THE CARPET OF THE PAST: PROBLEMS OF SYSTEM AND PROCESS IN URBAN ARCHAEOLOGY

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The sound of the bulldozer is loud in the land... and hardly a day passes without the earth's being torn and scarred by the wheels of progress. The carpet of the past is being rolled up behind us as we advance into the future, and before long when we look over our shoulders we shall see nothing but the mirror of ourselves...

(Ivor Noel Hume)

This paper is about urban archaeology or more specifically, the rescue archaeology of urban sites, and the problems concerning artefacts recovered from these sites, including some recent Australian examples.

Why discriminate and single out urban sites? you might ask. The answer is partly given by the opening quotation. The rapidity of urban renewal taking place in Australian cities is devastating the archaeological resource base. This is a finite resource that has in general been very little explored. The value of investigating urban sites on a large scale has long been recognized overseas. That this work now has to be undertaken in Australia on a rescue basis is a tragedy. Projects usually have to be carried out hurriedly, without adequate initial historical research, and often only a day or two in front of the demolition/construction gangs. The objective of the work is purely to record the sites before their destruction. They often have no research orientation or provision for dealing with the artefacts which such an exercise invariably generates.

Until recently, no large scale research projects had been undertaken on urban sites in Australia. Most work had been done in Sydney, but this was always related to specific sites of identified cultural significance, rather than general urban contexts.

In other capital cities, virtually no work had been done until 2 years ago. Melbourne's City Link Project and the Commonwealth Centre Site Investigation, and Adelaide's Queens Theatre Conservation Study, have attempted to explore larger areas and have fastened awareness of the problems of urban sites archaeology. I should add that these projects were all rescue-orientated and carried out by private consultants. I directed the latter two projects and my comments in this paper derive from those experiences; I believe, however, that they will be relevant to archaeology of all urban contexts.

The problems of urban archaeology can be traced to two areas - the legislative systems which impose the statutory requirements on the developers of sites, and the archaeological processes by which sites are investigated.

Whilst most of this paper will be dedicated to examining processes, a short word on systems is required. I shall conclude with some possible solutions to these problems.

SYSTMS

In NSW, Vic and SA there is heritage legislation incorporated into the Planning Acts which can be used to require an archaeological investigation of urban sites with known heritage significance. This can be applied equally to government or private developers.

The Commonwealth Heritage Act only applies to Federal government departments and instrumentalities; it has no power over private developers or State government departments. The other states either have no legislation or such weak provisions that they are easily avoided or evaded.

One thing that developers have had in common, whether they be government or private, was their loathing to carry out any archaeological or other site-recording prior to their schemes commencing. This is understandable as it was seen as a costly add-on with no tangible benefits to the developer. In reality, the reverse has proved to be true. A fraction of the total redevelopment costs (in one of our case-studies, 0.0004% of the proposed site-redevelopment budget was spent on archaeology) provided a huge return for the developer in terms of public relations, public awareness and acceptance of what was being done to the site. In archaeological terms, the project was the largest of its kind ever undertaken and it salvaged information from the site that has added an incredible dimension to the urban archaeology data-base.

Returning to the legislative aspect, where archaeological investigation of a site is required, there are no guidelines or requirements for how the work should be done. For instance, the emphasis in the Brief is nearly always on the excavation requirements rather than the artefact analysis - even though in real terms the latter is where the true worth of the exercise may reside. Given that funding is generally limited and compromises have to be made, it is always at the expense of artefact analysis and conservation.

This occurs because it is perceived that only the site is destroyed by the redevelopment; the argument goes that if artefacts are salvaged they can be analysed in detail sometime in the future by some as-yet-unknown person with funding from some as-yet-unknown source. The reality is, of course, that urban excavations run up vast...
amounts of artefacts and the moment something is dug-up and removed from its context its death line may accelerate dramatically.

It should be obvious to most people that not only sites are destroyed by redevelopment. If they don't want to find dust or rotting organic matter in those boxes when the mythical analyser arrives sometime in the future, there has got to be a radical re-think on where urban archaeology is going and what it can achieve in terms of the available resources.

PROCESSES

This brings me to discussion of the processes which are employed in urban archaeological projects. Detailed discussion of the merits of different excavation techniques is not relevant to the theme of this conference. It will suffice to say that excavation is a labour intensive process especially where in situ deposits are encountered; extensive use of earth moving machinery can be made on some large projects if the stratigraphy permits (if fill or demolition deposits are being excavated). Indeed, often it is a necessity when unrealistic deadlines are placed on the archaeological work. And some sites are extremely large; the Commonwealth Centre Site required that nearly 6000m$^2$ be excavated in less than 5 months.

The reasons that the designers of rescue urban projects place the main focus on the excavation component of an investigation are:

- the process is labour-intensive (hence costly), and soaks up so much of the total budget;
- the client is concerned that the work be done as soon as possible and not hold up the construction schedule;
- the client often stipulates that the whole of an area to be redeveloped be totally archaeologically excavated (rather than sampled), so that no unexpected structural remains are found in the construction phase which will further hold up the schedule;
- due to the lack of recognition of historical archaeological methodology, the client often does not allow enough (or any!) lead-time for historical research prior to the excavation period. Such research often speeds the excavation phase, as it may identify areas of high and/or low potential.

Experience from my recent projects has shown that urban sites produce huge numbers of artefacts. This is not surprising given that mid-to-late-19th century urban areas had relatively-high population densities and few services (such as rubbish-disposal or deep sewerage). The dilemma facing the designers or urban archaeological projects is whether to excavate the whole area that is to be destroyed by the redevelopment so that nothing (in terms of structural remnants or artefacts) is missed, and possibly generate huge numbers of artefacts; or sample designated parts of the site so that a profile of the structural and artefactual remnants is obtained. This will generate fewer artefacts which can be more thoroughly analysed. To simplify the problem even to this level ignores a whole host of minor problems that can be considered as in-house archaeological/material conservation issues.

Artefact-related problems are the most pressing facing the historical archaeological community in Australia today. The problems are not only caused by a lack of funds for specific projects but are often related to a lack of available expertise in some specialist and technical areas which are required for the analysis, conservation and storage of artefacts and collections. This is compounded by the lack of local (Australian) published comparative data, reference books, and source material which would aid the identification, cataloguing, and analysis of excavated material. On-site and off-site phases of archaeological excavations have their own specific problems but for the sake of expediency I have amalgamated them for discussion here.

IDENTIFICATION

There are few artefacts specialists working in the field of Australian historical archaeology. This is attributable to the relative lack of long-term, research-orientated projects which provide a training-ground for students and graduates. Most archaeologists working in the consulting arena have a general working knowledge of a wide range of artefact types and may have a more detailed knowledge of perhaps one or two other types (eg ceramics or glass).

Accurate and rapid identification of artefacts is essential to the running of any excavation. It can aid understanding of the stratigraphy and indicate historical uses of the site. Ascribing dates to excavated deposits relies upon interpretation of the stratigraphy, the artefacts and historical research. Of these, the dates obtained from the identification and analysis of the artefacts are often the most important.

The lack of local published material is one of the major problems in identifying artefacts. Whereas foreign reference books may be useful for identifying imported classes of artefacts (eg ceramics), they do not cover colonially-made wares or give dates when different wares were exported. To obtain this class of data it is essential that Australian archaeological reports be published, or at the very least, sent to major libraries in each State. Relying on artefact reports from overseas archaeological projects (such as the USA and Canada) which appear to deal with comparable sites in Australia, can often give misleading information. An example of this has just occurred in my most recent excavation where a particular bottle identified from the Parks Canada Guide as being dated 1890-1900 was found in a deposit that was sealed in 1877. The ramifications of this for dating sites are clear; if my work isn't publicly available, someone else using the same sources on deposits that aren't as stratigraphically-intact will be mis-led.
ANALYSIS

The analysis phase of a project (in terms of artefacts) involves cataloguing and detailed research of diagnostic material. It is from this analysis that predictions and conclusions regarding site-use, lifestyle and the social background of inhabitants are formed. If the purpose of archaeology is to increase understanding and knowledge of the past, then this is the most important aspect of any project, as it is not considered "essential" by the designers, and adequate funding is rarely made available.

Archaeologists must bear a good part of the blame for this situation. Archaeological methodology leaves a lot to be desired in most projects. At present there is no standard artefact cataloguing system in use in Australia. There is not even a standardized method of describing attributes or classes of artefacts or numbering them for recording purposes. Archaeologists describe artefacts differently to the way that museums and other curatorial bodies do, which may necessitate re-cataloguing after the excavation. Some consultant archaeologists, university archaeology departments and government heritage agencies are using computer databases for cataloguing but these are diverse and generally not compatible.

The problem with everyone using different cataloguing systems (whether they are computerized or not) is that it makes it very difficult to compare data from different sites. Whereas Australia should have a good comparative database for artefacts as there have been excavations in almost all States and Territories in the last ten years, there are virtually no accessible records in the form of published (or even unpublished) artefact catalogues. Every individual project starts from scratch, depending on the expertise and experience of the director, and whatever experienced or semi-experienced team s/he can put together at the time.

CONSERVATION TREATMENTS AND STORAGE

The lack of trained specialists and technicians in the archaeology field is especially so for conservators; organic and metal materials are often need of instant treatment once they are excavated, while even relatively-stable materials, such as ceramic and glass, may need some post-excavation treatment if they are to be permanently kept.

On-site conservators on archaeological excavations in Australia are very rare. Even if suitably-trained persons are available, it is often difficult to include them in a rescue project due to the funding constraints. Requirements such as chemicals, materials and a suitable laboratory or work space are usually deemed to be costly accessories to an excavation that can be done without.

Archaeologists have a distinct kind of need for conservators. Artefacts may need some instant conservation treatment to ensure they survive to the analysis stage. Whether they are treated again for permanent storage is a decision which is made later and should depend on the significance of the object. We can't afford the luxury of conserving every artefact.

In the post-excavation analysis phase, the archaeologist catalogues and researches the individual artefacts, and it is then that decisions regarding the viability of storing artefacts for the long term are made. If a specialist conservation facility is available locally, then often an approach is made to that body or agency for help and advice on cleaning and conservation. This is almost invariably sought on a voluntary basis as the costs for paid assistance are prohibitive when the amount of artefactual material is taken into consideration. Unless organic and corroded metal items are of the highest significance they are usually recorded and discarded. Only the relatively-stable and durable items are retained.

The effect this is having on archaeological collections is not hard to imagine; the effect it might have on future generations' perceptions of the past can only be guessed at.

SOME SOLUTIONS

After all this gloom and doom, you might be tempted to think that all is lost. It's not. There are many ways to improve the situation; recognition of the problems is the first step to finding the solutions. As the problems occur in the areas of system and process, this is where changes and improvements could be made. But it is necessary to go beyond this if we are to be really successful. We need to promote cooperation and interaction between all bodies and agencies which deal with heritage and material culture conservation; we need to initiate training programmes to create qualified specialists who can analyse and conserve the material culture remains produced by urban excavations; we need to increase public awareness of archaeology and museology through education and interpretation of sites and artefacts; we need to make developers aware of the public relations power of archaeology and history.

The first place to start to make improvements is within the system. Responsibility for this largely rests with archaeologists who are in the system working for State and Federal government heritage agencies and departments. Contract archaeologists working in the field could help with this by making recommendations grounded in experience from individual sites. Tightening-up and clarifying legislation would improve the situation for both developers and archaeologists, and lead to more productive results from urban rescue excavations. Three points come to mind:

. Where there are State and Federal statutory regulations tighten these up with specific reference to artefact analysis, processing and storage.
. Identify from the outset of a proposed project who is responsible for artefacts and where they will be stored, who will pay for analysis and conservation.
. Include experienced people in the team who design projects in order to achieve more balance between excavation/artefact components of the process.
The second place to make improvements is within the processes of archaeology itself. The archaeological community, which is made up of academics, consultants, volunteers, and societies needs to get together and agree upon some standard formats and procedures that will facilitate comparison of data between sites. Tertiary archaeology courses could provide a valuable labour-resource for contract projects and in return get practical training in all aspects of archaeology. Academic archaeologists need to take a more prominent role in evolving standing research designs to which contract archaeologists can relate their work. Contract archaeologists have the responsibility of ensuring their work is carried out to high standards and is recorded in a form which is comparable to other work being done on other sites. Archaeologists need to interact more frequently with museologists and conservators in designing and carrying-out projects.

In summary, then, it is necessary to:

- Establish courses for training technical specialists/conservators specifically for archaeological work;
- Promote more tertiary involvement to develop research questions, develop computer databases, participate in excavations, analyse artefact material, and publish results;
- Promote more involvement of artefact custodial agencies (eg museums) in designing and supporting urban archaeological projects.

Finally, things can be improved in terms of public awareness and public relations. Developers are more inclined to pay for archaeology if they perceive they are getting something for their money. As they are not interested in "big holes which produce piles of old rubbish" we have to disguise our 'product' as something more palatable. That something is good PR; lots of high-profile press coverage, and (where warranted) public praise for the developers’ responsible stance in conserving our cultural heritage.

This can often be achieved by combining the PR with on-site interpretation programmes during the course of the excavation. The natural extension of this is later to display artefacts and results of the archaeological research in well-publicised exhibitions. People are interested in this type of information; the Macedonian exhibition is currently on display in Adelaide, and it has broken all attendance records at the SA Museum. Where historic buildings are being conserved as part of site redevelopment it may be appropriate to have a small gallery-like display of excavated artefacts supported by other interpretive material. Computerisation of all excavation records and the existence of technology such as CD-ROM and video-disk have enormous potential for creating interactive or educational packages.

Some of the ideas I have put forward are long-term goals which may seem to be unattainable at the present. Others are more-immediately achievable as they only require a change of approach or attitude to make them possible. This first joint conference between AICCM and ICOMOS is a step in the right direction.

REFERENCES