Planning Resilient Sporting Public Parks in Perth

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‘It’s Complicated’

A Story of the Relationship Between Community Sport and Public Park Planning
The Early Spark

Community sport represents an ideal mechanism for public parks to fulfill their core social roles:

• The community benefits of grassroots-level sport are derived from two key properties:
  1. As a healthy form of outdoor physical activity;
  2. Facilitating social interactions in an educational setting.

• This matches closely the two original functions of the first Victorian Public Parks:
  1. A health-promoting landscape for the working class;
  2. A communal space to instill civil values.
The Courtship

Yet this seemingly inevitable union was not immediate, and had to be initiated by exceptional social circumstances:

- Early park landscapes into the 20th century found different ways to fulfill their core needs:
  1. The mental benefits of aesthetic natural landscapes;
  2. Pleasurable family activities rather than the games and sport favored by immigrant groups.

- However the looming threat of a second world war raised concerns about the physical fitness and mental strength of our future front line.

- Suddenly, community sport represented the perfect fit for park planners to adapt to these challenging times.
The Offspring

Utilitarian landscapes and supporting built infrastructure...

...And lots of them!
Community Sport gets Clingy

While their initial coming together was of mutual benefit, community sport soon found itself becoming increasingly reliant on its new partner:

- Funding for the Australian Sporting Industry was for a long time focused on elite results: peaking with the establishment of the AIS following the epic fail of the 1976 Olympics and Ashes.

- However reprioritisation towards grassroots level sport increased into the 21st century: highlighted by the recommendations of the Crawford Report.

- Recent policy initiatives such as ‘KidSport’, which enables sports participation through financial assistance for low income families, made the adequate provision of open space for community sport even more important.
Public Parks Move On

Yet just when community sport needed it most, park planners discovering a more stable, long-term partner... Sustainability:

- Around the 1970’s, passive and informal active became the favoured methods for promoting human health, while ecologically-educational park activities grew in popularity.

- This reflected an emerging new function of parks – promoting ecological health – which presented other planning challenges:
  - Park planning was increasingly beholden to green planning trends for biodiversity and stormwater management;
  - Depleted groundwater supplies, combined with developer-driven governance, forced park design towards groundwater-lite landscapes.

- Sporting space – facilitating a form of recreation favoured by ~5% of the population, competing spatially with green landscapes, and an exhaustive user of water - never stood a chance.
As it turns out, these moments of passion were more a temporary convenience made of urgent social circumstances rather than the union of two soul mates:

- This mutually beneficial affair had become a one-way relationship, with growth in community sport requiring more space within public parks, even though providing this space acted against its new sustainable relationship.

- This has seen a significant reduction in the amount of sporting recreation space in outer suburbs, where these pressures of sustainability are highest yet where young low socioeconomic families are most likely to need them.
What Happens Now?

What would sustainability (a compassionate being after all) think of park planners abandoning an already vulnerable ex-partner?

- Many developers and landscape designers give the impression of wanting to cut and run, however this would ignore the comparatively small yet also comparatively needy group that relies on community sport.

- Thus a way has to be found to do the right thing - to find new ways to plan *sustainable* sporting public parks (SPP) – and make it work somehow… for the sake of the kids.
Towards a Resolution

Firstly, sport must accept that things can never be the same; that the planning processes that have dictated this relationship have to change:

- The **Location** of SPP can no longer be predominantly within Local Open Space, and must be shared with school grounds and in Regional Open Space;

- The **Design** of SPP can no longer be planned primarily for a single purpose, and must be transformed into attractive venues for a range of non-sporting users;

- The **Governance** of SPP must better include those actually involved in their use and management (not just developers and designers).
Finding a Resolution

How is this new sport/park relationship been successfully negotiated within newly developed Perth suburbs without upsetting urban sustainability?

- Requires a broad, mixed-methods approach applying common planning data collection techniques to investigate the location, design and governance dimensions of SPP.

- Firstly however, a framework to guide this investigation must be determined that represents what a positive relationship between public parks and urban sustainability in the 21st century should be.
Developed originally for water management practice, the 5th Paradigm model suggests a linked social-ecological approach is necessary for 21st century sustainability:

From Ahern 2010
Public Parks under the 5th Paradigm

Shifting our views of parks as public open spaces to public green spaces acknowledges their unique ability to simultaneously promote human and ecosystem health through the provision of ecosystem services:

- Ecological
  - Biodiversity Conservation
  - Stormwater Management
  - Ecological Education

- Cultural
  - Mental Restoration
  - Active Lifestyles
  - Social Interactions

This makes parks a potentially valuably tool within this new model for 21st century sustainability.
Resilience and Public Parks

Resilience: the ability of a system to experience disturbance and still maintain its basic structure and function

- The 5th Paradigm has been described as the ‘Non-Equilibrium Paradigm’ to reflect the inherent variability and unexpected change present in complex living urban systems;

- Resilience is a key concept within this paradigm, as it deals with the properties of a system – diversity, multi-functionality, connectivity, adaptive and learning capacity – that allow it to sustain itself despite challenging and unexpected situations;

- Applicable to ecosystems, humans, and the institutional systems that govern cities, it represents a wide ranging framework for guiding sustainable park planning practice in the 21st century.
Ecological Resilience and SPP

How can SPP be located and designed to best facilitate these ecosystem services?

- Ecological resilience deals with the landscape configurations that allow ecosystems to provide their services despite ecological threats such as urban sprawl and consolidation;

- Public Parks contribute to ecological resilience by:
  - Forming components of regional biodiversity networks;
  - Embracing multifunctional stormwater areas (i.e. WSUD);
  - Integrating opportunities for ecological education and healthy recreation into these landscapes.

- The role of SPP is to not inhibit these biodiversity and stormwater landscape configurations, whilst exposing sporting users to educational and non-sporting recreation opportunities.
Visit each park within a defined region – sporting and non-sporting – and use GIS software to map significant areas of biodiversity, stormwater management, ecological education, and recreation.
Ecological Analysis Part 2: Spatial Landscape Audit

How can sufficient areas of sporting space be provided without compromising biodiversity conservation and stormwater management efforts?

- Compare total areas of biodiversity and stormwater landscapes with areas of local/school/regional sporting space across all parks within each suburb studied.

How can opportunities for ecological education and non-sporting recreation be integrated into SPP?

- Assessing the landscapes within individual SPP goes someway to investigating their educational and recreational potential, however cannot account for the inherent variation in the human health benefits of parks and green spaces.
Human Resilience and SPP

How can SPP be Located and Designed to Facilitate Cultural Ecosystem Services to Non-Sporting Users?

- Human health resilience suggests that environmental factors can be planned to help humans sustain healthy functioning despite adversity. However, an environment will only facilitate resilience if it meets an individual’s specific needs – failing to do so can even inhibit resilience.

- With the ability to protect at-risk residents from threats such as stress, physical inactivity and social isolation inherent in urban lifestyles, parks can be treated as valuable health resources and planned for human resilience just like other accepted infrastructure and social interventions.

- Yet while valuable to sporting users, SPP do not meet the needs of many non-sporting users due to the presence of both sporting landscapes and sporting activity. SPP thus only contribute to community-wide health resilience when they act as a venue for cultural services of restoration, physical activity and social interactions for non-sporting users.
Objective Human Analysis: Observations

How do non-sporting residents use SPP?

- One common method for directly investigating the relationship between park design and use is through observational studies.

- This research will design its observations to investigate two variables:
  1. The *physical* park environment: how is non-sporting recreation influenced by the presence of sporting landscapes?
  2. The *social* park environment: how is non-sporting recreation influenced by the presence of sporting activity?

- Observations will thus be undertaken in different areas of each SPP, during times of sporting and non-sporting use.

- However investigating highly personal factors such as restoration and social interactions is limited through objective techniques, and do not reveal how the location/vicinity of a park influences this use.
Subjective Human Analysis: Surveys

How do non-sporting residents value SPP?

• To include the actual perspectives of non-sporting users, surveys will also be used - both on and off site surveys given many non-sporting residents are likely to not use a SPP.

• Answers to on site-surveys will be specific to that park; gathering information on the users demographic and proximity, their value/use of the park for each cultural service, favourite location in the park, and if/how sporting activity affects this value/use.

• Off-site surveys will use a photo ranking technique, where residents are shown a series of pictures of different park settings and asked to rank them based on their individual preference, and likely they would be to travel to visit the park.
What are the governance structures that allow SPP to facilitate ecosystem services?

- These resilient public park configurations can only be provided if the governance structures responsible for their planning, design and maintenance are themselves resilient in the face of these current and likely future stresses.

- Resilient governance should recognize and ensure the input of those groups most affected by planning decisions, adapt to community changes and be quick to integrate new knowledge into this practice.

- Resident surveys go some way to filling this void, however also requires the perspectives of the local sporting community and LG park and recreation managers.
Governance Analysis: Stakeholder Interviews

• Open ended interviews with a range of stakeholders involved in the planning, management and use of SPP.

• Still a bit unsure of the details of this…
Limitations

- Such a broad approach necessitates a qualitative rather than a more rigorous, quantitative analysis. This may take away somewhat from the strength of the final recommendations.

- Nine months of paid study left to complete all observations, surveys and interviews… Dreaming?