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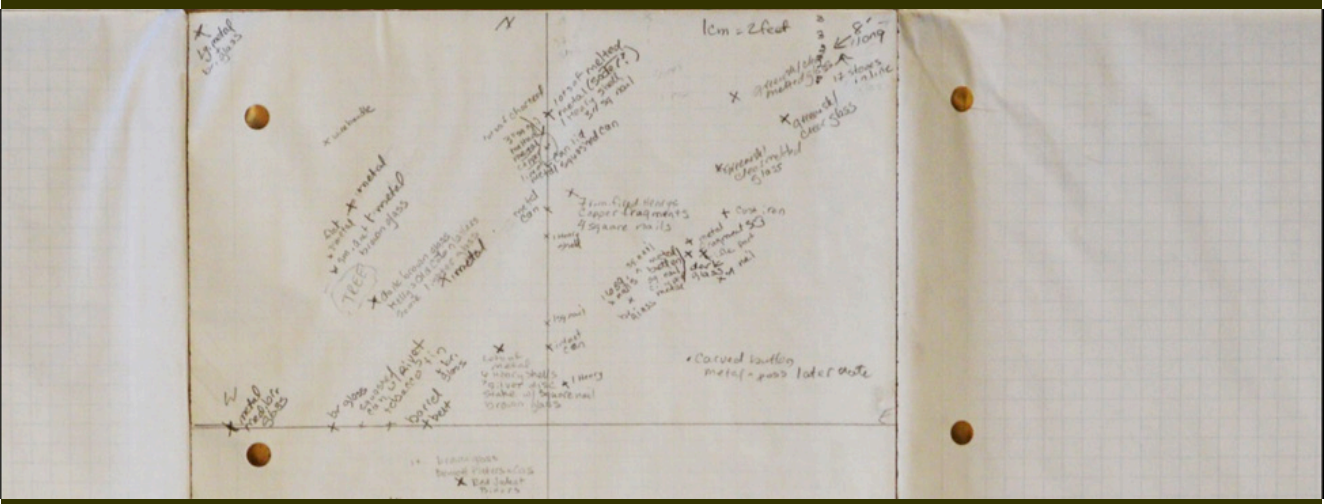

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# AP:

## Online Journal in Public Archaeology

AP: Online Journal in Public Archaeology is edited by JAS Arqueología S.L.U.

# FORUM

# The looting of archaeological heritage

In 2012, in addition to AP Journal Volume 2, JAS Arqueología also published a book in Spain about the looting of archaeological heritage: *Indianas jones sin futuro* (Indianas jones without future), by Ignacio Rodríguez Temiño. We then realised there was an urgent need to debate this issue more thoroughly at an international scale, to show how different things can be and try to find better strategies for the protection of archaeological heritage.

While the forum was being designed, a special issue of Internet Archaeology on looting was published (Issue 33) and new projects started to emerge. This shows an increasing interest in these topics and opens the way for wider debates and perspectives.

At first, we thought metal detecting was the main topic to be discussed. Then we started to realise it was just a small part of a wider problem: looting. This is how we decided to initiate a series of forums for the coming years, with a focus on different aspects of looting, and from different perspectives*.

PART I (vol. 3 – 2013) Beyond metal detectors: around the plundering of archaeological heritage.

PART II (vol. 4 – 2014) Conflict and looting: alibi for conflict… and for the looting of archaeological heritage.

PART III (vol. 6 – 2016) Beauty and money: a market that feeds looting.

PART IV (vol. 7 – 2017) Managing development: from the building of a country, to the destruction of archaeological heritage.

**Participation is open for anyone interested, for both published and unpublished parts. We would like the debate to constantly flow among topics.*

## PART IV

## MANAGING DEVELOPMENT: FROM THE BUILDING OF A COUNTRY, TO THE DESTRUCTION OF ARCHAEOLOGICAL HERITAGE

With the fast development of major cities around the world, many archaeological sites appeared. The birth and growth or urban archaeology is in some way the birth and growth of a protective system that started to regulate what could or could not be done when building new infrastructures.

In 1966, the National Historic Preservation Act (USA) stated on its section 106 the need to conduct archaeological research in those developments funded by the Federal Government. Soon enough, some States promulgated their own regulations on this line, as well as other countries did. In Europe, the London Convention in 1969 already raises awareness on the destruction and looting of archaeological heritage, and the need to regulate and communicate findings for the good of all. It does not directly refer to construction, but environmental laws would cover this gap.

Nevertheless, the unstoppable construction of buildings, roads, pipes, etc. needed further action. The French model started as a kind of blackmail to developers, according to Laurent Olivier (2016), but in someway worked, although to a high cost for the profession. Archaeologists became diggers whose only task was to empty plots for construction, leaving the scientific role of the profession in Academia. This was not different in many other countries that chose a commercial model. Power was (apparently) with developers.

But how could power be with the developers if laws were with archaeology? This paradox is one of the most interesting topics to take into account in current archaeological practice and archaeological heritage management models need to approach it urgently.

Why? Because together with the alienation of professionals in their practice lays a constant destruction of archaeological heritage.

Sometimes legal, sometimes illegal, the looting of archaeological heritage linked to construction projects is undeniable.

This forum intends to delve into the way different management models cope with the destruction of archaeological heritage linked to construction; in terms of prevention, mitigation, and prosecution.

How does the model deal with threats? What are the consequences of destroying archaeological heritage during construction? Is there a sustainable solution for all this?

# Impact assessment and archaeology

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## Introduction

Cultural heritage is as susceptible to damage by poorly controlled development as other valued aspects of the environment (Therivel, 2009). Many countries have institutional arrangements to protect recognised structures or sites from interference of various kinds, particularly land development. However, there remains the problem that important cultural heritage sites may not be protected, if only because they have not yet been discovered, or revealed to a wider community. In addition, some development activities can have indirect effects on cultural heritage that may not be obvious until careful analysis is carried out. In these situations, environmental impact assessment (EIA), and related approaches, provide a means for identifying possible impacts on cultural heritage and ensuring this is recognised by proponents, decision makers, and other stakeholders, so that appropriate measures can be taken to avoid or limit the impacts.

In this article, I briefly outline the nature of EIA, in terms of best practice thinking, and look at some of the ways impact assessment has been shaped to meet the needs of the archaeological community around the world. The final part considers some of the challenges facing the IA community as a whole, as an emerging community of practice seeking to establish itself in uncertain political and economic times. To avoid terminological confusion, I use impact assessment (IA) to refer to the generic process, and EIA to refer to the project-level application of IA. Some jurisdictions, and bodies such as the World Bank, prefer the term environmental assessment (EA), and there are other variations in use, but EIA is probably more familiar to most people.

## Nature and purpose of IA

Impact assessment is a structured process for considering the implications of proposed actions for people and their environment while there is still an opportunity to modify (or even, if appropriate, abandon) the proposals. In principle, it can be used at all levels of decision-making, from policies and plans through to specific projects; in practice, project-level application has dominated its use around the world (Morgan, 2017).

The institutionalised forms of IA now so evident around the world had their origins in the late 1960s with the enactment of the National Environmental Policy Act (NEPA) in the US. The following decades saw the process spread to more and more countries and it is now one of the most widely used environmental management tools.

The purposes of IA are:

- to provide information for decision-making about the biophysical, social, cultural and economic consequences of proposed actions;
- to promote transparency and participation of the public in decision-making;
- to identify procedures and methods for the follow-up phase (e.g. monitoring and mitigation of adverse consequences) in policy, planning and project cycles; and
- to contribute to environmentally sound and sustainable development.

Some jurisdictions use a narrow definition of "environment", to mean just the natural environment; while others also include people and their activities and structures. The trend in the international research and practitioner community, as exemplified by publications from the International Association for Impact Assessment (IAIA), is to follow the expanded interpretation.

A key driver in the original development of IA was to encourage investigation of *indirect* impacts (Morgan, 2012). Direct impacts of major development projects are generally well recognised and increasingly addressed through environmental engineering

methods. Indirect impacts can still cause problems as they typically result from more complex cause-effect pathways, and may be separated in space and/or time from the original action. A classic example of this is a dam on a major river: the interruption of sediment movement down the river often results in greater coastal erosion because sediments are no longer replacing material lost to the sea during storms. This in turn might affect coastal activities (settlement, recreation, and so forth) and may have implications for cultural heritage linked to historic coastal sites. An important purpose of IA then, is to recognise the possibility of indirect impacts and attempt to predict what they might be, and the likelihood and implications of their occurrence.

Another important consideration is cumulative impact. This concept recognises that, in many situations, earlier development projects will have already created a legacy of effects on the local environment. Before further development is allowed, the analysis of cumulative impacts considers how the impact of the proposed activity will add to, and perhaps interact with and exacerbate, existing pressures on the local area.

## Practice of IA

IA involves the identification and characterisation of the most likely impacts of proposed actions (impact prediction/forecasting), and an assessment of the social significance of those impacts (impact evaluation). Most methodologies break these two basic components into a series of steps comprising some or all of the following (Morgan, 2017):

*Screening:* Should an impact assessment be carried out? Many countries use lists of activities that require an EIA, perhaps supplemented by lists of those activities that may require an IA if they meet certain size/capacity characteristics.

*Scoping:* A critical step in the impact assessment process, scoping involves characterising the nature of the proposal and its constituent activities, the likely area that could be affected, and identifying the significant potential impacts that need to be investigated further.

*Impact prediction:* The phase during which potential impacts are investigated to determine the chance that they will occur, and if so, their magnitude, extent and so forth.

*Significance evaluation:* Those impacts that are likely to occur are evaluated for their social significance.

*Impact management provisions:* Significant impacts will require some form of response to avoid, or mitigate the impacts. This may be through design changes to a proposal, or by instituting measures to protect people and/or the environment, or by compensating affected parties. Managing impacts through the life of the proposal is an important part of EIA, so the development of impact management plans, together with monitoring provisions to ensure compliance and effectiveness of those plans, is critical to the whole process.

*Reporting/communication:* Effective communication of the information generated through the EIA to the people who need to use the information is vital. Potentially-affected communities and other stakeholders need the information in a form that enables and empowers them to participate in decision-making processes. Additionally, decision-makers need the information in a form that allows their decisions to be fully informed.

**Forms of IA**

Under the umbrella of IA, a number of specific forms have become firmly established since the 1970s. EIA itself tends to refer to the process used in development control to provide a broadly-based assessment of impacts of proposed projects on all aspects of the environment; better known examples of more specific forms include social impact assessment (SIA), ecological impact assessment (EcIA), and health impact assessment (HIA), all of which can be used as standalone assessment processes in themselves, or within an EIA for a major project to provide specialist input where needed. Strategic environmental assessment (SEA) extends impact assessment thinking to higher level decision-making at policy, programme and plan levels, a reaction to the project-orientation of

most EIA applications, and has been vigorously promoted in certain jurisdictions, such as the EU, and by certain agencies, including the World Bank (Morgan, 2017).

## Impact assessment, culture and archaeology

The treatment of cultural heritage, and especially archaeological resources, in impact assessment mirrors the variations described above. In some jurisdictions, broadly-based EIA requirements include reference to culture as one of the aspects of environment to be considered. For example, the 2014 amendment to the EU Directive on EIA refers to the need to assess the effects of projects on, among other things, "…cultural heritage, including architectural and archaeological aspects….". In New Zealand, the Resource Management Act on the one hand sets up a strong framework for the protection of historic heritage, including archaeological sites, through planning provisions; on the other hand, it is much less prescriptive in specifying what should be included in EIAs ("assessment of environmental effects" in New Zealand parlance) of projects. When legislation does not provide clear direction, leaving situations open to interpretation, it can be more difficult to persuade developers of the need for archaeological investigations in an EIA. After all, most people equate "environmental" with water, soil, air and biota, not human artefacts or cultural heritage.

In contrast, a number of jurisdictions (including Ireland, S. Africa, Jamaica, the US, and several Canadian states/provinces) make clear their expectations by requiring archaeological impact assessments (AIA). Other jurisdictions use broader names—heritage resources impact assessment (e.g. Hong Kong), or historic resources impact assessment (e.g. Alberta and Saskatchewan in Canada)—but they still explicitly include archaeological resources. While clear direction removes uncertainty, there is a danger that the process is seen as separate from EIA and the benefits of working closely with other impact assessors on a more integrated assessment can be lost.

Where cultural heritage and archaeological resources have been identified and could potentially be affected by proposed developments, it makes sense that developers recognise this

as early as possible and factor it into their project designs from the start. Major infrastructure projects, such as highways, can be particularly disruptive of the landscape and therefore tend to be more sensitive to environmental impacts in their design and implementation processes. For example, both the Irish National Roads Authority (NRA) and the New Zealand Transport Agency (NZTA) have developed tiered approaches to highway planning and design that involve environmental considerations from the earliest stages. And both have also released specific guidelines on how archaeological heritage (NRA) and historic heritage (NZTA) are to be addressed in their respective processes. This ensures heritage information, and archaeological information in particular, is taken into account when possible highway routes and designs are still being explored; in effect, internal impact assessments are carried out by the agencies. Then, as the process moves towards the implementation of a specific proposal, the impact assessment information becomes more specific, and more detailed, and is the basis for formal development control permissions.

However, despite the benefits of early recognition of cultural heritage, inevitably most impact assessment tends to takes place once developers have made decisions about location and likely design of a project, so investigations are often carried out against the clock, to serve the formal decision processes. For archaeological assessments, this would limit what can be achieved in terms of recording information, and may not be as effective in avoiding adverse impacts or providing for future mitigation of impacts during project construction and operation.

Direct impacts of development on archaeological resources, such as those associated with urban areas in countries with long history of human occupation in one space, focus attention on recording the archaeology of a site and maybe removal of key finds, before the site is covered, or significantly damaged by development. However, indirect impacts may need to be considered even if a valued site is not itself threatened by development. For example, rock art is very vulnerable to air pollution so any industrial proposal in the vicinity of valued heritage that could result in air pollution (especially a rise in local $SO_2$ concentrations) would need to be investigated to determine the likelihood of acid rain impacts on the rock art.

Given the importance of context in understanding archaeological resources in relation to other sites and in relation to the wider landscape, the incremental loss of parts of that picture through piecemeal development can be a significant cumulative impact. Where the situation allows, strategic environmental assessment (SEA) offers a way forward. As the name suggests SEA allows for more strategic thinking about the potential effects of development across wider areas, and where there are known or suspected archaeological resources of significant potential value, it provides a basis for controlling that development to avoid or mitigate impacts across large areas.

In situations where cultural heritage and archaeological resources belong to existing indigenous communities, it is possible that archaeologists may also need to work with cultural impact assessment processes (CIA). Although CIA can vary in aims and scope (Partal and Dunphy, 2016), the form practised in New Zealand, Canada, and several other places, is a post-colonial approach that ensures indigenous values are considered in decision-making. The scope of a CIA is usually broad but includes archaeological resources as important components of the cultural heritage of indigenous communities. Work by archaeologists in these contexts can contribute to the wider CIA by showing the nature of indigenous connections to place, and the historic legacy of occupation and resource use that underpin contemporary indigenous culture.

## Issues and challenges for IA

Ironically, a major challenge for IA results from its appeal as a widely-used method for protecting valued environmental components. Not only is it practised in most countries globally, it has also been adapted to serve many different environmental sectors, resulting in many varieties of impact assessment (Morrison-Saunders et al., 2014), including, of course, archaeological impact assessment and its related forms. The IA community struggles to manage the tension between sectoral forms of IA, which are often identified with disciplines or professional areas, and the need to ensure all forms of IA serve the same ends, adopt the same basic principles, and avoid wasting effort by reinventing the wheel. This

means forging an effective community of practice that can agree on basic standards and encourage communication between the various sectors and forms of IA (Morgan, 2017). The International Association for Impact Assessment (IAIA) is working to build such a community internationally and has strong links to bodies such as the World Bank, UNEP and the WHO. However, there is still a need to raise practitioner awareness within different sectors to the existence of a wider community of practice and to the research being carried out that may inform and improve their practices.

Within the IA research community itself there has been a move to develop stronger theoretical perspectives in the last 25 years; however, the practice of IA does not always reflect those developments. IA evolved in the 1970s as a technocratic tool, based on a rational decision-making model in which technical information is gathered and experts advise decision-makers on the best decision. Inevitably, this has been subject to increasing criticism over the years, reflecting the influence of wider theoretical debates in related fields, especially planning, about the nature of decision-making and the role of other stakeholders in those processes (Weston, 2010). Accordingly, contemporary literature on IA theory now tends to emphasise a participatory and inclusive approach which recognises different types of knowledge and the importance of representing the views of different groups in society, regardless of their economic and political status (for example, Spaling et al., 2011). There is also a growing interest in the role of power in IA processes as both a problem (Spiegel, 2017), and a facilitative aspect (Cashmore and Axelsson, 2013). So IA theory is evolving and pointing the way to more effective modes of practice.

Actual IA practice in many places lags well behind theory, for a number of possible reasons. For instance, most project-level IA is the result of statutory requirements and those institutional arrangements are slow to change. Moreover, modes of practice that have developed within particular jurisdictions become entrenched among local practitioners. It is difficult for emerging practitioners, imbued with new thinking about how to conduct IA, to overcome such institutional and practice inertia. IAIA and its national affiliates together with professional bodies in a wide number of countries have emerged to provide support for IA practitioners, especially

through professional development programmes. This can help overcome practice inertia, as long as all the bodies maintain good communication with the research community and with each other.

Despite those efforts, IA still suffers from the lack of a strong identity within political circles, and strong champions, at national and international levels. Many governments seeking to recover from the Global Financial Crisis of 2008 have been "streamlining" their planning procedures, to encourage faster decision-making about development projects (Morgan, 2012). Although they usually leave IA in place, they tend to limit its use to larger developments, and reduce the scope of issues to be addressed. This has increased the risk that important environmental values might be affected due to more superficial or nonexistent assessment of the implications of proposed development.

So while impact assessment will hopefully continue to develop and expand, it is vulnerable to political and economic whims. It needs to develop the resilience and political influence of a mature practice area. Developing that community of practice needs practitioners, who come from many diverse disciplines, to join with others in the IA world to build a critical mass that can really exert some influence in developing a shared picture of IA and promoting it to governments, funding agencies and the public.

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**Selected resources**

- International Association for Impact Assessment (IAIA) www.iaia.org The website has a variety of resources about the main forms of impact assessment, covering principles and practice-oriented tips.
- British Columbia Archaeological Impact Assessment and Review Process (online) https://www.for.gov.bc.ca/archaeology/docs/impact_assessment_guidelines/assessment_and_review_process_part1.htm

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