of preventive archaeological research might cause significant changes to the initial project. In some cases, due to previously unspecified clauses in the contract, this may considerably complicate the financial agreements between the parties involved

Compared to other European countries, Romania has, indeed, strange interpretation of the ‘developer pays’ principle. While one would expect that archaeological preventive research would be financed by the project investors (e.g. Ministry of Transport, National Motorways Company or CNADNR), this is not the case. One would also expect that the state would be the party interested in preserving the heritage but, on the contrary, when financing the development, the state considers the heritage more as a problem and seeks to avoid or ignore it. The state (as an investor), indeed, shifts the financial responsibility to the contractor of construction works. This creates a situation where contractors which have won a tender to construct certain infrastructural objects are then faced with different reality and conditions, to additionally finance from their own funds the works about which they have not been properly informed in advance (e.g. in tenders). In fact, tenders normally include only very short and general phrase - *technical archaeological assistance* - which stipulates that the enterprise must:

1. Respect the norms of Government Order No 43/2000.
2. Provide ‘technical archaeological assistance’.
3. Undertake all measures required to obtain a certificate to relieve the archaeological burden, should this certificate be needed.
4. Ensure, that archaeological sites are protected, where required.

Enterprises have little experience in estimating the costs of archaeological research, and by ‘technical archaeological assistance’ they frequently consider only ‘archaeological monitoring of construction works’. This means that in practice the costs of archaeology are *always* underestimated and that there are large discrepancies between the sum assigned in the contract and the real costs to be paid. Contractors simply consider this profoundly unfair from the state to pass its own obligation on to them and tend to avoid or minimize archaeological works.

One of the reasons for removing archaeological diagnostics from the feasibility study stage and moving it to the execution stage is also a difficult access to the areas on which the archaeological assessment is to take place. Government Decision No 53/2011 (Guidelines for applying Law No 255/2010) and Government Order No

43/2000 include norms regarding a landowner's obligation to allow access to archaeological research, with adequate financial compensation. However, there is no detailed procedure for the project developers to follow.

Attempts to minimize the costs of preventive archaeology 'exploit' the following:

- Archaeological research is not recognized as a specific category of works in the general estimate of investments framework as approved by Government Decision No 28/2008, where there is only a brief reference to the costs of 'other permits and authorisations'.
- Even though the law clearly stipulates the integration of archaeological preventive procedures in the framework of the environmental permit system, there are no clearly defined institutional responsibilities for doing so. Hence, the granting of permits for archaeology is distinct and separate.
- There are no consolidated procedures for issuing permits. As a consequence, similar permits issued by different agencies of the Ministry of Culture (i.e. Regional Directorates for Culture) may vary significantly in form and content.
- There is no clear, coherent or detailed description of the procedure that must be followed by a developer, from the release of the urban-planning certificate to the release of the final notice allowing them to perform construction work.
- Developers are not very familiar with the legislation protecting the heritage, and also tend to ignore it. A similar lack of knowledge and willingness to ignore the legislation can also be found in the institutions that perform preventive archaeological research work. Commissioned feasibility studies frequently do not include requirements related to the heritage protection at all (or include merely an ambiguous reference to it), and often do not include adequate financial allocations.
- There are no general cost standards for archaeological research in line with good practices elsewhere in Europe.
- Order of the Minister of Culture No 2562/2010 (which establishes the territorial competences of local museums) drastically limits the number of entities with legal authorization to perform such preventive research. This order, combined with the lack of cost standards, makes control of costs almost impossible as well as the quality of research. The developers are facing local monopolies which dictate their own prices. According to Order of the Minister of Culture No 2562/2010, a project developer is obliged to contract the local museum for all archaeological activities. In cases where local museums do not have enough personnel to carry out the works or they lack the managerial capacity for large projects, this may lead to prolonged field investigations and an extreme increase of costs.
- A significant lack of available archaeological personnel. Archaeologists from the museums which perform field investigations are not remunerated from the project budget, and in any case, their remuneration, as employees of the museums, is

far from attractive. Though, there are more than 800 archaeologists listed in the Archaeologists' National Register,<sup>3</sup> there is still a significant lack of staff capable of performing fieldwork.

- There are no standard templates for contracts for preventive archaeological research. Other European countries have such templates serving the developer's interests and those of the archaeological research. In Romania, every preventive archaeological research project is obliged to 'reinvent the wheel' and develop all the contractual terms from scratch.
- The recording and delimitations of protected archaeological sites (RAN and LMI)<sup>4</sup> are not always complete, correct or in line with reality. This sometimes leads to significant expenses for preventive research in areas with very small archaeological potential or even without any, and where the invested resources can hardly be justified, creating so unfavorable general opinion about archaeology.

Compared to other European countries, where large infrastructural development programs have ended or are almost at an end, Romania is still stuck at the beginning. For Romanian archaeology, this can present another chance to reinforce itself and reaffirm its status as a public service. For heritage, the following paradox applies: *this important national resource may be better known only through its partial damage by infrastructural projects*. This implies serious efforts and a coherent, strategic and structured institutional dialogue between the main actors. However, at this moment, the coherent and consistent approach to heritage management in line with legislation in many European countries still remains an ideal rather than reality.

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3 <http://arh.cimec.ro/RegistruArheologi.aspx>.

4 <http://ran.cimec.ro/>; <http://cultura.ro/page/17>.

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## Development-led Archaeology in Serbia: the case of Corridor X

*Tonko Rajkovača*

### **Abstract**

*La Valletta Convention of the Council of Europe (1992) prompted a major change within the discipline by integrating archaeology into the development planning process. Much like the shifts in theoretical perspectives within archaeology proper, these pragmatic changes also prompted numerous debates on various levels of discipline. Conferences were organised highlighting the variations across Europe in systems for delivering development-led archaeology (e.g. Bozóki-Ernyey 2007; Demoule 2007; Willems & van den Dries 2007; Kristiansen 2009). Depending on the political discourse, archaeological tradition, history and the perception of heritage, different countries adopted the Convention in different ways. Especially remarkable was the introduction of development-led archaeology in countries with a former communist/socialist regime. This paper uses the Corridor X Project in Serbia as a case study to address some problems in the effective deployment of development-led archaeology in former communist/socialist countries.*

*Serbia is a country with an archaeological history stemming from the last decades of the 19<sup>th</sup> century; it has conventionally good archaeological practice and an exceptional academic tradition in national and regional terms in SE Europe. The modern state of Serbia has maintained its good archaeological practice despite a significant decrease in state funded projects. However, a key factor that significantly hampers development-led archaeology in Serbia is the resistance of public sector institutions to privatise or commercialise archaeology and accompanying aspects of heritage protection. This continues to affect the development of the discipline of archaeology and heritage protection within Serbia. This study aims to offer a potential model for development-led archaeology in Serbia that is designed to minimise the negative effects on the discipline discussed above.*

**Keywords:** *Serbia, development-led archaeology, heritage protection*

## Introduction: Institutions and Heritage in Serbia

Serbia has a turbulent history, rich heritage, complex political circumstances and is in a challenging economic situation. Regardless of all of these, it has maintained a relatively solid network of heritage protection institutes and regional museums, with a strong history of academic achievements, and a respectable regional school of archaeology. Despite these, Serbian archaeology is still heavily reliant on tradition and appears unable to move forward as quickly as, for instance, Slovenia, amongst the ex-Yugoslav countries, has, despite their similar origins in the post-WW 2 period. Given this heritage, and a rapid increase in infrastructural development, it is highly important to ensure an effective system of archaeological exploration in advance of development projects.

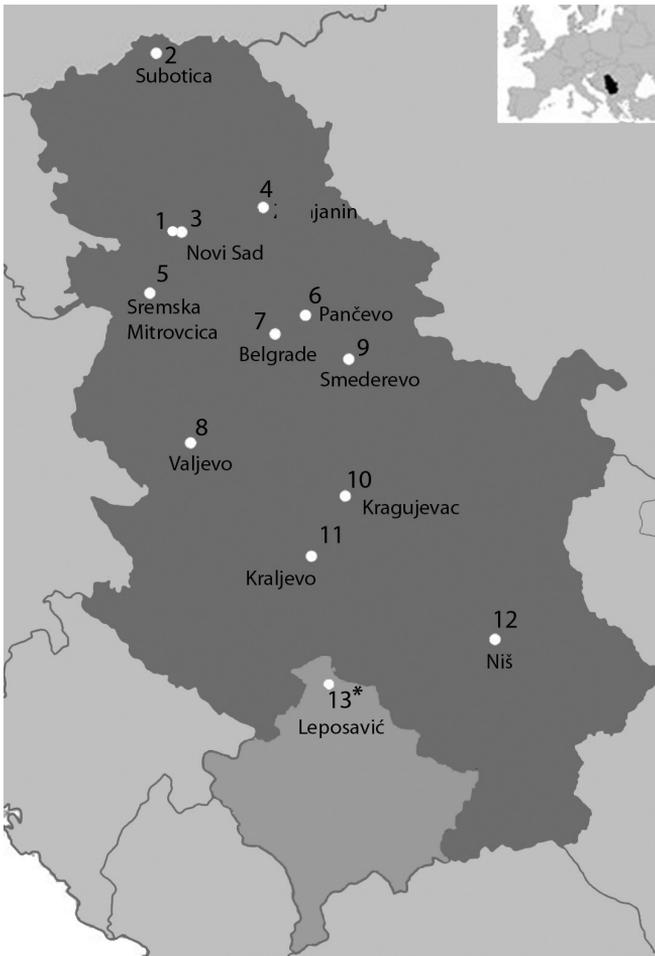
The Institute for the Protection of Cultural Heritage was opened in 1947 in Belgrade (Zavod za Zaštitu i naučno proučavanje spomenika kulture Narodne Republike Srbije / Institute for the Protection and Scientific Research of Cultural Monuments of the People's Republic of Serbia). The institution changed its name in 1960 to The State Heritage Office for the Protection of Monuments of Culture (Republički Zavod za zaštitu spomenika kulture) and merged with the Yugoslav Institute for the Protection of Monuments of Culture (founded in 1950).

One of the main responsibilities of major institutions based in the capital is to provide support in the establishment of a network of regional offices or museums within Serbia's heartland, a more difficult task than it appears. The public authorities for the protection and management of monuments are the Ministry of Culture and Media, the Ministry for Religion and some other religious authorities. Institutes are responsible for the protection of heritage and immovable cultural properties, including the Institute for Protection of Cultural Monuments of the Republic of Serbia (central body) and 11 Regional Institutes with territorial jurisdiction over funds for monuments located in their own territory.<sup>1</sup> Currently, the above institutes employ 348 people, out of which 207 are qualified with bachelor or other higher educational degrees. The expert staff has degrees in history, architecture, art history, archaeology, ethnology, engineering...

To illustrate how active Serbian heritage protection has been, let us look at the numbers. Since 1947, these institutes have conducted research on some 194 archaeological heritage-sites, 37 monumental heritage items and 2 cultural-historical areas. In the same period, 1214 research projects on archaeological heritage-sites were conducted by museums and 117 research projects by academic institutions (e.g. the

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1 With the exception of Kosovo, where three institutes used to work, this network covers the entire territory of the Republic of Serbia.



*Fig. 1. Map of provincial, regional and municipal Institutes for the Protection of Cultural Monuments in Serbia: 1. Provincial institute of Vojvodina, Novi Sad (since 1951); 2. Municipal institute, Subotica (since 1980); 3. Municipal institute, Novi Sad (since 1983), Novi Sad; 4. Regional institute, Zrenjanin (since 2004); 5. Regional institute, Sremska Mitrovica (since 1961); 6. Regional institute, Pančevo (since 1993); 7. Municipal institute, Belgrade (since 1960); 8. Regional institute, Valjevo (since 1986); 9. Regional institute, Smederevo (since 1979); 10. Regional institute, Kragujevac (since 1966); 11. Regional institute, Kraljevo (since 1965); 12. Regional institute, Niš (since 1966).*

*13\* Provincial institute in Priština (with seat in Leposavić). State of Serbia still recognizes some institutions from its former autonomous province of Kosovo. However, the institute in Leposavić is not part of the Serbian state network of the institutes for the protection of cultural monuments.*

Department of Archaeology, University of Belgrade, the Archaeological Institute of the Serbian Academy of Science and Arts, both based in Belgrade).<sup>2</sup>

In addition to the central bodies based in Belgrade, such as the Institute for Protection of Cultural Monuments of the Republic of Serbia, Institute of Archaeology and the National Museum, there is a network of regional heritage offices as well as a network of museums. The institutions listed in Figure 1 include regional offices as well as city institutes, like Belgrade and Novi Sad. Two regional institutes, Kraljevo and Niš, cover especially large areas – some have argued too large to manage – and these may be subject to revision.

While the necessary institutions are in place, the missing link necessary for the implementation of development-led archaeology is proper inclusion of archaeology in the planning-process. Current Act on Cultural Goods which legally defines tasks and responsibilities in heritage protection was adopted in 1994.<sup>3</sup> The La Valleta Convention was ratified in 2009. The existing relationship between heritage protection institutions and those in the spatial planning sector could be described at the level of consultation, rather than of active and regular cooperation, which would adequately achieve a level of inter-related activities between the different sectors necessary for the protection of cultural heritage and archaeology.

## **Recent changes in development-led archaeology in Serbia: Corridor X excavations**

This section will discuss one of the most recent development-led projects in Serbia and the issues arising from it. This case study aims to illustrate how prepared Serbian archaeology is for the introduction of development-led archaeology. The case study is also a useful indicator for the potential issues, which may stem from future commercial projects.

Perhaps the most famous large-scale rescue excavations undertaken in the history of Yugoslavia were carried out in the Iron Gates, or Đerdap National Park, in eastern Serbia, on the Romanian border. The excavations were undertaken during 1960s, 1970s and early 1980s as part of the large rescue operation to investigate, record, excavate and preserve sites affected (flooded) by the construction of two dams and accompanying power plants on the Danube, a project undertaken in partnership with Romania. These employed great numbers of professional archaeologists and students, with phenomenal results, which have significantly enriched not just our

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2 See: <http://www.culturalpolicies.net/web/serbia.php?aid=422>.

3 Закон о културним добрима, *Службени гласник РС*, бр. 71/94.

understanding of the region's past, but also national and world heritage. Since then, with the exception of a few quarry sites and coal extraction plants, there have not been many development projects, requiring archaeological investigations of that scale. With the lack of developments, or in fact risks to the heritage, Serbian archaeology has been heavily focused on research-led investigations. This all changed in 2011 with the Corridor X motorway project.

The construction of two main motorway routes (Corridor X) at the south of Serbia (E75 and E80), as a continuation of the Belgrade - Niš motorway and connecting Niš to Macedonia to the south and Bulgaria to the east, prompted large-scale investigations of vast swathes of land lying in the proposed motorway route. Though the Iron Gates excavations were labeled as rescue excavations and Corridor X excavations are identified as development-led excavations, the projects are very similar, with the main difference being terminology. It is important to note that development-led excavations used to be referred to as 'rescue excavations', indicating that archaeologists have one last chance to save what is left of archaeology under threat. This also points to the heightened speed of such investigations. There are not many differences between rescue excavations from five decades ago and those undertaken in development-led archaeology.

The daily conditions in which development-led archaeology is conducted could not be more dissimilar to those existing in academic research-based excavations. To ensure the best possible quality of archaeological work, the author believes that good methodology and understanding of what makes good archaeological practice should lie at the heart of development-led archaeology. Time constraints also mean those working in this sector should have an in-depth knowledge of the discipline, to be able to make informed decisions on what to sample and how to sample, all this with the goal of gaining a better understanding of the site, but also to ensure the results are available to be used by future generations. In addition to time pressures, those working in development-led archaeology have often found themselves needing to justify their work to developers and the public, given the amount of money it consumes. Because of these considerable constraints, and the potential for work quality to suffer, a development control officer should be appointed to cross-check quality.

## **Archaeology on Corridor X**

Corridor X is one of the most important pan-European transport corridors. It connects Austria, Hungary, Slovenia, Croatia, Serbia, Bulgaria, Macedonia and Greece, while also running through Serbia along the N-S axis. The motorway construction is ongoing and it aims to create a transport system of the Republic of Serbia that



*Fig. 2. Motorway network in Serbia.<sup>4</sup>*

will be compatible with those within the European Union, with a view to be further improved, in order for the Republic of Serbia to fully adhere to the standards of the European Union regarding transport. Once the project is complete, it will result in an increase of speed of the traffic in transit and in an improvement of the level of service. The motorway route will also facilitate easier flow of international trade and passenger transport. It will have a positive influence on the commercial and trade activities in the region and would contribute to the regional development and cohesion of the broader area of the Balkans. Given the Project's sheer size, it is divided into sections, our focus being on southern Serbia (E75 and E80).

Pursuant to the Loan Agreements between the Republic of Serbia and the World Bank, the European Investment Bank, the European Bank for Reconstruction and

<sup>4</sup> Map based on image [https://en.wikipedia.org/wiki/Roads\\_in\\_Serbia#/media/File:New\\_map\\_of\\_motorways\\_in\\_Serbia.svg](https://en.wikipedia.org/wiki/Roads_in_Serbia#/media/File:New_map_of_motorways_in_Serbia.svg)

Development and the Hellenic Plan for the Economic Reconstruction of the Balkans, the Government of the RS is constructing the southern sections of the Corridor 10 highway. Construction of both highways is the part of the Corridor 10 Highway Project and is implemented by the Koridori Srbije d.o.o. of Belgrade, acting as the Contracting Authority (the client). The approximate value of the financing agreements for the project is 1.3 billion euros.

ARUP, an independent firm of consultants, was contracted to carry out supervision of the Environmental Management Plan, monitoring and auditing of construction activities as well as maintenance of procedures throughout the project. This is incredibly important as sections of the motorway pass close to settlements, river systems and environmentally-sensitive areas. ARUP is responsible for inspecting the construction activities, ensuring that mitigation measures adopted are properly implemented and that the negative environmental impacts of the project are minimised. The study will focus on safeguarding the heritage and mitigating the damage on underlying archaeology.

In accordance with the operative policies for environmental protection prescribed by the banks participating in the financing of these projects (the World Bank, European investment Bank and the European Bank for Reconstruction and Development), prior to the commencement of construction works on the Corridor X sections, appropriate Environmental management plans have been drafted. Koridori Srbije are dedicated to protect the environment and heritage during the construction of the highway on Corridor X. For the last four years, the author has worked for ARUP, as a Consultant Archaeologist on archaeological investigations carried out in advance of the motorway construction along these two routes (E75 and E80).

National institutions responsible for the protection of cultural heritage have thus found themselves able to carry out extensive archaeological excavations in advance of the motorway construction enabling Serbia to preserve its archaeological heritage; some of the findings have proved to have international significance.

## **Project Organisation**

The prospect of archaeological investigations of such vast expanses of land meant that there would be sufficient funds and vacancies to keep a great proportion of archaeologists within the country employed for a long period of time. Despite this, some conflict of interest situations were also taking place. Thus, the exclusive right to apply for tender to run excavations was primarily given to the Institute for the Protection of Cultural Heritage (IPCM) in Belgrade, while this institution should also have been the one overseeing the works and the one responsible for setting the conditions

on the planning licence. Nevertheless, the project went on as normal. Given that the Institute for the Protection of Cultural Heritage did not have teams large enough to carry out all excavations independently, they had to sub-contract or employ field teams from other institutions, such as the Institute for Archaeology and Department of Archaeology. In addition to these, other unemployed archaeologists were hired on a short-term contract basis.

This is when the first issues started to arise. For the Institute for the Protection of Cultural Heritage to be the archaeological contractors and the development-control or inspectors on the same project is controversial as it implies a conflict of interest. The other issue is the sub-contracting of other organisations or outside field teams to run excavations on behalf of the Institute. This would not have been problematic in itself, had the Institute put in place the sampling and quality control of work which had been carried out in their name.

It became clear that although Serbia has a solid network of archaeological organisations and professionals with a great deal of expertise and experience, archaeologists have never had to apply or tender to carry out excavations. The lack of understanding of the process and the overall experience led to many oversights.

After a number of problematic situations which proved difficult to resolve as the responsibility was being thrown back and forth, it was realised that the Institute of Archaeology is probably the only institution with enough capacity to carry out excavations and post-excavation assessments in extreme financial and time constraints. Once the Institute of Archaeology has taken charge of the excavations, some of the issues have disappeared, yet other problems have started to arise in the field, especially oversights of costs of archiving the excavated material, which should have been costed in during the tendering process. Even though archaeology was included at the very early (planning) stage of the project, the project did not run as smoothly as anticipated. The list of flaws ranged from legal, organisational, logistical and finally, methodological. These issues are best illustrated on a site by site basis.

### **Early Christian basilica at Kladenčište, Bela Palanka**

Undoubtedly one of the most significant discoveries made during the project was the Early Christian (6<sup>th</sup> century AD) Basilica found at Kladenčište, on the outskirts of Bela Palanka.

Though there was mention of a villa in the area in the literature, the fact that this site was not previously known, recorded or noted during the early stages of investigations is unusual and emphasises the importance of carrying out test archaeological evaluations prior to any open area excavations. Here, we do not insist on the full-scale

evaluation trenches of 2m in width and over 50m in length. The evaluation could have been adjusted to the landscape. Had the site been evaluated in any way, the motorway route could either have been relocated to avoid the excavation of such an internationally important discovery thus preserving it *in situ*. Alternatively, the costs of preserving it by record, or excavating, conserving or relocating the entire structure would have been taken into account at early stages of the project.

At the watching brief stage, the team of archaeologists present during the strip-ping of the topsoil recognised the presence of a structure, though it was believed the building was the mentioned villa (*villa rustica* of Roman date) or an associated structure. As soon as the discovery was made, construction was halted and the regional Office for the Protection of Cultural Heritage and Monuments of Culture in Niš was informed. The Office responded quickly, visited the site and put together a document, which should have served as a useful source of information during the tendering process. Archaeologists from Niš Heritage Office compiled a bid for tender, and unfortunately, which was rejected because of the project's high cost. The developer had then given an exclusive opportunity to the Institute for the Protection of Heritage in Belgrade to excavate the site, which is surprising as the priority should usually be given to regional offices of heritage protection. The reason behind this is somewhat complex: as the Institute for the Protection of Heritage was the main institution in charge of the fieldwork, according to the signed contract, the developer was only able to legally 'recognise' this organisation as the only archaeological contractor, completely disregarding the other potential contractors.

The IPCM proceeded to fully excavate the site. Open area excavations resulted in the recovery of a remarkable basilica, found immediately under the proposed motorway route (Figure 3.). It soon became clear that such a site cannot simply be excavated and backfilled and that a solution more fitting to the importance of this discovery has to be found.

The importance of this remarkable object is enormous, not just for the region but for much wider audience as it is securely linked to the development of the earliest Christianity. The preliminary results of the material date from the 4th century AD and that it continued to be used well into the 5th and 6th centuries AD. With Constantine I the Great being born locally, in Niš (*Naissus*) and originating from the area, and his association with the Edict of Milan in 313 AD when Christianity became an officially recognised religion, make the discovery even more outstanding and important to preserve and show to the public.

Based on the events from the last two years, and following a series of recent developments, including the excavation results from 2014 (directed by Mirjana Blagojević from IPCM), two potential scenarios were proposed to resolve the issues surrounding this site:



*Fig. 3. Kladenčište, the site situated in the middle of the motorway route. Excavations lead by Mirjana Blagojević (Institute for the Protection of Cultural Monuments of Serbia).*

1. Leaving the object *in situ*. The site is not backfilled and it is turned into an open air attraction or monument with a visitors centre. This would involve significant changes in the current motorway design, either by moving the route to one side in order to avoid the object (extremely costly and problematic from the logistical point of view at such late stage of the construction) or constructing a flyover (or overpass, less costly and more feasible).
2. Relocation of parts of the object and building a 1:1 replica of the object in an alternative location. This option could also include fragments/ segments of the original object, if these could be taken apart and transferred to this new location. Parts of the object important to move would be the baptismal font, parts of the basilica floor and the apse, as well as other elements of importance. Before any of the work on relocation takes place, the object would need to be photographed and recorded using a laser scanner, as well as other traditional and modern methods which could help in reconstruction.

It was also recommended, regardless of which preservation scenario is selected, that a small visitor centre is constructed, which could contain an exhibition describing the history of the site, and Early Christianity in general. The centre could also contain the accompanying finds. In case of relocation, it is extremely important that the reasons for this are discussed and the entire process fully illustrated and described in text. The suitable road signs could be set up in the vicinity, as well as along the new motorway route, guiding visitors to this new attraction. That way, people using this new corridor of communication would be able to fully appreciate the area's rich archaeological past.

The final decision was made in the summer 2015 and the object was sadly back-filled and the motorway built over it. The convoluted processes of heritage protection laws and complex political situation all played their part in this poorly managed process. Despite an abundance of expert advice, strong criticisms and protests from the people and Niš, the regional heritage office, under whose jurisdiction the monument remains, as well as the expertise, guidance and support from the team of consultants from ARUP, the IPCM (the Institute for Heritage Protection, Belgrade) the central heritage institution in Serbia, made an executive decision to backfill the structure, cover it in gravel and allow for the motorway to be constructed over it.

Though it must be appreciated that any additional costs to preserve, protect and conserve the monument by relocating the motorway route or constructing the flyover would add an incredible amount of financial pressure on the already expensive project, we remain adamant that not enough was done to preserve this unique object *in situ* and make it available for future generations to visit and learn about origins of Christianity. The move by the IPCM, Belgrade, has been incredibly unpopular with the public and the professionals, with social media movements and organized on-site protests, as well as petitions to stop the site from being built on. Despite arguments made by the ministers and authorities that the structure will be 'protected' under gravel, it is necessary to say that over 2m overburden of gravel, with heavy machinery and further weight of countless vehicles driving over it will undoubtedly cause the irreversible damage to the structure.

## Conclusions

First, it is evident that prior to any open-area excavations take place, more funds should be invested in methods of; literature research ("desk top"), prospection and evaluation, as that could prove to be more cost and time-effective in the long term, while also ensuring the effective protection of heritage.

Secondly, effective communication on projects of this scale are key, between the developer and archaeological contractors on the one hand, and amongst archaeological contractors themselves. On Corridor X, the developer has often had an issue with the

responsible archaeologist never being present on site. This is especially characteristic of archaeologists in Serbia, not necessarily anywhere else. In addition to that, some archaeologists in charge of the watching brief have started acting independently without any prior consultations with their team leader, thus creating a number of on-site problems.

Thirdly, it is evident no quality control had been put in place. Quality control should be made an intrinsic part of every archaeological excavation, and not only those in the development-led sector. From the point of being granted an excavation permit until the end of the excavation, a system of quality control should be put in place and an officer ensuring that conditions are met and that the excavations are done to standards. While emphasizing the extreme pressures of the commercial sector, it is in the hands of the development control officer to ensure the maximum gain of knowledge and information for the minimum amount of funds in the shortest possible time.

Additionally, there are a few other points to note. Watching brief should have been used more widely in the project, as a good method to use on projects of this character, where vast expanses of land have to be investigated, and where heavy machinery operates in areas where we have little knowledge of underlying archaeology, but only when lines of communications are in order. After not being used at all for the first part of the project, it is now being widely used to inform future heritage protection decisions.

The author's involvement in Corridor X excavations has greatly improved the understanding of how the Serbian archaeological community is placed to accept the new challenges brought by the development-led archaeology and whether the state in general is ready to introduce the development-led archaeological sector. Despite having a reliable network of institutions and a strong academia, the Corridor X project has demonstrated the range of problems, which could arise from development-led excavations. It has proven that the transformation of archaeology from an academic discipline into a public or commercial service does not represent a small step. Deeply entrenched habits from Serbia's long archaeological tradition could not have been transformed in such a short time. It is clear that the process of learning and adaptation has to be much longer.

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## Bosnia and Herzegovina: Preventive Archaeology is Still Recovering

*Jesenko Hadžibasanović, Adnan Kaljanac*

### **Abstract**

*The organisation of systems of archaeological heritage services, museums and education in Bosnia and Herzegovina, after the end of Yugoslavia, and especially after the establishment of the post-Dayton peace agreement, radically changed compared to the situation 25 years ago. Major factors for today's abysmal situation are all closely connected with the general state of the country itself: the highly fragmented territorial and administrative organisation; the very challenging political climate; disharmonized laws on various juridical levels, overlaps of jurisdictions of protection of certain monuments leading to potential mismanagements; general poor economic situation preventing any substantial investment and new employment; inadequate and outdated infrastructure, i.e. lack of trained people, equipment, unfinished institutional development.*

**Keywords:** *Bosnia and Herzegovina, recovery, preventive archaeology, heritage protection*

### **Abstrakt**

*Organizacija sistema arheoloških servisa baštine, muzeja i obrazovanju u Bosni i Hercegovini, nakon raspada Jugoslavije, a posebno nakon uspostavljanja Daytonskog mirovnog sporazuma, se radikalno promijenila naspram situaciji do prije 25 godina. Glavni razlozi za katastrofalnu situaciju koju možemo danas vidjeti su: izuzetno fragmentirana teritorijalna i upravna organizacija; loša politička klima; neusklađeni zakoni na različitim pravnim nivoima, preklapanja nadležnosti u zaštiti pojedinih spomenika; opšta loša ekonomska situacija koja onemogućava bilo kakve značajne investicije i nova zapošljavanja; neadekvatna i zastarjela infrastruktura, prije svega nedostatak obučenih ljudi, opreme, nedovršen razvoj institucija.*

In the 20 years following the Bosnian war (1992-1995) numerous problems have arisen regarding the functioning of the state and public services. In order to fully comprehend the present situation in archaeology in Bosnia and Herzegovina, it is first necessary to address one of the biggest problems arising from the political structure of the country established on the basis of the Dayton Peace Agreement (1996). The problem lies primarily in the fact that there is a very fragmented state and government organization compared to that of the pre-war period. Bosnia and Herzegovina as a state is composed of three political entities: a) the Federation of Bosnia and Herzegovina (hereinafter as FBiH), the Republika Srpska (hereinafter as RS) and the Brčko District. Additionally, FBiH and RS are comprised of 143 municipalities. In FBiH they are grouped together into 10 cantons. A very decentralised system giving cantons rather strong powers exists in FBiH, but the situation in RS is completely the opposite – it is a very centralized system governed from Banja Luka, the entity's administrative center..

All three entities (FBiH, RS and Brčko District), 10 cantons (in FBiH) and the State of Bosnia and Herzegovina have separate autonomous ministries that are frequently opposed to each other, because to different parties run the ministries at different levels. Furthermore, the FBiH and RS are governed by elected officials, but the Brčko District is governed by an internationally appointed representative. A somewhat simplistic illustration of this fragmented state can be seen in figs.1 and 2.

This very fragmented system has led to the existence of a number of laws and executive regulations at different levels, which are not fully compatible with the comparable laws and regulations in other administrative entities. This is also true of preventive archaeology and cultural heritage in general. The general protection of heritage at the state level is still covered by legislation from the pre-war period (1985) (*Zakon o zaštiti 1985*), which is completely outdated in many respects. The situation at the level of the entities is as follows: the law in effect in the FBiH is the same as at the state level (1985), while

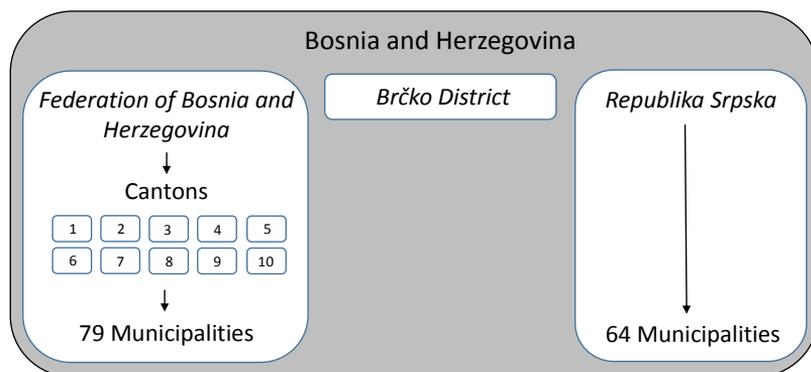


Fig. 1. Illustration of various levels of administrative organisation of Bosnia and Herzegovina.



Fig. 2. Administrative division of Bosnia and Herzegovina.

the law in the RS was only slightly updated (in 1995). However, in addition to this, there is *lex specialis* concerning national monuments at both, state and entity level, which was based on Annex 8 of the Dayton Peace Agreement. Some cantons in the FBiH also have their own cantonal legislation concerning culture. However, most of the cantonal laws do not deal with the protection of cultural heritage, and are less relevant to us.

Due to the fragmented nature of the state of Bosnia and Herzegovina there are also several public institutions responsible for the protection of cultural heritage. On the state level, there is only the Commission to Preserve National Monuments (hereinafter as: Commission), which is responsible for the proclamation of national monuments. It has very limited responsibility and power regarding the management of national monuments. The Federal Institute for the Protection of Monuments (*Federalni zavod za zaštitu spomenika kulture*) is responsible for cultural heritage, in the FBiH, while its equivalent in RS is the Institute for the Protection of Cultural, Historical and Natural Heritage of the Republika Srpska (*Republički zavod za zaštitu kulturno-istorijskog i prirodnog nasljeđa Republike Srpske*). Five of the ten cantons in FBiH have also their own cantonal institutes for the protection of cultural and natural heritage; whilst the Federal Institute is responsible for heritage protection in the other five cantons. The reason for the lack of institutes in five cantons needs to be primarily seen in the incomplete development of public services and in the lack of adequately trained experts, and, last but not least, also in the lack of political will to change the situation.

The biggest problem from a legislative point of view, is still the lack of modern laws defining classes of heritage, protection regimes, public heritage institutions

and their responsibilities and financing. The existing law is so outdated that fines are assessed in the former currency – the Yugoslav Dinar (sic!). There were attempts to prepare a new law, but it still only exists as a draft, because of the lack of political compromise (*Plan 2008/Nacrt 2008*).

As stated above, the only state-level body in the country is the Commission to Preserve National Monuments, which was established according to Annex 8 of the Dayton Peace Agreement (1995). However, it took another six years for this commission to be effectively established (on more details see Novaković 2010). The Commission has limited powers, because it deals primarily with the administrative nomination and proclamation of national monuments and not with the actual protection of heritage under threat. Furthermore, the wording of Annex 8 is such that it is open to a variety of political and other interpretations. Annex 8 can be interpreted as giving responsibilities for cultural heritage to the state, canton or entity. Sadly, this ambiguous interpretation leaves a lot of room for misuse. However, the Commission has the right to apply for international grants for national monuments. In practice, the Commission cannot act alone, but must cooperate with the entity and cantonal institutions. The response and conduct of the latter institutions to the initiatives of the Commission once again often depends on the current political situation. The legal situation is also not much better on the level of the two entities: FBiH still applies the 1985 law, whilst the RS made some changes to this law in 1995, but it still does not approach the modern laws in other European countries.

The third problem also arises from the decentralised state framework. There are also many different political parties and partisan interests in a state, in which so many different bodies have political powers. A problem emerges when a political party sees a particular interest in maintaining or ignoring a certain cultural good and that interest is at odds with the interests of a higher or lower level institution in FBiH. In such cases, many initiatives for the correct protection of heritage are simply blocked. A good example is the development of industrial and trading zones, sponsored by local municipalities, but contrary to a decision of the Commission. This is the case with the industrial zone that was built within the protected area of the medieval cemetery in Radimlja near Stolac<sup>1</sup>. The situation in RS is somewhat better due to the centralized nature of the organization of the entity and its public services, as well as the more homogeneous ethnic composition of the population. However developers as well as some public bodies often openly ignore the state law, or interpret it differently in the RS. In addition there is generally great political resistance here to the implementation of any laws that give powers to the state of Bosnia and Herzegovina.

Another major problem is the complete lack of definition of preventive archaeology in the existing legislation. The clauses ordering contractors to stop all construction

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1 The site inscribed to the UNESCO list (<http://whc.unesco.org/en/newproperties/>).

works in case they find evidence associated with archaeology are the closest that there is to the definition of the concept of preventive archaeology in legislation. However, archaeological remains are frequently ignored or quietly removed due to temporal constraints during construction.

It is also important to note that in many cases, there is 'no archaeology', because there are no archaeologists to monitor construction works and report the discoveries. The contractors are only exceptionally forced to fund archaeological research and, then, only when the endangered site is well known, where it could be visible to the public in urban areas, or when sites have some significance to the local community. In fact, the concept of preventive archaeology is not recognised in any of the existing legislation concerning archaeology. The existing legislation only refers to archaeological research in general.

A further problem stems from the abysmal level of concern for cultural heritage by much of the political elite. With a few notable exceptions, most politicians only express some kind of concern for heritage during election campaigns. These are often merely symbolic gestures in these contexts. The best example of what the political elites are capable of is best illustrated by the situation of the seven national institutions, which were inherited from Yugoslavia (among others also the National Museum, the National Gallery of Bosnia and Herzegovina, the Historical Museum of Bosnia and Herzegovina). These institutions have not been included amongst public institutions, which are funded from the state budget since 1995. They have, instead, been forced to look for funding from various rather insecure sources and grants, which have been themselves influenced by the ebb and flow of the political climate. The most striking example, and one that is particularly relevant for archaeology, is the case of the National Museum. This museum was established in 1888 and moved into the current building in 1914. It has played the paramount role in the development of culture and science in Bosnia and Herzegovina, but was left without a proper legal foundation and funding. The resulting



*Fig. 3. The National Museum on 30th December 2013, during the period of closure (Source: Wikipedia commons, made by Watalicom, name: „Posters by people who disagree with the museum closing“, used according to Creative Commons).*

political disputes over the legal status of the museum' (state, entity, canton?) and negligence by the ruling parties led to the closure of the museum in 2012. It was re-opened in 2015, albeit with status and capacities that it already had prior to its closure in 2012 (Figure 2). The absurdity of the situation of the Museum was at its greatest in 2014, an election year and also the centenary of the assassination of Archduke Franz Ferdinand in Sarajevo. The politicians wanted to have the Museum opened for a short period of time until the commemoration and elections were over (Hadžihasanović 2014). The legal status of the museum is still unresolved to this day.

Unfortunately, the other public institutions, dealing with heritage and archaeology are not in a much better position, thanks to the poor economic situation. Bosnia and Herzegovina is at the bottom of most of the lists of economic well-being (e.g. Worldbank list (2016), and analysis of Index of economic freedom of the Heritage Foundation (2016)). Most of the public institutions receive only the bare minimum required for maintenance and staff salaries. They are forced to compete for additional funding in the form of grants from public calls for applications posted by the relevant ministries. These grants in average rarely exceed 5000 Euros; larger grants are generally given on a case by case basis. This can also be seen in the recently published data on the funding of preventive archaeology (Novaković 2015: 163). The funding for preventive archaeology in Bosnia and Herzegovina is fifty times smaller than the funding in either Croatia or Slovenia. Another associated problem that plagues all public institutions is a shortage of trained personnel, archaeologists included. Andrew Lawler (2014) has undertaken comprehensive analysis on the state of the art in the field of archaeology, in which he states that there are a minimum 57 of field archaeologist employed in the country (Lawler 2014: 37). Taking into account this number and the number of residents from the last census (2013), it can be seen that there are circa 62.000 people per archaeologist and each archaeologist is on average responsible for 900 km<sup>2</sup> of Bosnia and Herzegovina. In reality, the ratio is even worse, because some of the archaeologists do not work in the institutions that conduct archaeological research, but are responsible only for legislative and administrative tasks, concerning cultural heritage in general, or are employed in the field of cultural management. As a result a very small number of professional archaeologists have the chance to keep up to date with everything happening in the areas they are responsible for. This is unlikely to change soon, because most of the state-governed institutions are not in a position to employ new archaeologists due to budget constraints. In some cases, new archaeologists cannot be employed, because of political limitations caused by frictions and conflicts between various political parties, which have deeply permeated all public life and institutions.

Another challenge for preventive archaeology lies in the fact that archaeologists effectively cannot act preventively, but they have to wait for something to happen before they can act. In most cases this is due to financial constraints in public institutions, an excessive workload, or the nature of the institutions, in which they are employed.

One possible remedy to the shortage of professional archaeologists might be the development of commercial entities providing archaeological service. However, the legal framework concerning archaeological research makes no reference to commercial archaeological enterprises. There is only a vague term referring to a *legal entity*, but this term is so vague that it could refer to both public and commercial institutions. The closest legal entities to commercial entities are foundations and associations, which could employ an archaeologist to conduct limited archaeological research. However, the size of these interventions is nowhere near the scale of preventive archaeological research, undertaken by the commercial sector in other European countries.

The great shortage of professional archaeologists has also another facet, that of the relatively low level of training in preventive archaeological fieldwork of the archaeologist in Bosnia and Herzegovina in comparison to the rest of Europe. The reasons for this are many: poor economic conditions, lack of funding in higher education, lack of modern technological equipment, the small number of local archaeologists in higher education, etc. The problem here also lies in the rigid regulations regarding the training of public officials (e.g. curators, conservators etc.). Most of the public sector training is concerned with the general training of civil servants and is not concerned with the transmission and acquisition of the specialized expert knowledge required for the correct level of expertise.

Prior 2008 the situation with archaeological staff was heavily impacted by the war in Bosnia, during which most archaeologists either fled the country, or their institutions stopped working. Those who remained faced the immense task of rebuilding the destroyed archaeological infrastructure. Most of the remaining archaeologists had worked for 20 or more years before the war and were approaching retirement. However, their posts and other vacant posts could not easily be filled with new personnel, because there was no pool of upcoming archaeology graduates due to the war, because it was impossible to study archaeology in Bosnia and Herzegovina. Thus, one of the most urgent tasks was to establish a full university curriculum in archaeology, because this had not existed in Bosnia and Herzegovina before. The Department of Archeology at the University of Sarajevo was established in 2008, with full Archaeology degree courses to Bachelor and Master level. The University of Mostar, also established a combined degree course in Archaeology and Art history to Bachelor level at approximately the same time. The situation has begun to improve. The EU (TEMPUS) funded project BIHERIT (Curricular Reform of Heritage Sciences in Bosnia and Herzegovina) was instrumental in this change during its two year duration (2012-2014). It led to considerable improvements in many areas such as modern equipment, the education of young scholars at foreign universities, the publication of manuals, textbooks and similar works, exchange grants for students, the intensive engagement of foreign teachers at the Sarajevo, Banja Luka and Tuzla universities, to name but a few.

In conclusion, questions should be posed about the profile of archaeologists since the prospects for future careers are still very insecure: What kind of young archaeologists in Bosnia and Herzegovina are needed to challenge the 25 years of lagging behind the rest of Europe?

- It requires archaeologists who are capable of understanding the relevance of archaeology and of preventive archaeology in particular, as well as understanding the commercial/private sector, ie. their view of time constraints, deadlines, financial losses caused by unforeseen cessation of construction, pressure to continue with work, etc. This kind of knowledge is applicable both in cases where archaeologists work in public institutions, or in the commercial sector.
- It requires archaeologists who are more than willing and capable of studying and applying new methods both in fieldwork and theoretical archaeology, while still understanding and using old methods, when appropriate.
- It is essential that archaeologists engage with local communities, local and state politicians to reform old and outdated laws, so that they can be clearly understood and efficiently implemented.

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## Birth and Crib Death of Preventive Archaeology in Italy

Maria Pia Guermandi

### *Abstract*

*In Italy there is no specific legislation on archaeology and the Malta Convention was not ratified until 31/12/2015. The realm of preventive archaeology, limited to public works alone, has been waiting for official guidelines for years. From a professional standpoint, the archaeologists who manage sites under the scientific direction of the Ministry of Cultural Heritage and Activities and Tourism face difficult conditions, while the reform of the Ministry, currently being implemented, is creating serious organisational problems for the Superintendencies – the local protection bodies. The lack of any connection between preventive archaeology procedures and spatial planning severely undermines the effectiveness of interventions. As regards the political and institutional context, in recent years a series of reforms in the public administration sector has greatly reduced the room for action of protection bodies in terms of the times and methods of intervention. Despite this difficult situation, preventive archaeology activities have led to highly important scientific results, especially in urban areas. Unfortunately, the ineffective manner in which these results are often disseminated to the public has an impact on social recognition, a fundamental element of sustainability of the discipline.*

**Keywords:** *P.A. Reform, Superintendencies, MiBACT, bureaucracy, communication*

### *Riassunto*

*In Italia non esiste legislazione specifica sull'archeologia e la Convenzione di Malta è stata ratificata solo il 31/12/2015. Le procedure di archeologia preventiva, limitate alle sole opere pubbliche, sono da anni in attesa di linee guida ufficiali. Sul piano professionale difficili sono le condizioni degli archeologi che gestiscono i cantieri sotto la direzione scientifica del*

*Mibact, mentre la riforma del Ministero, in fase di attuazione, sta provocando grossi disagi sul piano organizzativo alle Soprintendenze, gli organi di tutela territoriali. La mancanza di connessione fra le procedure dell'a.p. e la pianificazione territoriale sminuisce gravemente l'efficacia degli interventi. Relativamente al contesto politico istituzionale, negli ultimi anni una serie di riforme nel settore della pubblica amministrazione ha fortemente compresso gli spazi di azione degli organismi di tutela per quanto riguarda tempi e modalità d'intervento. Nonostante questa difficile situazione, le attività di a.p. hanno condotto, soprattutto in ambito urbano, a risultati scientifici di grandissimo rilievo. Purtroppo la comunicazione di questi risultati al pubblico non specialista avviene spesso con modalità poco efficaci che influiscono sul riconoscimento sociale, fondamentale elemento di sostenibilità della disciplina.*

In Italy, the ratification of the Malta Convention became effective as of 31<sup>st</sup> of December 2015, 24 years after the Convention's introduction. This grotesque delay mirrors the legislative lag which, among other things, afflicts preventive archaeology in our country. In Italy, there is no specific law dedicated to archaeology, much less to preventive archaeology. The ratification of the Malta Convention itself took place at a purely formal level and to date has not produced any legislative effects.

Moreover, the framework legislation embodied in the Code of Cultural Heritage and Landscape<sup>1</sup>, though relatively recent, especially the part concerning heritage is a faithful heir, from a political and cultural standpoint, to the historical law 1089 of 1939<sup>2</sup>, in that it maintains a notion of cultural heritage as “property” rather than introducing a radical and essential innovation that could have led to a more effective and up-to-date concept of protection.

In the Code, archaeology is still envisaged almost exclusively as a 19th century-style academic discipline. So much so that only one paragraph is dedicated to preventive archaeology, in Article 28<sup>3</sup>. What is more, it limits the scope of application of preventive archaeology to public works alone – practically the only case in Europe – whilst private property remains exempt (though in 2011 the category of public works was expanded<sup>4</sup> to include works of public interest and those related to sectors such as gas, electricity, and transportation)<sup>5</sup>.

1 Legislative Decree no. 42/2004.

2 The famous Bottai law of the Fascist period, expression of a strongly centralist policy.

3 Art. 28 4. *In the event of public works carried out in areas of archaeological interest, even when the verification as per Article 12, paragraph 2, has not been conducted or the declaration referred to in Article 13 has not been issued, the superintendent may request that preventive archaeological surveys be carried out at the expense of the commissioning entity.*

4 L. n. 106/2011.

5 In the context of private works (the large majority of interventions) apply regulations on rescue archaeology, except possible agreements that each Superintendence can stipulate with Municipalities in subject of city planning.

The small paragraph of the Code has made further legislative references necessary. These have not been set forth in specific provisions, but rather – for example in the Code of Public Procurement<sup>6</sup> – in provisions that have left many interpretative gaps. Two subsequent circulars, not having the force of law, were issued in 2012 and 2016 by the former central body of the Ministry of Cultural Heritage and Activities and Tourism, the Directorate for Archaeology, which the recent reform has abolished<sup>7</sup>.

Preventive archaeology procedures are coordinated by Ministry staff, which due also to endemic shortages of personnel (in September 2016, there were 340 Ministry-appointed archaeologists covering the entire country, excluding Sicily) have never been able to conduct excavations directly. Excavations are thus outsourced to specialized firms or professionals, who are paid by the contracting entity (developer), while Ministry officials are left in charge of their scientific direction.

This hybrid situation, neither completely public nor private, gives rise to many problems and forces professional archaeologists into an uncomfortable position between the contracting entity and the public body responsible for heritage protection (Superintendencies).

In the past two years, the Ministry has undergone a radical reorganization<sup>8</sup> which has generated a heated debate, still ongoing. In the view of critics, including the author, the objectives of the reform can be summed up, very briefly, as: a definitive break between protection and exploitation, to the advantage of the latter in terms of resources of every type; a hierarchization of the system as far as the decision-making process is concerned, with the aim of securing greater political control; simplification-compression of the mechanisms of oversight and monitoring.

Remaining within the realm of archaeology, the second stage of the reform (2016) saw the abolition of both the Central Directorate for Archaeology, and the Archaeological Superintendencies, now merged with the other specialized Superintendencies, which have thus now become mixed entities. The overall number of Superintendencies, the local protection bodies of the Ministry of Cultural Heritage and Activities and Tourism, has decreased from 79 to 50.

The fact of bringing together different categories (art history, architecture, archaeology, demo-ethno- anthropology and landscape) is not negative in itself, as it could result in better synergy among specialists and a more systematic vision of heritage, but the reform was hobbled from the outset in terms of its organization and resources: for years, the Superintendencies have been experiencing a severe crisis as far as personnel, archives,

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6 Legislative decree 163/2006, Arts. 95 and 96, since replaced with the new Public Procurement Code, Legislative Decree no. 50/2016.

7 The two ministerial circulars, respectively no. 10 of 15/06/2012 and no. 1 of 20/01/2016, are strictly internal in nature and have both been criticised for their almost exclusively bureaucratic-procedural character.

8 Prime Ministerial Decree no. 171/2014 and Ministerial Decree of 23/01/2016.



*Fig. 1. Protest of professional archaeologists (© Photo: Andrea Fabbri Cossarini, CGIL)*

laboratories and budget are concerned and a reform undertaken at zero cost (indeed included within the framework of a spending review) has no chance of inverting this trend.

There is a concrete risk that the result of the ongoing process will be a lower level of protection and that the role of individual Superintendents will evolve into that of a mediator among different demands and political pressures in their respective territories, increasingly more like managers and endowed with fewer and fewer technical and scientific competencies.

In this still very confused situation, the practice of preventive archaeology faces further problematic aspects. The lack of a clearly formulated law dedicated to preventive archaeology has created legislative ambiguities and uncertainties and has favoured a context that does not assure sufficiently dignified working conditions for professional archaeologists<sup>9</sup>: for several years now, gross hourly pay has stood at less than 10 Euros for multi-specialist professionals (the consequence being that excavation sites are managed according to barely acceptable standards and, even worse, the profession has been placed in a precarious state) (fig. 1). In respect of the protection of archaeological heritage, there continue to be many problems surrounding the promotion of newly discovered heritage or management of deposits of excavated materials. Just as there continues to be considerable diversity in the application of legislative provisions by different Superintendencies.

<sup>9</sup> To date (December 2016), no regulations have yet been issued within the framework of Law no. 110/2014 on the recognition of cultural heritage professions, specifically that of archaeologists, though the law had aroused high hopes for a better regulation and protection of the profession. On this subject see Guermandi & Salas Rossenbach 2013: 25-34; Stella 2013.

These problems should have been remedied by the guidelines called for back in 2006 (Article 96, paragraph 6 of Legislative Decree no. 163), which were supposed to provide a better organized framework of rules, more robust from a scientific, technical and administrative viewpoint, and as a result eliminate or narrow the areas of conflict characterizing many sites. Announced at regular intervals, but ten years later we are still waiting for them.

Yet in Italy, too, rescue or preventive archaeology accounts for 90% of archaeological digs: according to the Ministry (of Cultural Heritage and Activities and Tourism), excavations of this type amount to about 7 thousand per year.

A factor compounding the problem is the nearly absolute absence of statistical data relating to archaeological activities<sup>10</sup>, not to mention the lack of any surveys on the public participation. Practically the only data we get from our Ministry is the number of visitors to places of culture. This says a great deal about the quality of the Ministry's planning.

This far from optimal situation falls within an unfavourable (to use a euphemism) legislative and political context. Since the beginning of the economic crisis<sup>11</sup>, countless legislative measures aimed at relaunching the economy have had the effect of progressively eroding the areas of action of heritage protection bodies, particularly as regards activities on a local scale. Not only at a national level (this is a phenomenon affecting Europe and the western world as a whole, as highlighted by some of the authors in this volume), a general process of reform is seeking to redefine and compress government agencies and public institutions in a broad sense (from universities to supervisory authorities). A mutation in the organization of the State, that is, of the entity supposed to guarantee functions, including those of protection, under conditions of social equality, has been underway for over five years.

The watchwords accompanying this process have been "simplification" and "flexibility" (the latter with reference in particular to labour).

Our sector has thus seen the introduction of a host of measures designed to simplify protection laws with the aim of reviving the building industry, which continues to be considered a priority from the standpoint of economic development. In Italy, the so-called fight against bureaucracy (viewed as synonymous of government agencies) has accelerated further in the past two years. The latest legislative provisions<sup>12</sup>

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10 The last – and only – official data on preventive archaeology provided by the Ministry date from 2011, cf. Malnati 2011.

11 On the effects of the economic crisis in the archaeological sector, cf. Schlanger & Aitchinson 2010.

12 Concerning their effects on the system of protection, see above all the law introducing incentives for large-scale works, referred to as *Sblocca Italia* ('Unlock Italy'), Law Decree no. 133/2014 and the Public Administration reform and subsequent implementing decrees, Law 124/2015. For a comment on *Sblocca Italia*, see *Rottama Italia* ('Scrap Italy' 2015) and on the law reforming the public administration, cf. Sciuillo 2015 and Losavio 2016.

have at least one thing in common: complete disregard for planning, however interpreted, and, consequently, a curtailment of the guarantees of protection connected to planning operations across a vast area.

Instead of involving the Superintendencies or other protection bodies from the earliest stages of planning, as also suggested by the Malta Convention, the most recent laws have excluded them from decision making, confining them to marginal roles, any steps they take never beyond appeal, and sanction, on a legislative level, the subordination of the interests of heritage to “other” concerns, in particular economic ones.

The intervention of Superintendencies is rigidly and systematically circumscribed, both in terms of the time and in areas of decision making. Treated like undesirable guests, their representatives intervene – when allowed to – only ‘after the fact’, without any possibility of taking part in planning. What is more, even at the verification stage their scope of action is predefined and they can at most seek to ‘lessen the damage’, never venture any radical opposition.

It is almost inevitable that a finger is pointed straight at preventive archaeology, which can frequently block construction projects for lengthy periods.

To this we may add that the introduction of large-scale planning, despite being provided for in the Code of Cultural Heritage and Landscape, is well behind schedule, especially as far as the landscape is concerned: 7 years after the deadlines established by the Code, only two Italian Regions have implemented a landscape co-planning process, which is the very first thing that needs to be done and is essential for land protection. In the meantime, in the absence of any legislation in this area, we continue to gobble up land at a dizzying rate – among the highest in Europe – of 8 square metres per second<sup>13</sup>.

One of the most glaring examples of the damage caused by the lack of a connection between preventive archaeology and development planning is the case of the Rome Metro. The only major European city that does not yet have a decent underground network, for over 20 years Italy’s capital has been caught in a surreal impasse tied to the construction of the C line, which is supposed to cross the city centre. Due to manifest planning errors – the fruit of superficiality and the lack of any real involvement of archaeological expertise from the earliest stages – practically all the locations of stations – the points of impact with archaeological layers – coincide with very important ancient monuments (from the so called auditorium of Hadrian, to Hadrian’s barracks) (fig. 2). The result: an increase in costs, massive delays and enormous problems as regards the final organization of the archaeological sites thus uncovered.

However, another factor contributing to the weakness of the discipline, in terms of recognisability and consensus, is a certain methodological and cultural backwardness of Italian archaeology.

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13 Cf. ISPRA - Higher Institute for Environmental Protection and Research 2016.



*Fig. 2. The so-called auditorium of Hadrian, a horseshoe-shaped structure dating from Hadrian's era, unearthed during preventive archaeology excavations carried out before work began on the construction of the Rome metro line C. Seven years after the end of the excavations, the structure (a public building of great importance) lies untouched with little information provided to the public, in piazza Santa Maria di Loreto, in the centre of the city, just a few steps from the Trajan Column (©Soprintendenza Speciale per il Colosseo e l'area archeologica di Roma).*

The lack of a consolidated legislative framework has produced, as previously mentioned, a sort of anarchy, so that different solutions are applied to similar contexts and according to different logics. At least until the last circular of January 2016, the resources destined to promotion and enjoyment were almost always insufficient from both a planning and financial viewpoint.

A real sore point is the publication of the results of archaeological investigations, which often takes an excessively long time, but above all reflects a scant awareness of the mechanisms of “communication” in the full sense of the word. Publishing summary or even detailed reports addressed only to specialists in the field certainly does not fulfill the need to reach the widest possible audience.

From this point of view the Superintendencies in Italy continue to maintain a closed attitude: proof of this is the fact that excavation sites are always strictly off limits to those not involved in the work and only sporadically – in the case of exceptional discoveries – do the media succeed in gaining and disseminating information.

A good example is the case of the railway construction company Italferr: starting from the 1990s, the construction of the high-speed rail line along the Milan-Rome-Naples route, backbone of the railway network, represented a testing ground for preventive archaeology procedures in Italy. In many cases, excavation sites produced highly important discoveries. The first non-specialized communication of the finds was directly managed not by archaeologists, but rather by the developer, which publicized them as a feather in the cap of the infrastructure building project: essentially, a marketing ploy<sup>14</sup> (incidentally, the works on the high-speed line were often the subject of judicial investigations).

What is more: at the institutional and academic level, some confusion still persists between planned archaeology (based on the developer's agenda, not on research needs) and preventive archaeology. This is a consequence of the lack of a connection between spatial planning and protection activities, which constitutes an obstacle to implementing any real preventive strategies and transforms them into costly rescue operations, for which the available resources always risk being insufficient. From a methodological viewpoint, in the case of excavations of this type, which should not even be considered preventive archaeology, but represent the majority, diagnostic techniques become accessory and at times superfluous.

Though W. Willems (2014: 153-155) warned us about an excessive emphasis on *in situ* preservation, the opposite approach – generalized excavation – if a strategy and resources are lacking, ends up depriving us of knowledge and may result in an irreversible loss of archaeological deposits. In short, we are talking about a preventive archaeology that has never fully developed and still largely revolves around rescue archaeology.

Moreover, the social practices of sharing and inclusion, already experimented with in other European countries for many years, are still foreign to Italy.

To a large degree, when it does not become an ephemeral subject of curiosity following a “big discovery”, preventive archaeology all too often risks becoming a ‘bureaucratic’ process whose results consist solely of a collection of finds, essays and documentation destined to fall rapidly into oblivion in more or less precarious storage facilities and archives.

The other side of the coin of a discipline constrained within the bounds of academic research thus becomes an archaeology understood as a service provided to the commissioning entity, a practice where the primary goal is to improve effectiveness in relation to the project to be completed and cost and time parameters. In both cases, as is clear, what continues to be disregarded is the public and social dimension of the discipline.

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14 Cf. <http://www.italferr.it/ifer/Sostenibilit%C3%A0/Ambiente/Archeologia>.



*Fig. 3. The excavation site in Piazza Municipio, Naples, during metro constructions works. (Photo: ©Pierre Buch).*



## La tragedia del treno causata da tre ciotole

# Tutta colpa degli archeologi

*Alla regione Puglia nell'ultimo decennio sono arrivati 1,7 miliardi per modernizzare i trasporti ma il raddoppio dei binari è stato bloccato per salvaguardare dei «frammenti ceramici» del Neolitico*

*Fig. 4. Front page of the newspaper Libero, 15.7.2016.*

For all these reasons, we cannot blame the political class alone for the present status of delegitimization of the Superintendencies in general, and preventive archaeology in particular. Suffice it to say that the current prime minister, when announcing (on the 15th of August 2014) a decree aimed at relaunching “large-scale public works”, declared, in reference to the special project for the Neapolitan metro - which has produced extraordinary results from an archaeological point of view (fig. 3) - that public works would never again be held up because of archaeological finds.

Or, very recently, the front page of a national daily newspaper, which, after a tragic head-on collision which occurred in Puglia last July between two regional trains traveling along the same track, featured the headline: “All the fault of archaeologists. The train tragedy caused by three ancient bowls” (fig. 4).

Though the risks of an overall weakening of protection in Italy are very evident, this perception is unfortunately shared by only a minority percentage of the population. Issues related to cultural heritage and its protection reach beyond specialist niches only on the occasion of attention-grabbing events like the collapse of walls in Pompeii or in order to resurrect the by now worn-out mantra of our cultural heritage as being a source of wealth for country and too little exploited for that purpose.

The battles to protect our heritage, especially our archaeological heritage, continue to be outside public awareness. Although many land development projects are often of dubious collective utility and almost every day we hear about their excessive costs in relation to the benefits they bring, not to mention the corruption they often give rise to. On the other hand, a culture of communication and above all social involvement have nearly always been lacking in our country. More generally speaking, for several decades we have been feeling the effects of a lack of democratization of our heritage. In the present political context, for example, promotion of our cultural heritage means above all exploitation for tourism, a role that certainly cannot be played by preventive archaeology excavation sites.

In this undoubtedly critical situation, archaeologists should not limit themselves to fighting a battle to defend the *status quo*, but rather take up the challenge. Which means above all recognizing the essentially political character of the protection of our archaeological and cultural heritage in a broad sense. We must thus direct our attention also and above to cultural policy.

Contrary to the view expressed by the political-ideological mainstream, we do not need to simplify, but rather to understand complexity with increasingly powerful tools and, by improving our knowledge-building process, offer interpretations better tailored to the communities inhabiting the territory we work in and share its resources.

By this we mean projects for a land use that is not focused exclusively on a narrow idea of development. In order to be sustainable, however, such projects must be shared with the community they are intended to benefit. To this end archaeologists must be capable not only of informing but also of communicating and – better still – involving citizens.

If the benefits for communities become perceptible, we will have achieved the dual objective of more effective protection and sustainability of our discipline. And, on another level, we will come closer to the right to cultural heritage spoken of in the Faro Convention<sup>15</sup>.

As many are starting to recognise, it is time to guide the just objectives of the Malta Convention toward a vision tied not only to the protection of objects and monuments, but also to the satisfaction of needs and aspiration of the communities that preserve them. It will not be an easy process, since both in Italy and elsewhere there are still many difficulties in assuring a protection that is not merely bureaucratic or subordinate to the demands of economic development. A decisive help in achieving this objective may come from transnational cooperation and exchange, which is what the European Association of Archaeology is painstakingly and courageously trying to build.

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## List of authors

- Tim Allen (*Historic England – East Midlands, Northampton, UK*)
- Katalin Bozóki-Ernyey (*Government Office of Budapest Capital, Hungary*)
- Danijela Brišnik (*Institute for the Protection of Cultural Heritage of Slovenia, Celje Regional Unit*)
- Richard Ciolek-Torello (*Statistical Research, Inc., Redlands, USA*)
- Szabolcs Czifra (*Hungarian National Museum, Budapest, Hungary*)
- Jean-Paul Demoule (*University of Paris I, Sorbonne-Panthéon, France*)
- Pascal Depaepe (*INRAP – UMR 7194, National Museum of Natural History, Paris, France*)
- Szilvia Fábián (*Hungarian National Museum, Budapest, Hungary*)
- Håkon Glørstad (*Museum of Cultural History, University of Oslo, Norway*)
- Donn Grenda (*Statistical Research, Inc., Redlands, USA*)
- Maria Pia Guermandi (*Institute for Cultural Heritage, Emilia Romagna Region, Bologna, Italy*)
- Jesenko Hadžihasanović (*University of Sarajevo, Chair in Archaeology, Sarajevo, Bosnia and Herzegovina*)
- Michael Heilen (*Statistical Research, Inc., Haymarket, USA*)
- Milan Hornák (*Via Magna s.r.o., Vrútky, Slovakia*)
- Paul Jobin (*Institute of Archaeology, University of Neuchâtel, Switzerland*)
- Mihela Kajzer Cafnik (*Institute for the Protection of Cultural Heritage, Maribor Regional Unit, Slovenia*)
- Adnan Kaljanac (*University of Sarajevo, Chair in Archaeology, Sarajevo, Bosnia and Herzegovina*)
- Isabelle Kerouanton (*INRAP, Grand Sud-Ouest, France*)
- Andrei Măgureanu (*Vasile Pervan Institute of Archaeology, Bucharest, Romania*)
- Despina Măgureanu (*Vasile Pervan Institute of Archaeology, Bucharest, Romania*)
- Jan Marik (*Institute of Archaeology of the Czech Academy of Sciences, Prague, Czech Republic*)
- Tomáš Michalík (*Cultural Heritage Consulting s.r.o., Trenčín and Museum of Trenčín, Slovakia*)
- Predrag Novaković (*University of Ljubljana, Department of Archaeology, Ljubljana, Slovenia*)
- Matjaž Novšak (*Arbej d.o.o., Sevnica, Slovenia*)
- Agnieszka Olech-Sliż (*Institute of Archaeology, University of Warsaw, Warsaw, Poland*)
- Justina Poškienė (*Department of Archaeology, Vilnius University, Lithuania*)
- Gilles Prilaux (*INRAP – UMR 8164 Halma, France*)
- Tonko Rajkovača (*University of Cambridge, Division of Archaeology, UK*)
- Mihaela Simion (*National History Museum of Romania, Bucharest, Romania*)
- Filomena Sirovica (*Arheological Museum, Zagreb, Croatia*)
- Harald Stäuble (*Archaeological Heritage Office for Saxony, Dresden, Germany*)
- Eva Steigberger (*Federal Monuments Office, Department for Styria, Graz, Austria*)
- Marc Talon (*INRAP – UMR 8164 Halma, France*)
- Steve Trow (*Historic England, London, UK*)
- Mariusz Wiśniewski (*Provincial Office for Protection of Monuments, Warsaw, Poland*)









