

ARCHAEOLOGY AND URBAN PLANNING: USING THE PAST IN DESIGN FOR THE FUTURE

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Introduction

In Australia, we have only recently begun conserving rather than simply recording and destroying our historical archaeological sites. Considerations about how to conserve and interpret our archaeological resources are still at a fairly basic level and tend to focus on individual sites. While some of these site based interpretations are excellent, they are generally inward, rather than outward looking. Often inside large new office blocks, public buildings such as courts and in some cases purpose built museums, they tend to be isolated not only from their historic context but also the modern urban context in which they survive.

It is suggested here that the next step is to conceive of individual site interpretation in a larger context. Urban conservation is about more than the conservation of individual buildings or objects of historic interest. As Nahoum Cohen noted, "conservation on an urban scale, is concerned with the urban fabric as a whole and not with architecture alone" (Cohen 1999: 13). This urban fabric includes the archaeological landscape that underlies and often underpins our urban environments.

Australian architect Rod Simpson calls this process of urban conservation "respecting the layers": using references to the past as a starting point for new design and designing in context, rather than in a closed, inward looking way (Simpson 2005). In a sense this is about interpretation of our heritage, but not in terms of putting up a sign, displaying some artefacts and writing a guidebook although these can be part of the bigger picture. It is interpretation in its broadest sense on a landscape scale.

Achieving archaeological conservation on an urban scale requires a change in modern planning methodology. It requires development of overarching planning frameworks that allow interpretation and conservation outcomes on individual sites to work towards a bigger set of goals. This overarching framework also allows elements that move beyond the site to be conserved: the underlying topography, the urban order created by the street grid, the larger patterns of public and private spaces.

These principles are considered using three Australia case

studies.

1 Two schemes for the Sydney Olympic Village are compared: one that takes an urban conservation approach and one that takes a utopian approach.

2 The challenges of conserving and interpreting the archaeological landscape of the penal settlement of Port Macquarie (northern NSW), now completely covered by a veneer of 1940s-1970s development and undergoing a new development boom.

3 Archaeological conservation and the urban regeneration of Parramatta in Sydney's west.

These are set in the context of the Australian planning system and the current approach to site based versus urban conservation strategies in Sydney CBD.

Australian Planning Context

Historical archaeological investigation and conservation in Australia occurs within the context of a three-tiered system of legislative requirements and planning regulations, Federal, State and local. There is a user-pays system operating where most archaeological work is prompted by and funded by development. Regulation of planning and development is delivered by State and local governments. In NSW this is by the NSW Heritage Act, 1977, the Environment, Planning and Assessment Act, 1979 and a myriad of State Planning Policies, Local Environment Plans and Development Control Plans.

Sydney CBD

One of the pleasures of visiting large cities is the ability to trace the different periods of development in the urban fabric, whether that development was planned or ad-hoc. In London for example, the Roman period of development is still discernable at least on plan, if not in the glimpses of Roman archaeology beneath office blocks and in alleyways. Dutch New York is still there in the pattern of streets and in the street names of southern Manhattan if you know how to look at it.

In Sydney, the CBD street grid is dictated by its

relationship to the harbour, the early desire to create a government domain and the location of Sydney's water supply. This in contrast to Melbourne for example where the CBD was deliberately planned and imposed. In Sydney however, while the street grid has remained fairly stable, the early building stock and landscape features have not. Very little architecture remains from first settlement due to a largescale process of urban regeneration undertaken in the 1960s and 70s. But the skeleton of the early settlement pattern, which still forms the structural basis for modern Sydney is slowly revealing some of its early houses, pathways, gardens and commercial buildings through the process of archaeological investigation. Making sense of these sites in both their historic and modern contexts is difficult. Partly because they are now cut off from one another by high-rise buildings, and hard surfaces. Partly because their investigation and presentation is occurring in a vacuum, without reference to an overall planning concept. While Sydney City Council has an archaeological zoning plan to identify potential areas of archaeological potential, it doesn't have an overall plan for how these remains should be managed as an archaeological landscape of interrelated sites.

Recent attempts to place individual archaeological sites in an historic context, while introducing new architectural and landscaping elements have had varying degrees of success. The Museum of Sydney on the Site of First Government House is a difficult to interpret modern space. Tracing the footings in the paving outside the museum may give a sense of the size and layout of the building, but the sense of how the site would have felt and how it related to the rest of the fledgling colony is somewhat lost in an expanse of grey stone and reflective glass.(fig.1)

The nearby Conservatorium of Music built in the Government House stables also makes a token effort to look outwards in its approach to interpreting the early roads that linked it to the Governor's Domain and the Government House, but in the end the archaeological remains are largely presented in glass boxes. Some of this is successful in providing an historic context for the setting of the stables building, but more subtle effects, such as the reshaping of the foyer to reflect the shape and size of the stables forecourt is lost on many visitors. On the whole however, this site works better than the site of First Government House because the stables still sit in their historic setting (now Botanic Gardens) and maintain views to the Harbour. This in turn provides a broader setting for the archaeological remains.(fig2.3)

Both of these examples illustrate the difficulties in retrospectively fitting urban conservation goals into an area

that has already undergone a significant program of modern urban regeneration without those goals in mind. The Port Macquarie and Parramatta examples in this paper, will look at major regeneration process in progress and how archaeological landscape conservation could be achieved by using an overarching plan.

The Sydney Olympic Village – planning a new suburb

The Sydney Olympic Village, now the suburb of Newington, is almost in the geographic centre of Sydney. It was built on the site of the former Newington Armaments Depot. The site was developed as a military facility from the mid nineteenth century, with each subsequent phase of development having its own distinctive architectural style and landscape character. The earliest layout was close to the Parramatta River and was a closely grouped radial complex of brick and stone buildings served by small gauge rail. Later phases show more modification to the landform as earthmoving technology developed. The later layouts were more sprawling and reflect a road rather than rail-based transport system. This development pattern is characteristic of large military sites, where unconstrained by land economics they are typically opportunistic, sprawling, organic and ad-hoc, using space and landform instead of building for their purposes (Simpson 2005).(fig.4)

Military facilities management tends to include a "disinclination to demolish and a propensity to adapt and reuse buildings and infrastructure" (Simpson 2005). It leaves sites with a pattern of organic, ad-hoc growth. When the military moved off the Newington site, they left an existing urban structure ready to be built on again. In both the original design competition in 1992 and the second design competition in 1997 a number of teams carried on this approach of adaption and re-use.

Once scheme in particular, the Aurora Scheme, included street grids and ridge roads that drew from the existing patterns and incorporated much of the armaments depot into the design. In particular it retained and reused the munitions bunkers present on the site, as community facilities. The "bull ring" became a sunken road in a ring park and the sunken fibro sheds and earthworks were turned into sunken gardens for surrounding apartments. Some of the bunkers were left as ruins, becoming landscape features as part of the urban design.(fig5.6)

The rival Newington Scheme, which was eventually constructed, largely ignored what was there in the past, choosing instead to impose a new urban structure. It did

keep three 'typical' bunkers as a token reference to the past but removed the roads so the context was lost. It designed new contours and landscape features rather than working with what had been there. In essence treating the site as a blank slate. Rod Simpson, who worked on the Aurora Scheme likened the difference between the two schemes as "open and contextual" versus "closed and utopian" (Simpson 2005). As Simpson noted: "Newington does not have an open relationship to the [Olympic] venues or to the landscape, nor to the past. The scheme that is built is something so new, that it has involved complete erasure" (Simpson 2005).

He suggests that this utopian approach is dominant in architectural and urban design because it is neat, complete and easy. Interestingly, he also suggests that this approach is also common in heritage conservation practice because it is forced by legislative and development constraints to take a museological approach, choosing the best example of a type according to 'criteria' and accessioning into the 'collection'. Then the collection needs to be interpreted because it has been decontextualised and framed by its new surrounds. The Aurora Scheme on the other hand was interesting not only in its respect for the layers, but also in its use of much of the fabric of previous phases of development whether that was considered to have heritage significance or not. The element of surprise in finding hints of the past interwoven with the new may have provided a richer, uninterpreted experience of the site and its history.

Port Macquarie – urban regeneration

The Olympic Village example is somewhat unusual in that it presented an opportunity to design an entire suburb. More often, there is opportunity to work only on an individual site or set of sites, comprising only a small part of an existing urban structure. The scope for broader interpretation of the setting of a place can be much more limited in this instance. There are however possibilities for looking beyond the borders of an archaeological site and bringing that to bear on new design concepts, particularly when the area is undergoing a process of urban regeneration.

Port Macquarie on the NSW mid-north coast is currently in the middle of a development boom. A long time holiday destination for families, the small brick holiday flats from the tourism boom of the 1960s are being replaced by bigger, shinier versions. This presents an immediate archaeological opportunity as well as a problem. The development is providing the capital for archaeological investigation, but it is also the driver for destruction of the sites being uncovered. The scale of the problem is magnified by the fact that Port Macquarie began life as one of a small number of penal

colonies within the larger penal colony of Australia. Settled in the 1820s, its relationship to the era of forced migration from Europe to Australia gives it a national and some would argue international, level of heritage significance. While later phases of development have removed almost all of the penal phase buildings from the town, but the footprint of the penal settlement is still there in a rich layer of archaeological remains.(fig.7)

The opportunity provided by this rich archaeological resource is still not fully recognised by the local council, who are far more interested in the development boom than conservation. While archaeological investigation and recoding of the important information in these sites is happening begrudgingly, conservation is not, despite some level of public pressure.

A key problem is that the archaeological landscape of the penal settlement is not being managed holistically. Where investigation and interpretation occur, it is very much on a site by site basis. An attempt in 1998 to implement an archaeological interpretation strategy for the whole town centre was met with a lack of funding support. Ideally, development approvals for the town centre would be granted in the context of an overall archaeological management strategy that addressed setbacks, building orientation, vistas and the form and scale of development overlying the core of the former penal settlement. The plan itself was completed but has not been realised on the ground. This first step of placing signage around the town would at least have raised awareness of what was beneath the streets and may have spurred public support for changes to the local planning frameworks. At the moment taking a landscape approach to archaeological investigation and conservation on individual sites is very difficult and depends on the good will of an enlightened developer.

The Commandant's House for the penal settlement was found in 2000 during construction of a new motel. Sitting atop the highest ridge in the town, with strategic views across the town and harbour, the archaeological remains of the House were not only in excellent condition and highly interpretable, they also clearly showed the alignment of the original street grid skewed at 45 degrees.(fig.8)

The new development had failed to take account of the potential presence of these remains and had certainly not considered the possibility of keeping anything that should turn up. The ensuing political tussle between the community, the developer, the local council and the NSW Heritage Council is an interesting subject for another paper. But what is relevant here is the alternative design concept that developed from that tussle, in which the new hotel

straddled the archaeological remains, ensuing their conservation. The new design attempted to interpret the original roof pitch and volume of the building, but more interestingly the hotel tower was oriented on the original street grid. At 45 degrees to the current street grid it would have been a very visible reference to the historic configuration of the town. This type of lateral thinking, in combination with more traditional interpretive techniques from the failed interpretation strategy would have assisted in providing a sense of the penal settlement in the visitor's experience of Port Macquarie.

Like the Aurora Scheme for the Sydney Olympic Village this concept was also never realised, but it highlights what is possible on an individual site in the absence of overall planning controls. It also highlights the lack of visionary thinking in Australian local government regarding the conservation of our archaeological heritage. Hopefully an overall urban conservation strategy will be developed for Port Macquarie before the penal settlement disappears.

Parramatta – urban regeneration

Parramatta is not far from the Sydney Olympic and about 40 minutes west of the Sydney CBD. It was the second site of European settlement in Australia. Established in 1789, largely as a centre for agricultural production for the Colony the military/convict settlement was in the same location as the current CBD of Parramatta. Parramatta did not however undergo the major highrise development phase that Sydney CBD did in the 1960s and 70s. It is going through a deliberate phase of urban regeneration now and the opportunity still exists, although is rapidly slipping away, to take an urban conservation approach to the significant archaeological remains of the early settlement.

New planning controls written for Parramatta in 1999/2000 aim to reinvigorate Parramatta as Sydney's second major business district. These controls did attempt to address conservation of the historic street grid and views and vistas through the city centre. It also addressed building envelopes within identified historic 'precincts'. Archaeological conservation however, wasn't seriously considered. While overall awareness of archaeological requirements in the NSW Heritage Act mean the process in Parramatta has resulted in more archaeology being done in Parramatta, the planning framework still lacks a forward vision for conservation of the archaeological layers in the urban landscape. We are still seeing ad-hoc and isolated conservation attempts.

Around the time the planning system was being overhauled, the Parramatta Archaeological Landscape

Management System (PHALMS) was also being developed.(fig.9)

PHALMS provided quantitative analysis of the archaeological resources the City and even identified some thematic archaeological landscapes, but didn't quite move to an integrated landscape management approach. The major planning reform process was completed at the same time as the Archaeological study and the findings were not incorporated into the revised planning system. So the PHALMS still acts simply as an early warning system for developers rather than a proactive conservation and interpretive planning tool.

Despite the absence of a supportive planning context in Parramatta opportunities, like the Port Macquarie example, still exist on a site by site basis. Covering an entire city block, the proposed Parramatta Justice Precinct contains an archaeological landscape dating from 1789 to the present day. There is evidence of four separate phases of development of the Parramatta Hospital (the longest continuously used hospital in Australia), part of a row of convict huts, a brewery, later housing for free settlers and remnant drains, pathways and garden beds that tie the archaeological landscape together.(fig.10.11)

Unusually, the potential scale and significance of the archaeological resources was incorporated in the planning rationale for the site from the outset, which has allowed us to attempt a landscape conservation approach. Archaeological investigation has recently been completed as part of the precinct design process. Interpreting this historic landscape within a new justice precinct of large multi-storey buildings is one of the key challenges of the next phase of work on the site. The designers are being encouraged to use new architectural and urban design to embrace rather than compete with the archaeological layer. Avoiding decontextualised archaeology in boxes will be a key aim. A commercial building is being designed that will span part of the 1818 hospital remains, allowing for partial exposure and interpretation in a controlled environment, while the rest of the archaeological landscape will be reburied for ongoing conservation purposes. They will however, remain in an area of open space adjacent to the commercial building allowing scope for interpretation of the site as a landscape of connected buildings and features. Some opportunities at reconnecting the archaeology to its setting have however, already been lost. The only building left on the site from the 20th century 'fourth' Hospital sits on the bank of the Parramatta River, between the river and the 1818 hospital footings. This effectively cuts the archaeological remains off from the surrounding precinct of early government buildings and the parklands of the early

Governor's Domain. A proposal to create an opening in the bottom of this four-storey building was quickly knocked back, but it would have recreated a visual link between the hospital and its historic setting. An overall urban conservation strategy for Parramatta, enacted in the planning controls would have assisted in this case.

Conclusions

As noted in the introduction to this paper "conservation on an urban scale, is concerned with the urban fabric as a whole and not with architecture alone" (Cohen 1999: 13). It is argued here that the archaeological layers of our urban environment make an important contribution, not only to our understanding of our past, but to the richness of our urban environments. Where we choose to conserve them, their management should be guided by an overall plan, not as it currently happens in Australia, in an ad-hoc and isolated way. This requires an urban conservation approach that recognises the importance of archaeological resources and is enacted in planning regulations. In this way as each site is discovered and developed, it becomes a piece contributing to a larger goal. Only when conservation of these archaeological layers is embraced by architectural design, urban design and planning in a holistic way, will they make sense as part of our urban environments.

Abstract

The archaeological remnants that exist beneath modern cities were once connected to one another in living networks. Often however, our access to significant archaeological remains is confined to windows of opportunity on single sites, divorced from their historic context. While these sites tell interesting stories in themselves, it is sometimes difficult to connect them conceptually or physically to one another, or to envisage the urban or rural landscapes in which they once existed.

Regional and local planning policy can unwittingly further obscure or destroy these site specific contexts. It can also obscure evidence of broader historic urban planning principles that are still evident (archaeologically or otherwise) in street grids, views, setbacks, open space and density of development.

This paper explores opportunities for achieving recognition and conservation of important archaeological site networks on a landscape basis at a city-wide and neighbourhood-wide scale. It will explore planning tools and interpretive and architectural design techniques that can be used as individual sites are developed, to progressively build an understanding/interpretation of the historic

development of our urban centres on a landscape basis. This will be done using Australian examples including: one of the unsuccessful designs for the Sydney Olympic Village; the changing street grids of the penal settlement of Port Macquarie in regional NSW; an Archaeological Landscape Management Strategy (ALMS) prepared for Parramatta in Sydney's west; and the development of a large new justice precinct in Parramatta on the basis of the results of the ALMS.

References

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Fig 1: Museum of Sydney outdoor paving area outlining the footings of First Government House (C.Allen 2002)



Fig 3: In situ archaeological remains at the foyer entrance (C.Allen 2003)



Fig 2: Conservatorium of Music redevelopment (NSW Department of Public Works and Services 2000)



Fig 4: Major components of the Newington armaments depot (Simpson 2005)



Fig 5: Relationship of Aurora Village to the retained elements of Newington armaments depot.



Fig 6: Incorporation of the bunkers into the Aurora Scheme



Fig 7: Plan showing the initial penal settlement layout with the 1840s street grid superimposed (NSW DPWS 1998)



Fig 8: The remains of the Commandant's House found during early stages of redevelopment (C.Allen 2000)

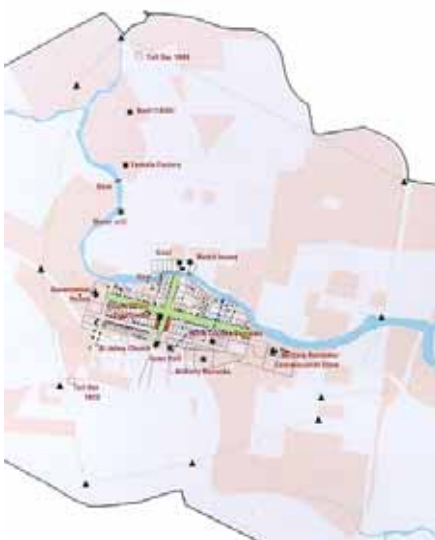


Fig 9: Thematic landscape plan from the Parramatta Historical Archaeological Landscape Management

System (GML 2000)



Fig 10: The footings of the 'third' hospital built in 1818 (C.Allen 2005)



Fig 11: The Hospital as it looked in the 1870s with the Parramatta River in the foreground (DPWS archive)