

# The contemporary urban commons – a case study of Darling Harbour, Sydney

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## Abstract:

This paper reports on research funded by the RICS Education Trust. We offer an analysis of the contested state of contemporary urban commons in an Australian city, through a case study of the Darling Harbour scheme in Sydney. Moral claims of ‘ownership’ often outweigh legal claims of ownership in the scarce public spaces that comprise the contemporary urban commons. We question if these contemporary commons provide a counter-weight to the privatised rigidities of urban capitalist societies.

Our research design incorporated an analytical hierarch process (AHP) to test a ‘mosaic’ of property rights in the contested commons. This mosaic essentially comprises a spectrum of property rights, resulting in a variety of contemporary ‘commons’ that range from spaces with unrestricted public access to private leasehold property with limited public access rights. We identify several distinct types of commons at Darling Harbour. We engaged an Expert Choice analysis of interview data to ascertain the relative importance of each kind of property right for users and lessees of different kinds of spaces in Darling Harbour. This enables Darling Harbour to be mapped as a heterogeneous commons comprising a set of spaces that each has their own distinctive mosaic of predominant perceived property rights.

**Keywords:** property rights, contemporary commons, AHP, Darling Harbour, Sydney

## 1 Introduction

The issue of the commons has received increasing attention from an environmental perspective. There has however been a dearth of research into the urban commons. In

this paper, we investigate real property rights in the contemporary urban commons - the perceived public spaces that are found interwoven into the tapestry of the urban environment. The city comprises a milieu of competing and complementary property rights, ranging from the individual to the communal. Whilst property rights provide a coherent legal, economic and social framework for the relationship between people, place and property, they are often misunderstood and misinterpreted by the multiplicity of stakeholders sharing the space that is the contemporary metropolis.

The importance of treating the urban commons as a distinct research area is underlined by McShane (2010, 107), who states

... analysis of urban commons requires distinct conceptual and contextual frameworks, requiring new thinking about sectoral relationships and calling into question the separation of nature and culture that is reproduced in the rubric of old/new commons.

One of the central issues here is the diversity of rights, obligations and restrictions that can apply to an urban commons. This diversity leads to the need to conceive of a mosaic of real property rights that govern these public (and semi-public) spaces. The need for such a perspective has been identified by Kohn (2004, 10):

The term commons . . . erases the distinction between a number of different kinds of collective property. The commons of a gated community is not the same as a Boston Commons. We need a language that helps us distinguish between apparently similar forms of collective ownership that have very different social and political effects.

We provide an overview of property rights and the contrasting legal, economic, and sociological, interpretations and the conceptualisation of rights as being composed of a mosaic. This is used to frame an analysis of the diversity of real property rights in the contemporary urban commons of Darling Harbour, Sydney. The analysis compares perceived property rights within our mosaic and identifies the main typologies of rights in each category of the commons in Darling Harbour.

## **2 Property Rights and the Urban Commons**

As Bollier (2008, 4) identifies, “a commons arises whenever a given community decides that it wishes to manage a resource in a collective manner, with special regards for equitable use, access and sustainability”. The contemporary urban commons, as a particular type of inherently public property, are represented by spaces of public interaction. They are important spaces between buildings where people can meet, eat, play and relax. As Kohn (2004, 194) argues, “These places are not consumed or diminished when others enjoy them. In fact, in many places, their value actually increases when a critical mass of strangers congregates”. Nevertheless, this obscures the existence of a range of rights, obligations and restrictions attributable to each of the stakeholders who use and enjoys such spaces. Given that moral claims of ‘ownership’ often outweigh legal claims of ownership, the identification of the rights that may apply is critical to understanding the contested state of contemporary urban commons.

### 3 What makes a Property Right?

Discourse on property rights has emerged within a broad range of disciplines. These include, but are not limited to, archaeology, anthropology, ethics, sociology, history, psychology, law, geography, biology, philosophy, economics, and planning. The most influential Western theorising about property is underpinned by what Hann (2007, 290) refers to as the ‘standard liberal model’, yet property is “much broader than the liberal tradition recognizes, and that the political, economic and social functions of property are in continuous flux”. Many of these disciplines draw heavily on legal traditions, and in particular have been influenced by Henry Maine’s (1861) metaphor of ‘a bundle of rights’. The importance of the ‘bundle’ metaphor is that it highlighted the common circumstance that different individuals or groups may hold differing rights, obligations and restrictions over the same parcel (or piece) of land. The understanding and articulation of property rights, obligations and restrictions influence property relations in all human societies.

Anthropological engagement with property issues has often been overtaken by the standard liberal model. These models range from Hardin (1968) wanting to avoid a ‘tragedy of the commons’, the ethnographic cost-benefit analysis Demsetz (1967), the new institutional economics of North (1990), through to the beguiling capital creation propositions of de Soto (2000). Likewise, we find the disciplines often evolve their interpretation of property rights in isolation and concern themselves with different aspects (McEwin, 1993, 35):

Lawyers, at least academic lawyers and judges, rely on principles of jurisprudence to determine ‘fair’ property right allocations on the basis of ethical and moral standards. On the other hand, economists tend to evaluate property-right systems on the basis of whether they ensure resources go to their most valued use.

Table 1: Hohfield's System of Jural Relations  
(Source: Hohfield, 1916-1917, 710)

Jural Opposites	right	privilege	power	immunity
	no-right	duty	disability	liability
Jural Correlatives	right	privilege	power	immunity
	duty	no-right	liability	disability

As Cole and Grossman (2002, 318) highlight, “divergent conceptions of property rights can lead to differences in analysis and to confusions in cross-disciplinary scholarship”. Caution needs to be taken when research into property rights, such as that evolving within the Asia-Pacific Centre for Complex Real Property Rights, strives to be transdisciplinary (Nicolescu, 2006, Max-Neef, 2005), and navigates the boundaries of diverse disciplines. As Bromley (1991) highlights, there are few concepts in economics that are more central, or more confused, than those of property, rights and in particular property rights. Loose talk about property, rights and property rights is not new, indeed in the early twentieth century Hohfield (1913-1914, 1916-1917) offered a system of

jural relations (rights and obligations) in an attempt to avoid such misunderstandings (see Table 1).

Whilst Hohfield's system has become an influential and enduring contribution to analytical jurisprudence, we determined to analyse these relationships in the context of the contemporary urban commons in order to discern the level to which the confusion persists. To do this, we engaged a synthesis of property rights, obligations and restrictions developed by Boydell (2007, 111), which drew on a range of contemporary property rights literature (see Crocombe, 1975, Bromley, 1991, Payne, 1997, Rigsby, 1998, Sheehan and Small, 2002, World Bank, 2003, Farran and Paterson, 2004). We applied these rights, obligations, and restrictions, to the institutional arrangements prevailing in the contemporary urban commons of Darling Harbour, Sydney. On closer inspection (see Table 2), it will be apparent that some of these *rights* (e.g. duration and flexibility) are actually attributes of more fundamental rights, rather than separate individual rights.

The standard libertarian view (that was criticised above by Hann, 2007) regards ownership as the highest level of right to act, and that property rights vest only with the individual. In contrast, Lyons *et al.* (2007) view is that with property rights at any level come roles, obligations and restrictions. This perspective is especially crucial in considering challenges concerning the maintenance and development of the urban commons, where spaces are potentially under threat of conflicts over the roles and obligations of the various stakeholders, who see themselves as asserting certain properties rights over the commons. At one level this can be seen as an issue of information and negotiation transaction costs (Webster and Lai, 2003, Coase, 1960). But at a deeper level such conflicts need to be understood in terms of a more nuanced view of the nature of property rights (Cole and Grossman, 2002), of varying ideological beliefs about the urban commons, and of implicit power relationships between stakeholders (Flyvbjerg, 1998).

Rifkin (2000) highlights an increasing emphasis on the importance of 'access' rather than ownership. Access is key in the urban commons, as "These places are not consumed or diminished when others enjoy them. The magnetism that attracts people to make diverse use of public space is what Kohn (2004, 104) refers to as the 'carnival of the commons'. The *values* are not necessarily economic. Rather, what is valued in urban commons is:

"...places to sit, plenty of shade, 'touchable' water, good food, and well-connected streets and sidewalks. But what a vital commons can offer a community is far from simple. A sense of identity. Belonging. Connectedness. Fun. Tradition. Stories. Great public spaces are what memories of cities are made of" (McGinnis, 2001).

There has been significant analysis of the goals of, and impacts on, the range of stakeholders involved in urban planning schemes that involve consideration of the commons, especially using Lichfield's planning balance sheet / community impact evaluation methodology (Lichfield, 1996). However, the treatment of the commons in such analyses has considered it as a product of the goals of different stakeholders rather than as being a contested site for different property rights, and where the way in which

those rights are resolved in each area of the commons has central implications for urban sustainability.

Table 2: Property Rights Summarised  
(Source: Boydell, 2007, 111)

<b>Right</b>	<b>Explanation</b>
Direct use	Rights to plant, harvest, build, access and similar, maybe shared rights
Indirect economic gain	Such as rights to tribute or rental income
Control	Conditions of direct/indirect use, held by persons other than the user
Transfer	Effective power to transmit rights-by will, sale, mortgage, gift, or other conveyance
Residual rights	Remaining rights at the end of a term (such as lease, death, eviction), includes reversionary rights
Rights of identification (symbolic rights)	Associated with psychological or social aspects with no direct economic or material function
Duration	Length of time property right is held, indicating profits and/or savings
Flexibility	Right should cater for modifications and alterations
Exclusivity	Inverse of the number of people with shared or similar rights, more relevant to water property
Quality of title	Level of security that is available as tenure shifts from the optimum of notional freehold
Divisibility	Property right can be shared over territories, according to season, etc.
Access	Entry/ admission onto the land
Withdrawal (extraction)	Extraction of resources by owner despite leasing property
Management	Be able to make decisions on how and by whom a thing shall be used
Exclusion	Disallowing others from entry and use of resources
Alienation	Transfer of an interest (right) in property to another, in perpetuity

In contrast, our systematic analytic framework for understanding property regimes, as with several other projects being undertaken by the Asia-Pacific Centre for Complex Real Property Rights, is influenced by the thinking of von Benda-Beckmann *et al.* (2006) of the Legal Pluralism Research Group, at the Max-Planck Institute for Social Anthropology. Their model distinguishes four layers. The

ideological layer consists in the norms and values of a cultural tradition. The second layer comprises political and legal regulations. The third layer consists of the social relations of property. The final ‘concretised’ layer is the layer of practice, where actors operationalise or reinforce the patterns of the other layers, or strive to initiate changes. Property must be analysed at all four layers.

Having provided some background to property and property rights, in the next section we will provide locational and spatial context for the case study site.

## **4 Darling Harbour**

Sydney’s Darling Harbour provides a lens through which the mixed use contemporary commons can be explored (see Figure 1). Darling Harbour, on the western boundary of the Sydney CBD, has been a port area since the early days of the city. The construction of a new port to the south at Botany Bay in the late 1970s, to relieve congestion in port activities in Sydney Harbour generally, caused an extensive area of land at the southern end of Darling Harbour to become available for redevelopment. In 1984, the state Premier announced the government’s intention to develop Darling Harbour to capture more of the already expanding global tourism numbers coming to Sydney. The redevelopment included a major exhibition and convention centre, a harbourside market / retail precinct, and hotels along the foreshore, as well as a Chinese garden and maritime museum. A casino was also included, with the licence fee to NSW Government intended to recoup much of the overall development costs of the project.

To carry out redevelopment, the state government established a special authority (now merged into the Sydney Harbour Foreshore Authority) with its own planning powers. The large land holdings held by the state government at Darling Harbour vested in the authority. The result of Darling Harbour’s redevelopment has been the formation of a space with a complex and uneven landscape of property rights, in which public ‘rights’ vary from site to site depending on the particular institutionally-driven micro-history of each land ‘parcel’. Up to the 1980s, when Darling Harbour was Sydney’s main port area, the foreshore was predominantly owned and administered by two state government authorities: the Maritime Services Board (port operations land) and the State Rail Authority (goods railway land). Public rights over these areas were essentially limited to access rights associated with carrying out port or rail business. A small proportion of the land around Darling Harbour was in private ownership, mostly warehouses and storage facilities associated with port activities, but also included incidental commercial premises such as hotels. The state government also owned Pyrmont power station, a stand-by facility that was being phased out with the construction of major power stations on the coalfields north and west of Sydney. Again, public access rights to these properties were generally limited to persons employed or doing business there. Thus while most of Darling Harbour land was in public ownership, the general public had few rights to enjoy the use of the space. There were no ‘commons’.

## **5 The mosaic of property rights**

The formation of the Sydney Harbour Foreshore Authority and subsequent redevelopment of Darling Harbour as a form of contemporary commons where people

congregate to relax, walk, play, dine, shop, attend an event or watch a movie, has resulted in what we refer to as a *mosaic* of ‘public’ property rights (Boydell et al., 2007). This mosaic essentially comprises a spectrum of property rights, resulting in a variety of contemporary ‘commons’ that range from spaces with unrestricted public access to private leasehold property with limited public access rights. In detail, we can identify several distinct types of commons at Darling Harbour.

The **first** type of commons is the classic version of a space that is publicly owned and open for general public use. This type is found in the open space of Tumbalong Park (a multi-use grassed area) and the promenades around the harbour. Whilst accepted as commons, it is monitored by a range of security cameras and patrolled by park ‘rangers’.

The **second** type of commons are a shared space on land side of the promenades, where café’s and restaurants ‘spill’ over onto the commons to provide popularised ‘al fresco’ dining. This is achieved through a clear demarcation of space for which the café’s and restaurants pay a significant licence fee.

A **third** type of commons is a public garden with an entry fee – the Chinese Gardens. In this case, the public right to use the commons requires a payment, but the public space is indirectly controlled via the Authority.

A **fourth** type is an extension of the second type. It involves areas set aside for public spectacle that require an entry payment, but which are privately leased and operated. Darling Harbour has several such ‘commons’, including the Aquarium, Maritime Museum, and Australiana Zoo. We can view such areas as a type of commons in that their predecessors in central cities and elsewhere were usually provided by the government or non-profit organizations with free entry. The Darling Harbour versions retain a tenuous link with older public equivalents by dint of their long-term leases of land owned by a public authority.

A **fifth** type of commons are the public spaces in private facilities on land leased from the Authority, such as in the Casino in particular. These are a genuine commons insofar as they are on publicly-owned land that allows, to all outward appearances, free and unrestricted access. However, these spaces are in fact leased by the Casino company and are patrolled by security guards who do not have the right to exclude entry to anyone. They thus represent a version of the privatised commons. The Casino, whilst outside the SHFA boundary, is a key typology of commons as the licence agreement provided revenue that was used to finance the rest of the public development at Darling Harbour.

In addition to the above, but continuing the same logic, two additional types of commons can be identified as follows:

A **sixth** type of commons are the public spaces in private facilities on land leased from the Authority, and for which an entry fee is charged. These include the exhibition spaces and conference facilities that are hired for use and for which individuals typically pay for entry. These are a commons insofar as they physically offer the same level of

common access as the third and fourth types, but are managed by private business, rather than public entities. They provide a social space at a fee, but with common access to the corridors, toilet and eating facilities. To the extent that they provide a social space they are a type of commons, however the measure of their commonality is inversely related to the level of the charge for access. They thus represent a version of the privatised commons.

A **seventh** type of commons are employment spaces in private or public facilities on land leased from the Authority, to which only limited entry is possible. These are perhaps the most limited commons, in that access to them is restricted to certain persons, however the persons admitted are not the lessees, but persons who derive their livelihood from using them as employees, albeit that there is public access to foyers and circulation spaces. For these people, these spaces provide the physical context for the social interaction of employment, and they rely upon its free provision. They represent a valid, though restricted form of the privatised commons.

Table 3: The Mosaic of Property Rights

(Source: Boydell et al., 2007)

	Public land	
	Managed publicly	Managed Privately
Fee for Entry	③	④ ② ⑥
No Fee for Entry	①	⑦ ⑦ ⑤

The dimensions of these various types of commons are shown in Table 3. This sets out a matrix of commons, some of which are managed privately, some publicly and for access to which fees may or may not be charged.

The rationale underlying the formation of this range of commons is the Authority's assessment of the mix that is needed to maximise development and thus payments to the state government. In particular, the provision of traditional commons in Tumbalong Park and elsewhere is intended to make Darling Harbour an attractive place for visitors. In turn, this will increase the custom for profit-making activities at Darling Harbour. Thus, Darling Harbour illustrates a new role for urban commons in an era of constrained government capital expenditure, with governance replacing government in the public

sphere to meet shortfalls in public provision. In the contemporary era of governance, the creation of a variety of urban commons can leverage private investment in addition to meeting traditional community needs for public spaces.

In this process, the creation of a relatively autonomous agency like the Sydney Harbour Foreshore Authority that has its own planning and development powers greatly facilitates these outcomes. In this sense, the Authority has effectively created a private city precinct in which public access and related property rights are given in ways that maximise the Authority's interests (Glasze et al., 2006). The Authority is vested with the powers normally held by local government to choose the bundle of developments, including various types of commons, that serve to benefit its goals. The transaction costs involved (basically, the operating costs of the Authority) have been kept in check by the granting of strong powers that require minimal negotiation with the rest of the public sector, and by contracting out initial design and development activities. Normal democratic processes for debating the supply of commons have been able to be excluded because of the Authority's powers to by-pass the public consultation processes of the NSW Environmental Planning and Assessment Act, and because of the original economic development and project deadline dimensions of the Authority's planning and development activities.

## **6 Interpreting the Commons**

The various types of commons found in Darling Harbour reflect a hierarchy of social accessibility. Commons of first type are true commons, dedicated to the public for free personal and social use, subject to limitations of acceptable use. They provide the physical context for social action and connection.

The second type provide nominally free social access, but carry a social more for persons using the space to participate in a commercial relationship with the proprietors of the restaurants in order to validate occupation. Their value to the restaurant proprietor comes largely from their connection to the type one commons and the entire surrounding environment in its physical and social dimensions. The rent paid by the restaurant proprietor is based on the business that flows from this connection and the desirability it creates for the humans who use the area.

The third and fourth types of commons are private property owned by the state. They behave similarly to the fifth type, except that they have an element of social identification as public space which connotes a relationship between the owner and user that make the extraction of a profit repugnant. The consequent poor commercial performance of commons of this type deserves close study as an example of a variety of commons, such as public car parks and camping grounds that have in recent times been privatised to improve their commercial performance.

The fifth type illustrates the social dimension of private property. While this land is leased from a public authority, its treatment is private and its management is directed towards commercial profit. It functions as a social space, because commerce in any form is a social activity and the provision of services, such as gambling opportunities, is social.

The final two types of commons have conceptual links to the foregoing. They rely on their character as providing a space for social activity and derive their value from the matrix of surrounding commons. The seventh form of commons recognises that work, as well as leisure, is social, and even when nominally private, employment space is a commons.

## 7 Analysis

The identification of the variegated public rights surface of Darling Harbour used data from interviews with the multiple stakeholders who use the area for a range of business and recreational activities. Separate sets of property rights were identified for each of the above seven types of commons in Darling Harbour. For the area comprising publicly owned space for general public use, 25 interviews across the general public at different locations throughout Darling Harbour (see Figure 1) were conducted. Some 52% of our interviewees were from outside Sydney, compared with 46% for Darling Harbour as a whole during 2008 (based on the Darling Harbour Nov 2007-June 2008 visitor survey conducted by I-View Pty. for SHFA).

Our research instrument was developed from our summarised property rights (per Table 2). We created a multi-criteria decision making tool using Expert Choice software (Saaty, 1988), to formulate an interactive analytical hierarchy process matrix of property rights for the contemporary urban commons. This enabled us to collect data direct onto laptop computers, enabling respondents to see their judgements as they were recorded in the field. Each interviewee was asked for their perception of what property rights they held in that space (the type one space). For the other six types of space, lessees of each type of space were interviewed about the property rights they perceived themselves to have in each case. One lessee was interviewed in each case, except for Type 4, publicly leased space with an entry fee, where two lessees were interviewed. The interviews asked each person to rank different types of property rights (as set out in Table 2) in terms of the priority each one had compared to each other type of right (pairwise-comparison).

The paired rankings thus obtained were then converted into an overall priority listing of each property rights type perceived by users or lessees of each type of space (see Table 4). The conversion of paired rankings to an overall prioritisation was analysed using Expert Choice and then transferred into Microsoft Excel for refinement and presentation. The methodology generated an inconsistency measure in each case that indicated the extent to which rankings were inconsistent with each other (that is, showing the extent of intransitivity).

Figure 1: Survey locations, Darling Harbour  
 (Source: Authors for this research – image courtesy of Sinclair Knight Mertz Pty)

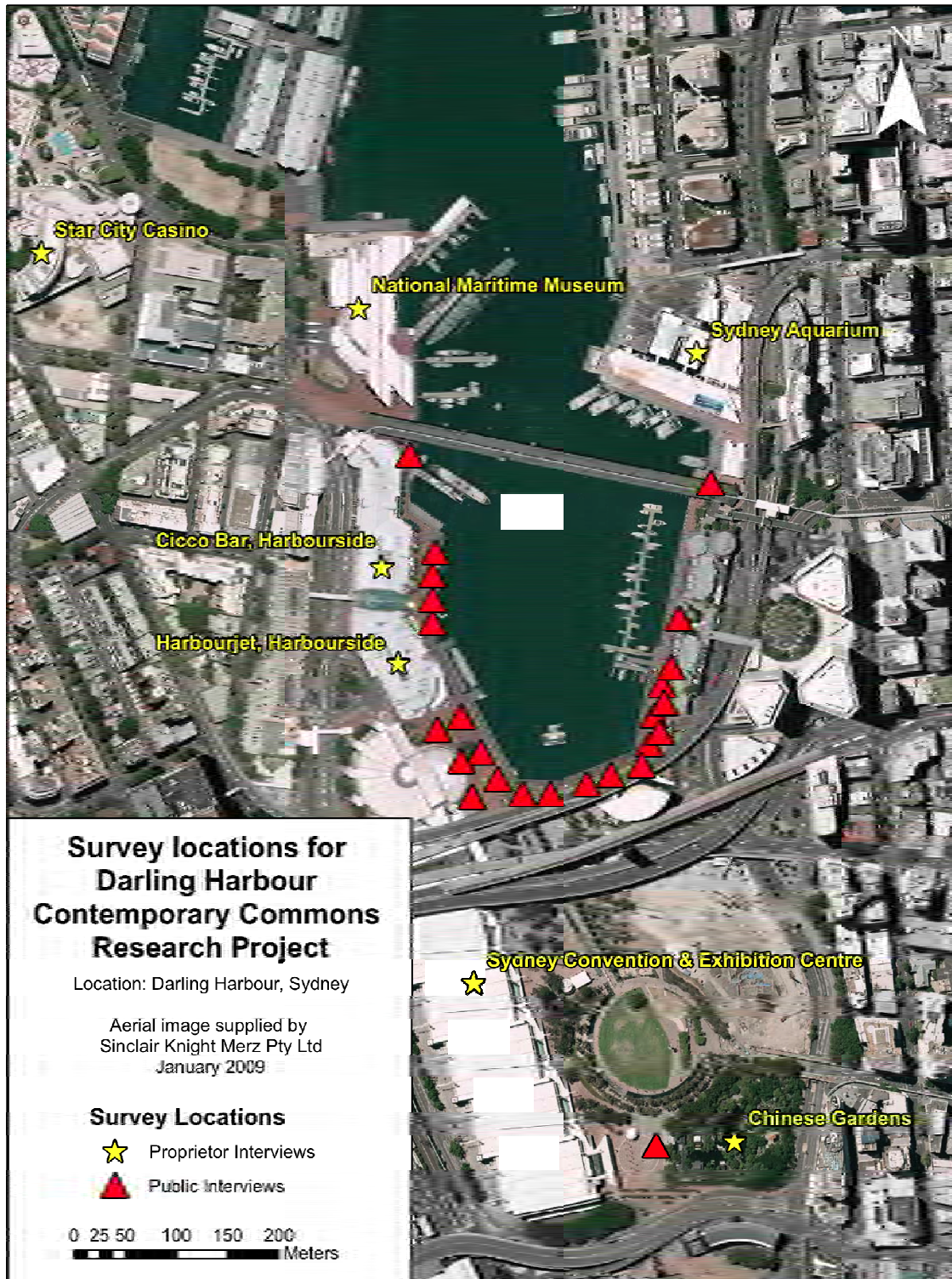


Table 4: Analysis of Property Rights Mosaic for Darling Harbour

(Source: Authors for this research)

Mosaic Type	#1	#2	#3	#4	#5	#6	#7
Property Right	Public Space	al fresco' shared	Public Garden (fee)	Public spectacle	Public in Private	Privatised (conv)	Restricted
Access	0.217	0.226	0.095	0.059	0.098	0.047	0.053
Alienation		0.008	0.024	0.008	0.020	0.008	0.008
Control	0.053	0.050	0.147	0.207	0.134	0.092	0.042
Direct use	0.211	0.233	0.055	0.122	0.082	0.106	0.181
Divisibility	0.033	0.009	0.037	0.038	0.009	0.112	0.008
Duration	0.150	0.159	0.104	0.079	0.159	0.045	0.194
Exclusion		0.017	0.018	0.023	0.023	0.020	0.033
Exclusivity	0.033	0.089	0.030	0.062	0.230	0.044	0.143
Flexibility	0.167	0.036	0.060	0.074	0.017	0.047	0.033
Identification	0.061	0.040	0.009	0.045	0.029	0.013	0.008
Indirect economic gain	0.037	0.015	0.023	0.162	0.071	0.239	0.161
Management		0.070	0.125	0.076	0.092	0.092	0.111
Quality of title		0.009	0.134	0.008	0.014	0.101	0.008
Residual rights	0.040	0.030	0.115	0.009	0.009	0.011	0.007
Transfer		0.010	0.023	0.030	0.015	0.024	0.011
	Inconsistency = 0.00827	Inconsistency = 0.18	Inconsistency = 0.21	Inconsistency = 0.16	Inconsistency = .017	Inconsistency = 0.20	Inconsistency = 0.22

## 8 Analysis issues

In the context of *Publicly owned open for general public use space* (category #1), five property rights typologies were not included. During the pilot study, it became evident that Alienation, Exclusion, Management, Quality of Title, and Transfer were not rights that members of the public could hold over the urban commons. In the initial interviews, it quickly became apparent that reducing the property rights to ten typologies streamlined the data collection on site and reduced confusion on the part of the respondents (Expert Choice recommends nine as the optimal). In part, the reduced number of typologies and the larger number of respondents resulted in a significantly more consistent rating of the relative importance of different property rights. We retained all 15 typologies in the other categories.

## 9 Results

The prioritisation of different types of property rights in regard to each type of commons space at Darling Harbour showed a differentiated landscape of perceived property rights. The importance of the different types varied from one type of space to the next. In this section we summarize the findings for each type of space and overview the differences by mapping the property rights priorities for each space.

### #1: Publicly owned open space for general public use

The perceived property rights for this space are those shared by the general public. These are marked by a strong prioritization of access and direct use rights (Table 4). This reflects basic reasons as to why the general public visit Darling Harbour – to enjoy walking, resting and recreating in the general public spaces and having the assurance that they can do so when ever they come to visit. Table 4 indicates that rights embodying flexibility and duration are also perceived as being significant for the general public. Flexibility is important because the public places value on visiting Darling Harbour for different purposes, whether it be to promenade, play in the park, sit

down and eat food, and so on. Duration is also important because visitors want to be able to choose how long they wish to use the public spaces each time they visit.

## **#2: Shared space alongside promenades**

The perceived property rights here were those identified in an interview with the proprietor of a café with *al fresco* dining, in a space shared with the general public. The dominance of direct use and access rights (Table 4) mirrors the high priority given to the same rights by the general public. The café proprietor saw direct use rights being significant because of the *al fresco* area's thoroughfare location. Access for staff and customers was seen as important for his business. Duration was also significant because the proprietor considered it important to feel secure in holding the lease for a reasonable period of time. The meaning of duration in this context differs from the duration of access enjoyed by members of the public in category #1. This highlights the challenging semantics of property rights descriptors.

## **#3: Public garden with an entry fee (Chinese Garden)**

This space embodied several types of perceived property rights of relatively similar significance (Table 4). The three most important rights were seen as being Control, Quality of Title, and Management. Complete control of the enclosed garden space was regarded as necessary to retain the Garden's public image. Quality of Title was seen as an important asset that ensured the preservation of the educational and cultural benefits of the gardens. Management rights were also regarded as significant, reliant on the security that these rights provided. This is because of the oversight of the Sydney Harbour Foreshore Authority ensuing from management reporting requirements. Residual rights were also important. There was a sense of defensible space, by virtue of the existence of a wall around the gardens.

## **#4: Public spectacle leased space with entry fee (Maritime Museum and Sydney Aquarium)**

For this type of space, Control was the most important perceived property right. Direct Use, Indirect Economic Gain, Access and Management rights were also seen as being significant (Table 4). Control rights in this space are given effect through the leases, which confer a legally binding status on these rights. It also provides them with a high-level of asset security. Management rights are seen as being closely related to Control rights. Direct Use rights are considered important because these allow the Maritime Museum and Aquarium operators to run the venues as businesses and attract admissions. Indirect Use rights are important because of the extra revenue these can generate, through sub-leases of office space and through spending in retail outlets at the venues. One of the two operators here saw Access rights as being very important because the activity would be impossible to carry out in the absence of these.

### **#5: Public space in private facilities (Casino)**

Exclusivity is the most important perceived property right. Duration and Control rights are also regarded as being important (Table 4). The significance of Exclusivity rights here derives from the Casino's operating rights on the site. The state government guarantees exclusivity (in return for the licence premium), as this is the only casino allowed in the state. Duration rights stem from the length of time to which this exclusive right to operate as a casino applies. This is an intrinsic element of the commercial value of the combined rights of Exclusivity and Duration, and hence its significance perceived by the Casino. The ability to Control access and use of the Casino in order to maximise revenue is fundamental to the investment value that the Casino can extract from the site, and is thus a central component of the property rights the Casino sees as significant.

### **#6: Privatised commons where entry fee charged (Exhibition and Convention Centre)**

In this space, Indirect Economic Gain is the dominant perceived right (Table 4). This arises from the perspective of the Sydney Harbour Foreshore Authority (as they control the Centre's management company), which goes beyond the Centre's conference and exhibition revenue. This perspective incorporates wider metropolitan economic activity generated by the Centre, such as accommodation and associated spending. Other rights for this space also considered important are Divisibility, Direct Use, Quality of Title, Control, and Management. Divisibility is important because a core function of the Centre is the ability to hire space within the Centre on behalf of conference organisers and exhibitors. Quality of Title, Control, and Management rights are seen as interlinked. The first stems from SHFA's ownership of the Centre, which gives SHFA control of the Centre and the right to manage it. In turn, these rights allow SHFA to have direct use of the Centre, which is seen as important because it allows SHFA to extract revenue from this use.

### **#7: Public access spaces in private owned space for employment**

For these spaces, rights of Duration, Direct Use and Indirect Economic Gain are significant. The respondent selected to represent this space operated a marine tourism business. Direct Use rights are perceived as essential by providing premises from which to run the business, while rights of Duration are also important in giving Direct Use rights a degree of security via a lease. Indirect Economic rights are also important because the business uses sales agents to market its services who are located beyond Darling Harbour.

## **10 General Trends**

It is clear from the above analysis that certain typologies of property rights are not significant in the contemporary urban commons of Darling Harbour. The most obvious of these are Alienation, Exclusion, and Transfer. This is understandable, because the commons are not about alienating, excluding or transferring – these are not property

rights that impact in the commons. Property rights in the commons need to be interpreted in a communal way, compared to the private property rights of an individual. We therefore need adapt the summary of property rights that prevail in the literature to a more specific list that is more appropriate to the analysis of property rights in the contemporary urban commons. We therefore contend that only those property rights that apply in the commons should be considered in analysing other urban parkland.

Whilst we excluded Alienation, Exclusion, Management, Quality of Title, and Transfer in the analysis of the Public Spaces (category #1), the Management, Quality of Title typologies remain relevant in the other six categories of our mosaic.

## 11 Limitations

The way in which the ranking of property rights typologies are identified by the Analytic Hierarchy Process within the Expert Choice software highlights potential inconsistency between the ranking of different rights due to intransitivity. The resulting level of inconsistency for each mosaic category is shown in Table 4. Inconsistency levels of 10% or less are not regarded as being significant. The objective is to make ‘good’ decisions rather than attempt to minimise the inconsistency ratio (EC2000, 2002). What is important is to maintain coherence among the objects of our experience, in this case members of the public analysing hierarchies of property rights that may demonstrate inconsistency amidst lawyers or property professionals. The only mosaic category with an inconsistency of <10% is that of Public Space. In this category, consistency arises both from the reduced number of property rights typologies that were analysed (10 cf. 15) and from the larger number of respondents.

For all other categories the inconsistency level was significant (ranging from 16% to 22%). In an analysis with 15 criteria a level of inconsistency is to be expected, as the human brain has can have difficulty comparing more than nine components. We could have reduced the criteria to 9 or 10 (as we did for the Public space category #1). However, in accordance with the spirit of the research instrument we did not want to moderate or limit the number of categories derived from the literature. Likewise, for the purpose of this data collection we did not want to stifle the potentiality of respondents to manage multiple ideas. We elaborate on the impact of this below.

The Public Garden (category #3) demonstrated an inconsistency of 21%, because the respondent prioritised Exclusivity (a low ranked right) over Direct Use (also low ranked). Similarly, confusion over pairwise comparison between the other low ranked rights typologies also contributed significantly to the overall inconsistency value. The lack of perception about the nature of these low ranked rights could be suggested as a major reason for the inconsistent ranking of these rights.

Public Spectacles Space (category #4) had an inconsistency level of 16%. This is lower than the other non Public Space categories, because there were two respondents compared to one in categories 2, 3, 5, 6 and 7, with the hybrid output demonstrating a more balance perception.

In the Restricted commons (in employment spaces) category (#7), the major inconsistency arose from the rankings of Direct Use and Indirect Economic Gain. Both emerge as being of similar importance, but the pairwise comparison between the two significantly prioritised Direct Use (extreme importance) over Indirect Economic Gain. Whilst we could speculate that this relates to the owners perception the importance of his companies control at Darling Harbour over the external sales agents influence, such interpretation is beyond the scope of this study.

## **12 Conclusion**

We have engaged a novel approach to interpret the contemporary urban commons. We have provided distinct conceptual frameworks (from the literature) and contextual frameworks (from locating the analysis in Darling Harbour, Sydney). As we demonstrated, notions of property rights are confused and contested within the literature. The urban commons literature highlights that access to urban parkland is important for the well-being of city dwellers. Our analysis reinforced the importance of access to public space to relax and recreate from the perspective of our general public respondents. The public space in urban commons prioritises rights of access, from the perspective of both jural opposites and jural correlatives.

The seven categories that comprise our mosaic of property rights are closely aligned to the third layer of social relations of property (per von Benda-Beckmann et al., 2006). Our mosaic categorisation was robust enough to be tested in the context of Darling Harbour. It will be interesting to see if the categorisations render similar responses in other contemporary urban commons, which are spaces of interaction that accommodate and expand the norms and values in a multicultural city like Sydney. The political, legal and indeed economic relationships between people, place and property influenced the responses for our categories #2 through #7. By analysing all four layers, we were able to consider within our approach the ‘concretised’ layer of practice, and how users relate to their engagement with space.

## **13 Acknowledgements**

The authors acknowledge the funding support of the RICS Education Trust (project #349), which combined with the assistance of the UTS: Asia-Pacific Centre for Complex Real Property Rights enabled this research to be undertaken. We also thank the Sydney Harbour Foreshore Authority for their interest and support in this project. Dr Garrick Small was a member of the research team in the formative stage of the project, and his collaboration in the development of the mosaic was invaluable. We also thank Kate Fairlie, a doctoral scholar with the UTS: APCCRPR, who was the research assistant for the project.

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