The background is a solid orange color. A vertical blue line runs down the right side of the page. A horizontal blue line runs across the middle of the page. There are four horizontal blue bars of varying lengths extending from the left edge towards the center. A vertical blue line also runs down the left side of the page, intersecting the horizontal bars.

Practice pillar

2013 YEAR BOOK

UDAL

Urban Design Alliance Queensland

PREFACE

My first encounter with UDAL was in May 2012 at the UDAL City Symposium where I was impressed by the strong themes of taking action and 'walking-the-walk attitude'. The range of speakers and attendees at the Symposium really struck a chord with me and was something different to what I was experiencing at other professional development events.

It was here that I first met one of the founding members of UDAL, Juris Greste, who, over the months following the City Symposium, encouraged me to get more involved with UDAL. I took his advice and lead, and in October 2012 joined the UDAL Board as Chair of the Practice Pillar.

One of my key initiatives for the UDAL Practice Pillar was to capture all the great learnings and best practice urban design being presented at the UDAL forums and symposia. As a keen attendee of many conferences, workshops and industry functions, I know first hand how difficult it is for attendees to absorb all the information presented and capture the key points.

The UDAL Practice Book was driven from this experience and my desire to capture and transfer the knowledge presented at the fantastic practice events UDAL runs each year.

The UDAL Practice Pillar Review 2013 has come to fruition largely through the efforts of Hans Oerlemans who diligently noted the key learnings of each presentation for inclusion in this book.

The Book has been written in three parts:

1. A Brief History of UDAL, written by Juris Greste;
2. Forum Summaries
3. The UDAL Agenda

Each practice event summary is written from the viewpoint of an attendee, with input from the presenters. I am confident that by reading these summaries you will enhance your knowledge in urban design as well as advance your thinking on many common, pressing urban issues.

We look forward to your continued support of the UDAL Practice activities.



Tobias Volbert

Urban Design Alliance Queensland - Practice pillar



NOTES OF THANKS

This book is a summary of a 2013 UDAL Practice Pillar calendar. UDAL wishes to acknowledge with deep gratitude those who contributed to both the delivery of the calendar and this Book.

First and foremost, we thank Hans Oerlemans and wOnder city+landscape. Without Hans' effort, time, and expertise, this book would not have happened. In addition to his commitment to promoting the UDAL objectives, Hans brings extensive experience and international perspective to the UDAL table. Thank you Hans!

A significant thank you is also due to Tobias Volbert for his enthusiasm, drive and vision for the UDAL Practice Pillar, and to Tobias' employer, Playscape Creations, for supporting UDAL through Tobias' involvement on the UDAL Board.

To the members of the UDAL Board 2012-13 for their support of the Practice Pillar events including assistance with planning, attending and facilitating events.

Finally, thank you to all the presenters and their respective employers for volunteering their expertise and their openness to transfer knowledge for the greater improvement of the urban design profession.

UDAL would like to thank

Brisbane City Council as sponsor of the UDAL forum calendar and continued supporter for all UDAL practice activities.

Urbis for their ongoing support and hospitality in allowing UDAL events to be held in their beautiful training rooms.

Queensland University of Technology (QUT) for their hospitality and assisting UDAL with finding a venue solution at the last minute.



CONTENT

Preface	1
Notes of Thanks	3
Content	5
A history of UDAL	9
The UDAL agenda	17
• <i>Fundamental ideas</i>	18
• <i>Qualities of good urban places</i>	25
Forums	
Continuity of Culture - <i>Forum December 2012</i>	34
Designing Resilient Neighbourhoods - <i>Forum March 2013</i>	42
Beyond Accessibility: City of 7 Senses - <i>Forum May 2013</i>	52
Urban Informatics - <i>Forum June 2013</i>	64
City-Making - Super <i>Forum July 2013</i>	74
Creating Sustainable Urban Transit - <i>Forum August 2013</i>	82
Health and The City: Growing Pains - <i>Forum September 2013</i>	94
Illustration Sources	104
Links	106
<i>(Hyperlinks in the text are marked blue. Here you can find the URL's)</i>	
Colofon	108







A HISTORY OF UDAL

By Juris Greste

History is always enriched by the accounts of those involved, however; we must remember that the view of the game by one of the players is usually different from what the referee or the spectators see or interpret. So it is with this account of the early days of the Urban Design Alliance of Queensland Incorporated (UDAL). I was one of the instigators of this group as well as the first secretary 13 years ago.

An early Management Committee meeting at the Architects Institute

How did it start? As the previous century was coming to an end, the various built environment professional groups recognised that urban design was something that needed to be acknowledged. The urban design Masters program had been running at the Queensland University of Technology (QUT) for 13 years. The Planning Institute of Australia (then RAPI) had started urban design subcommittee meetings. The Australian Institute of Architects (then RAIA) Queensland Chapter had drafted an urban design policy and there was an RAIA Planning and Environment subcommittee, of which I was a member, where discussion on urban quality matters was happening with more frequency. The landscape architects were also turning their attention to urban design as a province of their interests.

With increasing attention to urban design by diverse groups of practitioners, it seemed sensible to bring some of them together around the same table instead of meeting and discussing urban design in their own separate enclaves. I was also aware that in Britain, an urban design alliance of various professional groups had been established for some time. After a number of informal meetings under the scope of the RAIA's planning and environment group, the first meeting of the infant Urban Design Alliance was convened on May 18, 2000.

The initial aspiration was that this group, supported by the RAIA, RAPI, Australian Institute of Landscape Architects (AILA), the Australian Institute of Urban Studies (Qld Chapter), Queensland University of Technology and The University of Queensland, would join to advocate for the advancement of urban design. UDAL would not be a collective voice representing all the constituent groups but would independently lead the urban design cause. At that time, RAPI and RAIA were happy to see UDAL play the role of their urban design subcommittee and planning and environment committee respectively.

The early days, of course, were not without some apprehensions and hesitancy. Some senior architects feared that the establishment of UDAL could create various conflicts and difficulties. Nevertheless, the RAIA were still prepared to host the meetings as we proceeded with enthusiastic caution.

A well attended presentation after the Brisbane City Centre Master Planning workshop in 2005

Before long, UDAL declared its goals as: "to foster, educate and improve awareness of urban design and the design of the built environment and to promote higher standards of urban design in our cities and towns." It aims to represent the design professions and other related groups committed to improving the quality of urban life in Queensland and to work with all interests

concerned with the built environment such as governments, local and business communities, property developers, investors and with special interest groups who have particular concerns with aspects of urban development.

Within its first two years, the nascent organisation had achieved many great things on minimal funding, including:

- Been an active participant in organising a very successful Urban Design Forum Conference in Brisbane in November 2000.
- Successfully lobbied against large expressway signs that obstructed or impeded important views of the city. This has resulted in some of these signs being moved and Main Roads policy on these issues revised.
- Made substantial submissions to Brisbane City Council's (BCC) Living in Brisbane 2010 process. UDAL was a major participant in two important workshops to formulate policy.
- Made various submissions on large projects around Brisbane. UDAL was able to coordinate and call briefings on specific projects and development proposals.
- Been consulted by the BCC Opposition Transport and Urban development committee.
- Made a major submission on the proposed Helensvale Town Centre, at the invitation of the Helensvale Residents Association. This work was appreciated by the community as well as the Gold Coast City Council.
- Convened a 'North Bank' workshop addressing the issues of the northern side of Brisbane River opposite South Bank. This was very successfully mounted in collaboration with the Brisbane Development Association.
- Started work on a formal Charter and Manifesto. It was anticipated that the Manifesto would be endorsed or adopted by a wide range of interest groups, organisations and institutions as a basis for a broader common understanding of the principal urban design issues and concepts.

The drafting and publishing of the Charter / Manifesto was an important focus of activity during much of 2003. It was felt that this kind of document was necessary as a point of reference and establishment of some base line positions on urban design to signal what is important to UDAL. It also attempted to provide some commonality of language in the diversity of understandings about urban design.

After a good deal of grinding and polishing, on 26 September 2003, the Agenda for Urban Quality was launched by the Hon. Rod Welford, Minister for Justice and Attorney General, with the keynote address given by Rob Cowan, prominent London based planning consultant. This landmark event, hosted by Queensland Parliament, established a platform of principles and concepts that have subsequently informed and influenced other groups and documents.

A highlight for UDAL in 2005 was to host internationally renowned leader of the pedestrianisation movement, Professor Jan Gehl. UDAL coordinated seminars, presentations and briefing meetings with special interest groups during Gehl's visit to Brisbane. Despite the broad interest and welcome reception of his advocacy, Brisbane has yet failed to adopt and implement most of

the work of his firm, despite his guidance having helped to make Melbourne one of the world's most walkable cities.

As the profile and credibility of UDAL grew, it was considered vital to make the organisation publicly more accountable, especially as bigger support funds were being attracted. Thus, a landmark of 2006 was that the organisation became an incorporated not-for-profit association in Queensland. Although this step took much of the attention of the management committee, energy and enthusiasm were still available to also organise a very successful National Urban Design Forum conference in Brisbane.

The work and scope of responsibilities of UDAL were growing. Membership was swelling, so too grew the demands of time on the secretary and management committee. For some time I had encouraged my colleagues to consider appointing a part-time paid executive officer if UDAL was to forge ahead and respond to the expanding needs and opportunities. It was indeed a big and courageous step to make that commitment. In March 2008, Donnell Davis was appointed to that position for a three-month period which kept being extended.

2010 was another important turning point as UDAL celebrated its 10th year of activity and urban design leadership with a very public dinner event. A refreshed management committee was elected and in mid 2011 a new executive officer, Linda Cupitt, joined UDAL. Together with the Board, UDAL revised and restructured the way the organisation operates. There is now a smaller Board with five 'pillar' subcommittees to pursue and develop specific directions. It is welcome that there has been a generational change in the leadership that has injected new energies, enthusiasm and directions. However, the corner stone of the work of UDAL Qld Inc still remains the monthly Forum program.

An account of a look backwards prompts also a view ahead. In its 13th year, what are the major challenges of the future?

UDAL is essentially like a charitable organisation. While it assists its members with development of knowledge and provides a ground for intellectual engagement on urban matters, essentially it works for the public interest. It is not an organisation that can offer its members great personal or material benefits and advantages. We work together to make places better for other people. But like all groups, which exist to serve the public interest, attracting resources is a constant challenge. Urban designers are being asked to put dollar values around their decisions and recommendations. Similarly, putting monetary value on public interest is very difficult. Thus, UDAL has managed to exist largely as a volunteering dependent group.

Our city making is driven by market economics. Development and construction companies as well as financiers to a large extent manage the market. Asking them to support the causes of urban design is much like asking tobacco companies to put funds into anti smoking campaigns. Thus, the challenge will remain to find resources on a sustainable basis to pursue the longer-term benefit

goals in which short-term market'ism sees no dividend.

The development industry will argue that of course it is responding to the market demands. But in the main, it is a very conservative industry that has its strength in the supply side of the equation. So far much of the advocacy work of UDAL has been to persuade the market suppliers to change its 'product'. This approach continues to fall short of expectations and desired standards. Thus, the challenge is to now pay more attention to the demand side of the formula. We need to persuade the everyday public that what it has been getting for a long time is not as good as they deserve. We need to argue the case that the community can have better places in which to conduct their everyday lives. By strengthening the demand side of the market, it can then expect higher standards from and through the political leadership (the regulators) as well as the producers of the 'goods'.

As the growth curves are plateauing or even dipping around the world, the focus is likely to change from quantity to quality. This presents great opportunities to groups like UDAL who are dedicated to excellence in the way we make and manage human habitats. I trust that all associated with UDAL can respond to this challenge. As Rob Adams has put it, "Cities are a game we cannot afford to get wrong." However, regrettably, it is not a game. It is life. Let us continue using our endeavours to create ever better settings for life.

*Jan Gehl addressing a
large audience in 2005*

Informal gathering.

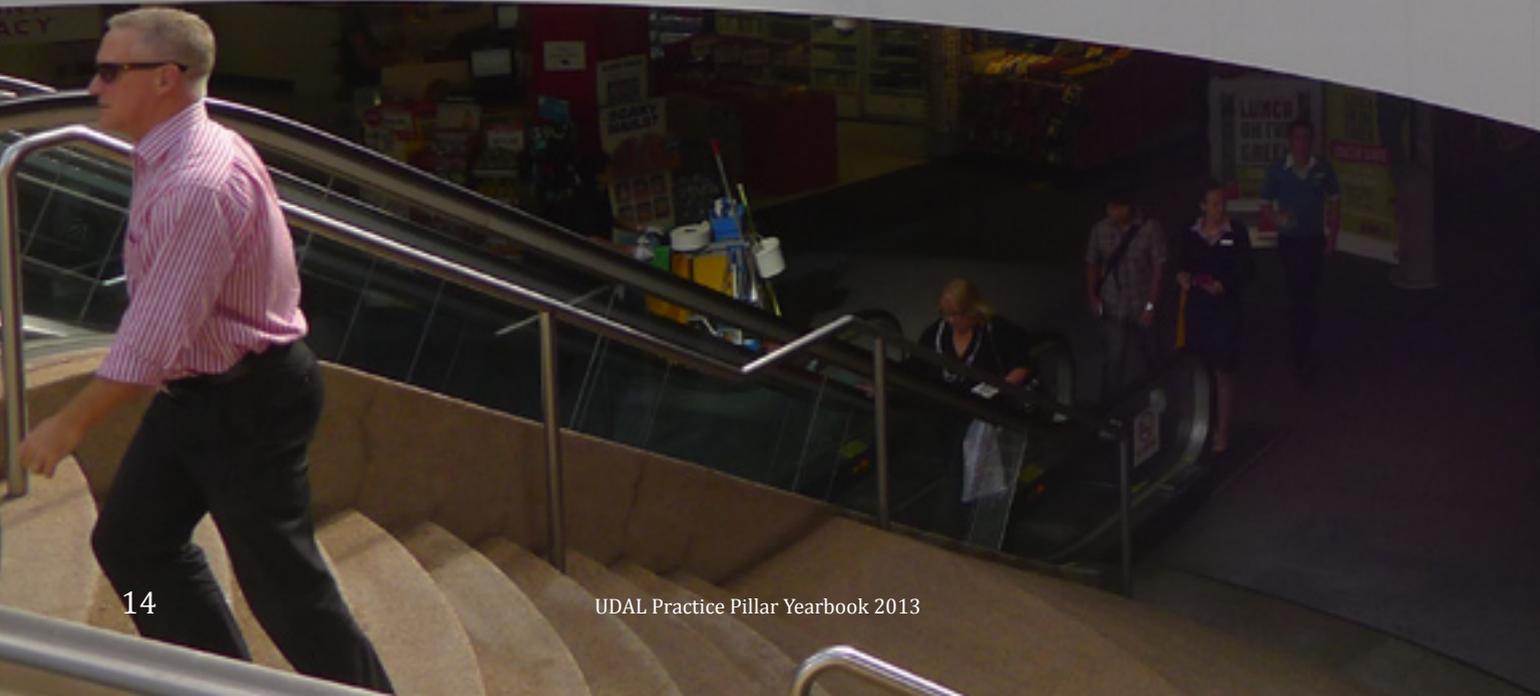




Post Office
Square



FOOD COURT





SALADS
HAMBURGER
SUSHI
SANDWICHES
CAKES

Through To Adelaide St

AN AGENDA FOR URBAN QUALITY IN QUEENSLAND



THE UDAL AGENDA

By UDAL, 2003

Urban Design Alliance of Queensland

The Urban Design Alliance of Queensland, known by its acronym UDAL (QLD), is an independent organisation drawn from the design professions and other related groups committed to improving the quality of Urban Life throughout Queensland.

UDAL believes that urban design is a significant contributor to the physical, social and economic well-being of the community and the nation.

UDAL's goals are to foster, educate and improve awareness of urban quality and the design of the built environment, and to promote higher standards of urban design in our cities and towns.

UDAL has been formed, and includes members, from the major institutions of the design professions, including the Royal Australian Institute of Architects, Planning Institute of Australia, Australian Institute of Urban Studies, Australian Institute of Landscape Architects, University of Queensland, Queensland University of Technology and other affiliated built environment professional groups.

UDAL aims to work with all parties concerned with the Built Environment such as Local, State and Federal governments, local and business communities, property developers, investors and the professions, and special interest groups, which have particular concern for aspects of urban development.

UDAL believes that the processes and outcomes of urban design are not the exclusive province of any single design group, and that only through collaboration and joint activity can effective and positive urban design be achieved.

An agenda for urban quality

We, the members of UDAL, and others who support this document, share the belief that we live in cities and towns for greater social contact and interaction, for fulfilling human experiences (such as work, leisure, social interaction) and for cultural development, as well as material benefits.

Cities and towns provide the setting, which is the stage of life for most Australians. Built places - urban and suburban settings - can enrich our lives, uplift our spirit and expand our human faculties.

For many Australians not living in urban settings, cities and towns provide social, cultural and commercial centres for less frequent but nonetheless essential purposes.

It is our commitment therefore to work towards making our cities and towns ever better places for life.

*Cover of the original
UDAL Agenda of 2003.
The text is replicated on
these pages. The illus-
trating images are new.*

FUNDAMENTAL IDEAS

Drawing from a wealth of knowledge from contemporary environments as well as past examples, and guided by a principled and responsible approach to the design of our built habitat, we believe in the importance of a number of fundamental ideas as a framework within which desirable urban qualities may be achieved.

Cities and towns must be

- 1. Sustainable***
- 2. Livable***
- 3. Viable***
- 4. Responsible***
- 5. Memorable***

Urban design is all about people



1. SUSTAINABLE

1.1 Sustainability and urban design

Sustainable development represents one of the greatest challenges facing Australia. Our current form of development may, in some way, be sustainable for the present generation of mainstream citizens. It is not sustainable for the poor or disadvantaged members of society, nor the generations that will follow us.

Cities and towns contribute disproportionately to environmental deterioration, both on a local and global scale. However, it is in cities and towns that many improvements can effectively be made towards sustainable development.

Good urban design can contribute to urban sustainability by improving or enabling social equity, economic vitality and environmental responsibility. This can occur at the building, street, neighbourhood, district and regional scales.

Urban design supports the delivery of **social equity** by:

- enabling the co-location of uses to provide housing close to employment opportunities;
- providing active public spaces, community facilities and a unique character;
- including a mix of housing, ownership patterns, price and building types for a diverse community;
- being responsive to stakeholders' requirements and concerns;
- utilising existing social infrastructure; and
- promoting an inclusive process of design that recognises the concerns of all individuals.

Urban design supports the delivery of **economical vitality** by:

- creating active, interesting and stimulating mixed use centres;
- facilitating a density of development with amenity which makes cost effective use of scarce land;
- improving the quality of the development by providing a

- high standard environment with high returns;
- reducing reliance on private transport; and
- embracing the concept of shared opportunities and synergies within the area, which contributes to overall efficiencies.

Urban design supports the delivery of **environmental responsibility** by:

- facilitating a smaller environmental footprint;
- facilitating the reuse of inner urban brownfield sites and existing infrastructure;
- utilising a site sensitive approach which builds on the attributes of the area;
- encouraging a decrease in car travel by providing a mixed use, walkable and accessible urban environment; and
- minimising the use of fossil fuels and their effects.

1.2 Cities and towns must be sustainable

Any sound principles for a good urban place must be sustainable. Sustainability means adopting a mind-set, an attitude that human kind is here on earth to stay. It means keeping the consumption of renewable natural resources within the limits of their replenishment. Sustainability means handing down to successive generations not only wealth created by humans (such as buildings and roads) but also natural wealth.

Sustainability is multi-faceted.

- Economic sustainability ensures that heavy costs and penalties are not imposed on future generations.
- Environmental (urban) sustainability enables a city or town to change gradually and without pain.
- Social and community sustainability assists people to stay within their chosen areas and communities. It ensures that they are not forced out by conditions and factors beyond their control or choice.
- Cultural sustainability creates conditions for cultural expression and development. It nurtures and supports a

- variety of cultural heritage and contemporary practices.
- Sustainability is not an 'add-on'. It is an intimate and necessary part of all qualities that contribute to a good urban place.

1.3 Sustainability at all levels of scale

Whilst acknowledging cultural differences, many good urban design principles work at all levels of scale: local, regional, national and global.

The principles and concepts outlined in this document will contribute to, and are capable of supporting, sustainability. Particular matters to be considered include:

- overall regional, metropolitan and local urban structures including the strategic transport system;
- location of development and uses (in terms of primary, secondary and supporting activities);

- layout at the scale of clusters of neighbourhoods, individual neighbourhood, urban block;
- uses and activity mix including community facilities and housing mix and densities;
- built form and landscape (including street frontage, detailing and expression, and relationship of car parking areas);
- the impact of climate;
- conservation and heritage;
- natural habitat; and
- the public realm.

Buildings that contribute to an agreeable microclimate and reduce heat island effects

Designs that are prepared for climate change and extreme weather events





Housing above facilities; mix of uses is essential for lively neighbourhoods



Squares are centres for urban life

2. LIVABLE

2.1 Cities and towns are for and about people

All decisions must be evaluated in terms of what they will mean to people and how their lives will or might be affected.

Whatever our particular specialty, finally our work must be related to what it will mean for people and how it will affect their lives in a built environment.

2.2 The domain of people is the ground

Decisions, which affect the form and function of cities and towns, must be related to the pedestrian experience because that is how we use and interact with built forms most of the time.

Even though many of us come to know cities or towns through the use of the private car, the final evaluation of our decisions must be in terms of what they will mean to people at ground level, moving around as individuals.

2.3 Cities and towns are public places

Cities and towns are unique and highly complex systems held together by, and structured around, public spaces, amenities and institutions. Highest quality public spaces are

crucial to good cities and towns.

Although in Australian cities and towns most of the ground space is privately owned, it is in fact the public spaces (roads, streets, squares, parks) and amenities, which make the built environment the place of people, the democratic environment within and through which we interact.

2.4 Permanent residents should have priority

In making decisions that affect the setting in which people conduct their lives, priority must be given to those for whom it is their permanent or long term residence or place of work. A place will be only as good for everyone else, as it is for the people who live and work there.

2.5 Qualities of public spaces and places

Urban design - both the process and the end outcome - concerns itself with how a place/ space/ system feels, functions and serves the needs of the multitude of users now and in years to come. It considers psychological, spiritual and cultural needs as much as physical, functional, economic and political matters.

3. VIABLE

3.1 Cities and towns must be economically viable

Someone has to pay for good urban places.

An urban place, large or small, must make economic sense - as a whole as well as in its parts. This has always been so; it is not a modern day concern.

In our time of complex systems of business and exchange transactions, each and every part of a city and town might not be economically accountable. A more profitable part may support a necessary, but less profitable, section such as for recreation, cultural and social significance or heritage value. However, as a holistic entity, the city or town must make overall economic sense.

A good urban place can exist for only as long as it is economically sustainable.

3.2 Cities and towns are market places

Cities and towns are the places and settings of an almost infinite number of exchanges - economic, social, cultural and political as well as personal. The opportunities, facilities and settings for these exchanges are what make the difference between cities and towns and an isolated homestead or small settlement.

The city is a marketplace of economic, as well as social, cultural and personal exchange

The need and opportunity for the almost unlimited forms of exchange is what sustains cities and towns of today. They have proved to be humankind's best setting for personal, cultural, political, social and economic exchange. To optimise and maximise these opportunities, a public space structure is important.

3.3 A good place maximises choices and opportunities

To fully realise the potential and value of urban exchange, there must be a wide range of choices and opportunities.

The range and extent of choices and opportunities are limited only by our democratic norms and responsibilities and constraints of sustainability.

Kiosks and food stands facilitate pedestrians and bring life to the streets





Individuality of buildings in the street provide scale and layers of meaning



Buildings are carriers of culture and should to contribute to innovation

4. RESPONSIBLE

4.1 Landowner's rights and responsibilities

A freehold landowner is entitled to certain rights on the land. However, in return for the enjoyment of those rights, one must also accept and exercise some responsibilities.

While enjoying the privileges of ownership, we must also accept the constraints and responsibilities to also add value to the quality of the adjacent and surrounding public space. In enjoying private benefits we must be prepared for some compromises on behalf of public interest.

The landowner's benefit should never be at the expense of the quality of the public domain.

4.2 The urban environment is like a 'political' system

The built urban environment is like a political system. It can limit or constrain our freedoms, behaviour and choices or it can enrich, liberate and enhance our opportunities.

We should be careful that the built environment does not impose limits and restrictions, which are contrary to our general political norms, standards and intentions.

4.3 Property

Our actions and decisions regarding the way we modify the built environment, in however small away, affect others as well as ourselves.

We must ensure that positive outcomes and any possible negative effects are distributed equitably.

Do not do to other people's places what you would not want done to yours.

4.4 Stakeholder's responsibility

The process of determining new outcomes requires a collaborative and consensual process.

All individuals are stakeholders and have a right to participate in decisions that affect urban futures, but they also have a responsibility to contribute, collaborate and debate outcomes on behalf of the common good as well as individual interest. The outcome of urban design is as much about means as ends. Only responsible cities and towns can truly reflect the desires and needs of their inhabitants.



Vibrant nightscape

5. MEMORABLE

5.1 The built environment is meaningful

The built environment is a most powerful communicator. It speaks of and reflects our culture, community values, aspirations and achievements. It reflects us. How and what it expresses will largely determine the meaning of a place to us and its level of memorability and meaning.

The built settings provide the stage of life for most of us. Our memories, our links to the past as well as the future, are influenced by the impressions that the built environment makes upon us. We have a duty of care to ensure that the impressions we create are a force for the good and the future well being of all the inhabitants of our towns and cities. The meanings that individuals take from those impressions are the substance of humanity.

5.2 Cities and towns are about design

Cities and towns are as much about design as are the buildings from which they are derived. Our hopes, desires and attitudes are reflected in the form and detail of our cities and towns as much as the built form is itself a statement of our civilization.

A good urban setting is a measure of our ability to lift ourselves beyond the ordinary. The extent to which urban design can infuse delight and passion is a measure of the memories and meanings that individuals can glean from the design of the city. An unsatisfactory urban place is a statement of our failure.

Infrastructural works are carriers of culture



Historical buildings secure the cities layers of time and meaning



QUALITIES OF GOOD URBAN PLACES

Most of the cherished and highly valued places in Australia as well as other parts of the world share many of the qualities outlined below.

For cities and towns to serve us best, they need to offer environments, which possess a large number of these qualities. These qualities are based on learning, experience and a balancing of factors and constraints. There are well-developed and proven principles, concepts and models, which guide designers and other decision makers. There exists a broad knowledge base, supported by research and study, confirmed by precedent and experience over time.

Cooling places draw people out of air-conditioned buildings

Good urban places must be

- 1. Connected**
- 2. Accessible**
- 3. Meaningful**
- 4. Legible**
- 5. Humane**

Monumental tree lined streets provide shade, status and beauty





High quality public transport integrated in mixed-use streets



Adaptive reuse of industrial buildings

1. CONNECTED

1.1 Physical connectivity

Good places will have a choice of routes for various methods of movement. A fine mesh of routes is more desirable than a few widely dispersed routes. A multitude of smaller connections, which link also to important networks, are more versatile than a few major local connections. Through routes are generally more desirable than dead-end ones. All these qualities make a place more flexible and better able to respond to the demands of constant change.

Greater physical connectivity makes places more accessible. Connectivity means a high number of movement and access connections and shorter journeys between places. Only places, which are well connected, can offer maximum choices.

1.2 Visual connectivity

People prefer to go where they know where they are going. General visual connectivity, together with important vistas, landmarks and other elements that we can use for reference, help us to understand cities and towns. Being able to see from the public spaces into private areas in a controlled way enriches the public domain and enhances surveillance of public spaces for safety.

1.3 Time connectivity

We have a psychological need also to be connected in the flow of time. We need to be aware of where we have been to be better able to go forward into the future with confidence.

Connections to previous times and places can be made through visual references to objects (buildings and other physical elements of the built environment), place names and people. We can also provide for links to the future by creating options over time. The retention of built fabric and its adaptation to new uses offers the continuity of the old and links to the new. Being able to perceive in our urban environment the continuity in time helps us to affirm our own position in the world. This is also the role of conservation of our built and natural heritage.

An urban environment that displays the annual passing of the climatic seasons also helps us to connect with the rhythms of life and time.

Right: high quality spaces with informal seating

2. ACCESSIBLE

2.1 Physical access

Good places are accessible to all members of the community.

Access paths for pedestrians are provided. Paths integrate wider urban areas and lead to community focal points. Pedestrian access paths have good surfaces that are level, not too steep, avoid unnecessary steps and have good lighting.

Good access is not necessarily however guaranteed by good connectivity. Equally good vehicle access to important urban places and views, by slow speed streets or esplanades, is therefore important for those with impaired pedestrian capacity.

2.2 Psychological access

A good place must be thought of, felt and experienced as being accessible and welcoming to all members of the community.

When a public space communicates that some members of the community, be it because of their social position, appearance or cultural affiliations, are not welcome, then access to that space or area is difficult and sometimes impossible.

The design and management of public places can therefore be a matter of democratic rights.

2.3 Universal design

Good Urban Design does not discriminate.

Individuals are not the same. People are old, young, infirm, as well as active and healthy. They have different needs at different times in their lives and situations. Good urban places are places for all people regardless of infirmity or ability. Where the natural and pre-existing environment allows, access to public and private amenities and spaces is a fundamental right to which only good urban design will attest.



3. MEANINGFUL

3.1 Variety

Variety is an essential ingredient of most good places. Variety of experience implies places with varied forms, uses and meanings. Variety of use can unlock other levels of variety.

A place with varied uses has varied building types and forms. It attracts a variety of people, at various times, for varied reasons. Because the different activities, forms and people provide a rich perceptual mix, different users interpret a place in different ways: it takes on varied meanings.

3.2 Human scale and sense appeal

A good urban place affirms the centrality of human beings - the highly complex systems of intellect, emotion, senses and spirit that we are.

The evidence and use of the human dimensions (physical as well as non-physical) helps us to relate to, interpret and appreciate the built environment in relation to our own size and experience.

Buildings and other elements, which are big, are not necessarily of poor human scale. Large buildings can

be designed so that we feel comfortable and not overpowered by their presence.

A good place offers a wide range of sensory and intellectual experiences that are understood and absorbed by individuals.

Appeal to the senses and intellect may be regarded as the non-physical aspect of scale. It means an abundance of sensory experiences and meanings - visual as well as smell, touch, sound and motion.

A good place is a vehicle for the human spirit, uplifting and enhancing our physical and psychological being, and adding meaning and hope to our individual and collective journeys.

3.3 Adaptability and versatility

A good place will be able to accommodate a large range of uses, activities and purposes over daily and weekly cycles, and seasonal patterns, as well as other changes with which the cities and towns have to cope.

These changing requirements will be accommodated without major economic costs or other upheavals. Easily adaptable and versatile (robust) places will be able to offer their users greater choices over time.

Temporary street furniture activates public space





4. LEGIBLE

4.1 Wayfinding

An accessible and connected urban environment must be “understood” by its users. This “legibility” can be achieved through the design and relationships of urban elements including:

- varying street types such as boulevards, avenues, mews, streets and esplanades;
- public spaces such as plazas, squares, courtyards, arcades, greens and parks;
- the relationship of streets and public spaces to each other creating choices of routes;
- the relationship of the settlement and public spaces to the natural features of the setting, such as hilltops, valleys, ridges and creeks (including the edges of the overall settlement to significant natural features such as rivers, lakes or the coastline);
- the thoughtful location of public buildings and infrastructure such as council buildings, libraries, art galleries and railway stations;
- the alignment of streets to enhance views to landmark vistas or to create a sense of enclosure; and
- the grouping of land uses, building types into precincts and districts.

This applies to pedestrian and cycle movements as well as public and private vehicular trips.

Above: temporary follies create meaningful places and new use.

Left: Invaluable connections with waterways

4.2 Qualities of edges

How well a public space works will be significantly influenced by the arrangement of, and around, its edges. A dynamic, vibrant and interesting space is likely to have ‘active’ edges. Active edges have variety - variety of use, activity, visual experience and many points of access. ‘Passive’ edges are likely to produce a space which is lacking in life and therefore, perhaps, a sense of safety.

4.3 Urban landscape

The landscape of our cities and towns is a reflection of dynamic ecological and social systems. It is an essential part of the urban “fabric” and, as the pressures of our development of the natural environment become more critical, its importance demands greater attention and care.

Urban centres distinguished by comprehensive landscape strategies, often have acknowledged the importance of context. All elements of the built and natural environment are reconciled and considered. The landscape contributes to our experience and memory of a place.

5. HUMANE

5.1 Human needs

A good place will consider and provide for all human needs.

- **Physical** - adequate space for movement, sitting, shade and sunshine (the urban microclimate needs to be given special attention).
- **Safety** - security and an environment supportive of good health.
- **Psychological** - good orientation, and acknowledgment of our value as people and citizens.
- **Cognitive** - being able to make sense of our environment and find our way around.
- **Sensory** - the exercise of all our sensory systems (sight, smell, hearing, touch and sense of motion).
- **Behavioural** - catering for habits and patterns of behaviour of all social and cultural groups as well as the potential to personalise part of our territory.
- **Aesthetic** - beauty and related visual experiences.
- **Intellectual** - the opportunity to gather and understand the meanings of the environment around us.

5.2 Safety

A good place will be perceived as safe as well as be safe. The physical arrangement of a place can greatly affect the perception of personal safety.

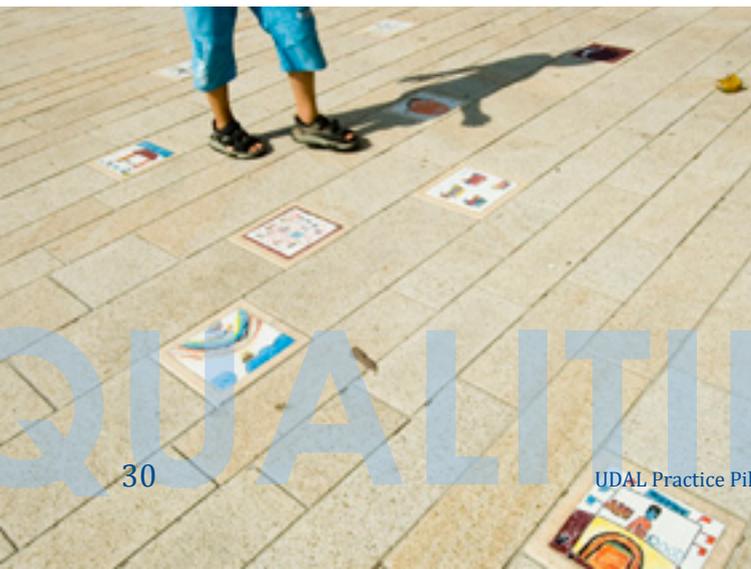
While making places safe, we must allow scope for people to manage their own exposure to risk and not diminish opportunities for discovery and creative engagement with the built environment. While being cognisant of the need to be non-discriminatory in regard to safe design for abroad spectrum of humanity, to also recognise that the pre-existing environment is a palette on which urban design must rely.

5.3 Community enhancement

A good urban place is one that enhances the sense of community, and social interaction, and strengthens the self-image and identity of the people who use it. It celebrates both differences and the shared and the common.

Schools, places of worship, monuments, civic and public art, halls, civic centres and other public amenities support and reinforce our community self image by joining us in common 'ownership'. They deserve to be located where their community role and meaning is enhanced.

Integrated public art, connecting people with place



Good streets are primarily for pedestrians





Above & right: Growing veggies and herbs double the use of valuable urban space and enrich meaning and experience

REFERENCES

- Tibbalds, F. 1992 Making People Friendly Towns, Longman
- Engwicht, D. 1999 Street Reclaiming, Pluto Press
- Geason, S. & Wilson, P. 1989 Designing Out Crime, Aust. Inst. of Criminology
- National Office of Local Government Australia's Guide to Good Residential Design Aust. Govt. Publ. Serv.
- Queensland Dept. of Transport, 1997 Shaping Up English Partnerships
- Queensland Dept. of Transport, The Urban Design Compendium 2002 English Partnerships
- Ministry for the Env. Wellington, NZ 2002 People + Places + Spaces
- Prime Minister's Urban Design Task Force 1994 Urban Design in Australia AGPS
- Urban Design Advisory Service (NSW) 1998 Urban Form Dept of Urban Affairs & Planning (NSW)
- W.A. Planning Commission 1997 Liveable Neighbourhoods W.A. Planning Comm.
- Aust. Inst. of Urban Studies (Qld) 1998 Good Urban Places AIUS (Qld) Inc.
- Gold Coast City Council 1997 Guiding Principles for Urban Design GCCC





CONTINUITY OF CULTURE

Forum | December 2012 at D-block, QUT Gardens Point,
Brisbane



Summary by Hans Oerlemans

Forum Chair: Tobias Volbert, UDAL Practice Pillar Chair

Presenters:

- *Professor Darryl Low Choy, School of Environment, Urban Research Program, Griffith University*
- *Hans Oerlemans, Urban Designer, Landscape Architect and Town Planner at wOnder city+landscape*

Introduction

by Tobias Volbert

After opening the forum, Tobias asks the audience to announce which disciplines they represent. The attendees introduce themselves to each other in little groups. They discuss their experience with this forum's topic and what their central questions would be, as preparation for the group discussions after the two presentations.



Looking After Country

by Darryl Low Choy

Darryl presents his views and research on our current understanding of Indigenous landscape values in South East Queensland. In particular, he talks about how could we incorporate Indigenous landscape values into the regional planning process.



The research and thoughts Darryl presents are not all published yet and due to this, he prefers that a summary of his presentation is not included in this yearbook.



Continuity of Culture, on Cultural Sustainability

by *Hans Oerlemans*

Hans begins his presentation by introducing three different aspects of sustainability: technical, social and cultural. He stated that the cultural aspect is the base of them all. Our cultural beliefs define all our actions, including how we plan and design, how we deal with the economical, ecological and social issues.

To understand our current situation we must first understand the dark, cramped unhealthy cities of the 19th century. Their problems with overcrowded areas, sanitation and unsafety gave rise to modernism as a new ideology. Modernism gradually introduced a new cultural belief: the conviction that "old = bad" and "new = good" starts there. In Europe this conviction is accelerated in the aftermath of

World War II. During the 20th century, this conviction also conquers North America, and Australia, as the changes in Brisbane between the 1950's/60's and 2010 clearly show.

Modernism however hasn't brought us the ideal world we hoped for. In the western world most of the 19th century urban problems are now resolved. Yet modernism has given rise to a whole new set of issues, such as car-dominated streets with hardly any pedestrians, a sedentary lifestyle creating contributing to many health problems, urban sprawl consuming large amounts of fertile agricultural land and towering costs for infrastructure. We feel the urge for change, but are easily tempted to tear down all our 'mistakes' and start with new (again). This, however, would mean that we haven't learned from the biggest mistake: the old = bad mentality. When we are not prepared to learn from the past, to improve what we have been doing to grow on what we have built up so far, then we will never truly progress or achieve sustainability.



Over the past two decades, a different approach to this conviction has arisen in the Netherlands. There the amount of culturally valuable buildings became so large, that plain protection wasn't attainable anymore. Even whole landscapes were put on the heritage list, landscapes where people are living, and using the landscape to earn a living. Quite simply, you cannot just preserve these landscapes and allow nothing to change. That was tried the decennia prior and only resulted in a degradation of the landscapes; the so valued elements and characteristics disappeared because they were not functional anymore and developing new values was prevented, due to the focus on protection.



Until the 1980's only buildings from before 1850 could be monuments, such as the Dom Church (left). But how can you protect a whole production landscape of international cultural importance, such as the UNESCO listed Beemster Polder?



A new approach had to be found. This new approach was formulated in the 'Belvedere Memorandum', with the slogan "protection through development". Hans clarifies the approach with four examples: a regional policy for cultural landscapes, a greenfield development, an urban retrofitting project and a public space design.

Interested to know more on the 'preservation through development' approach download the text of the [Belvedere Memorandum](#) in English.



Quality Guides for National Landscapes

Hans uses the Quality Guides as an example of the methodology. First, observing: mapping, telling characteristic stories and recording the dynamics that will influence the landscape. Second, valuating, based on the key qualities of the landscape. Telling the essence in only a picture and 5 pictograms, differentiating it with sub-areas. Concluding with setting ambitions and giving design and planning inspirations to strengthen the key qualities.

If you would like to see a completed Guide, you can download them from the [Province of Utrecht](#) website, however they are in Dutch. For more information in



Two of the pages of the Quality Guide for National Landscapes

English, check out the [project page](#) on the wOnder city+landscape website. On the same website you can find the [paper "Continuity of Culture"](#), describing in more detail the developments in the Netherlands, the methodology of the quality guides and the advantages 'preservation through development' can bring to Australia.

New-peat-lands, Meppel

This example is an extension of a city into a valuable landscape. The strategic plan is based on the characteristics of the landscape, urban requirements and development principles. As a result, the city and landscape are literally slid into each other:



Landscape characteristics of stretched out parcels and ribbon occupation is translated into an urban development strategy...



...resulting in the integration of city and landscape, and suburbs where everybody lives at a meadow

Heart of South, Hengelo

The retrofitting of an industrial area. Again the unique qualities of the existing fabric (spaces and buildings) are used to define the strategic plan. This approach is continued in the architecture and reuse of the existing industrial buildings. The project transforms and reuses both valuable 19th century buildings and newer light-built structures, which would normally be demolished and replaced.



Characteristics of the urban fabric and factory buildings were the foundations to redevelop this 50 ha. industrial site

Dom Square, Utrecht

The last example is an urban space project. Here the 2000-year history is used to transform a desolate square at the heart of town into a vibrant space that has a positive resonance in the community.



Top: location of the castellum marking. Bottom: marking during the day (left) and in the evening (right)

Hans concludes his presentation by stressing that the “preservation through development” is widely applicable and a good way to deal with the “old = bad / new = good” syndrome. This method would also assist Australian cities, suburbs and landscapes re-establish a connection to place, and become more sustainable, culturally relevant places.

If you would like to know more about these projects, you can find information through the following links:

- [New-peat-lands, Meppel](#)
- [Heart of South, Hengelo](#)
- [Dom Square, Utrecht](#)

GROUP SESSION

1. GROUP ROLES: <ul style="list-style-type: none">a. presenterb. writerc. timekeeperd. facilitator	2. TWO QUESTIONS: <ul style="list-style-type: none">a. What cultural item would you like more pronounced within your own neighbourhood?b. How would you put this into planning?
--	---



Discussion

After the presentations, the forum attendees broke into small groups to discuss the presentations and how the presented methods can be used for embedding culture in Australian cities and towns.

There is some heated discussion about the suitability of the “preservation through development” method here in Australia, where the culture is not embedded in structural buildings due to the relative youth of our built environment. Hans provides further examples that were not dependent upon attaching the culture to the built environment, such as the one where an artist developed a perfume that captured the smell of the original landscape and every new resident received a small bottle when moving in to the area.







DESIGNING RESILIENT NEIGHBOURHOODS; BUILDING THE CASE FOR CHANGE

Forum 14 March 2013 at the Urbis Training Room, Brisbane



Summary by Hans Oerlemans

Forum Chair: Tobias Volbert, UDAL Practice Pillar Chair

Presenters:

- Stephanie Wyeth, Senior Social Planner, Urbis
- Phil Smith, Architect & Urban Designer, Deicke Richards



Introduction

by Tobias Volbert

Tobias welcomes everybody and explains this evening will have a more interactive set-up. He stresses that all who are present are experts in their own field and on their own level. This forum intends to use that expertise, getting everybody involved in the exchange of ideas. Tobias introduces Stephanie and Phil, who kick-off the forum with a short introduction to get the thoughts flowing. They present their approach to the planning and design of resilient communities. Stephanie focuses on the young, while Phil concentrates on the elderly. Then all attendees will work in a speed-workshop scenario on a master plan for Aspley and strategies how to encourage community-driven change in our suburbs.



Our presenters Phil and Stephanie

Creating neighbourhoods for the young

by Stephanie Wyeth

Stephanie starts with addressing the rate of change occurring in our current environments and how we respond to these changes. The technological changes are happening so fast that it frightens many people. Neighbourhoods are being transformed to adapt to these changes. Design-teams responsible for these transformations, however, often mainly consist of older white men. Due to this, there is not enough understanding for the different cultures and perceptions in the transforming areas. Clearly we need to engage the communities more in the process – and they want to be part of it! But how do we engage?



First, we need to communicate WHY change is necessary. The first reaction of many people towards planning is often “We don’t want change!” These voices are echoed by the media, which often makes these voices appear stronger or

greater than they are.

Crucial to ‘why’ change is necessary are the megatrends in the world. We need to talk about big ideas and conceivable trends, like that we might live to 150 years old. How will being connected in the virtual world 24/7 compete with the physical world? Complete changes happening in energy resources. The technology in transport might change radically how we move goods and people. What do these changes mean? How do they apply to a neighbourhood?

Secondly, we need to include the younger generation. In particular, we should be asking ourselves ‘how welcoming are our cities for young people?’ Research in Redlands region showed that 40% of the young people didn’t feel welcome in the key public spaces. Especially young men; young women felt a bit more welcome in shopping centres.



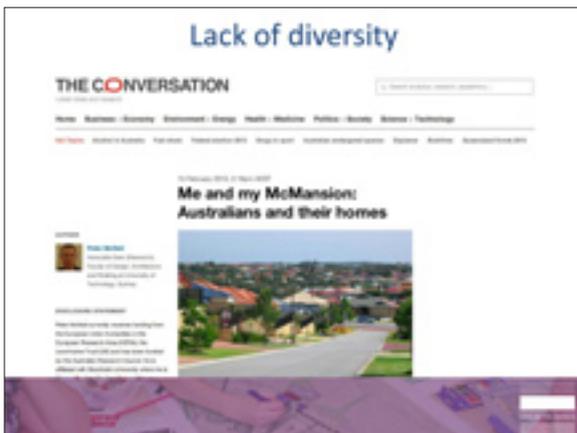
Orange = now: unsafe if you would want to walk or bicycle. Pink = what should be: walkable and bike-able cities and neighbourhoods

The increase in the division of wealth and opportunity between demographics has also led to increased social differences. Children and young people born into lower socio-economic households experience increased health and wellbeing impacts, with higher rates of obesity, diabetes, exposure to abusive behaviour, binge drinking, drug abuse, and mental health problems. These impacts need to be considered and should inspire neighbourhoods that help to counteract some of these socio-economic impacts.

When considering neighbourhoods for children and young people, we need to remember that they experience space differently. Their environments are completely controlled. The modern suburb is set up around a 'fear of the other' mentality. Everything possible is done behind the front door or hidden behind the fence. Our homes have become cinema, circus, farm and playground. Outside, children are put in cars, not on footpaths. They don't learn to engage with others. A recent survey, that was done for one of Stephanie's projects, revealed that children could not even map their own neighbourhood. They had only experienced it from the car.

As designers and planners we have to ask ourselves: "Do we design them in or out?" Do we include children in the design and make it possible for them to experience the world? Or do we design a world where children are kept behind doors? Current neighbourhoods have too many unsafe elements to allow children (4 years on) walk to their destination: unsafe crossings, absence of sidewalks, car speeds, etc. We have to address these elements and create safe environments and opportunities for children to walk and cycle to school, e.g. using 30km/h zones. We have to create an environment where it is possible for them to lean and become responsible.

Change is required. *"Reconstructing the suburbs so they continue to sustain all our citizens - and secure their votes - is the new challenge for our policy makers"* Shocking The Suburbs, Dodson & Sipe, 2008.



Creating neighbourhoods for the elderly

by Phil Smith

Phil introduces his session by revealing that he is personally conflicted by suburbanisation. He grew up in a suburb, lives in the suburbs and has emotionally invested in a suburban lifestyle. But professionally Phil recognises there are also many downsides and inefficiencies to our suburbs and how we design them. Some suburbs will successfully renew themselves. Others will fail.

The biggest issue of the suburb is its lack of diversity. People however generally react protectively towards sameness, as it helps with our sense of identity. Take for instance the hatred many car-drivers feel towards cyclists. The result is an example of altruistic punishment that occurs in order to protect our sameness and status quo. Cyclists trigger the moral order of the road, using the roads but not following the same rules as the car. They have more freedom in where they can access and are less polluting. But why a person who changes to cycling should get the benefits and not the rest? Our instinct is to punish or impede those trying to change to cycling in order to protect our 'sameness' and status quo. This urge to protect sameness is especially strong in suburbs. We need to take this into consideration when we plan and design for them.

Designers can be the catalyst for the change our suburbs need. To quote Bertrand Russell: *"it is only through imagination that men become aware of what the world might be; without it, 'progress' would become mechanical and trivial."*

Change in suburbs will partially be driven by the seniors who live in these suburbs. They lived there for a great deal of their lives, often in the same house. They have their social network in the suburb and feel a very strong emotional connection to the place. Often they want to stay in their suburb, but the ailments that come with age force them to move from their current house. Especially when they cannot drive a car anymore, the suburb becomes unfeasible.



Although suburban seniors generally dislike higher density, they often accept a slightly higher density than they are used to, if that will mean that shops and services will be within walkable distance. This was a key finding from a research undertaken by Deicke Richards together with the University of the Sunshine Coast. The research team asked four groups of seniors, living in Brisbane and the Sunshine Coast, what kind of neighbourhood they wanted. They made photos in their neighbourhood of what was important to them. Each of them presented the results and discussed them in the group. From this exercise, the research team developed 12 principles for good housing for seniors. Surprisingly, only 6 principles are about the house design, while the other 6 focused on the neighbourhood. When it came to neighbourhoods, locality is a major factor: close to shops, neighbourhood centre, public spaces and younger people, for liveliness and support. Keeping a



The 7 typologies located in a neighbourhood



Two of the 7 typologies that were developed

mixed age demographic is seen by the seniors as being very important, for their health and as support while they are ageing, even though they recognize there are issues in mixing with young adults and children.

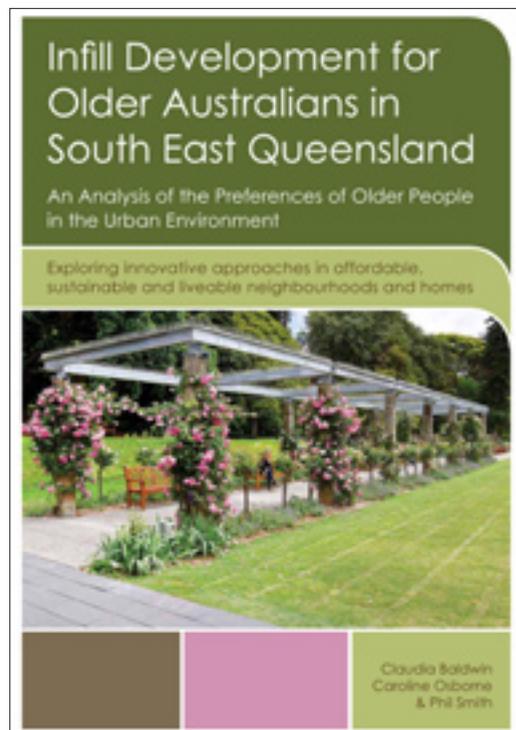
In the research, the senior groups were combined with a designer in a design session specifically on the housing. Together, they developed 7 typologies for housing. The seniors did not want to be in clusters bigger than 20/25, or in mono-neighbourhoods, such as retirement communities with over 65s only. There was a clear preference to be ageing IN the neighbourhood.

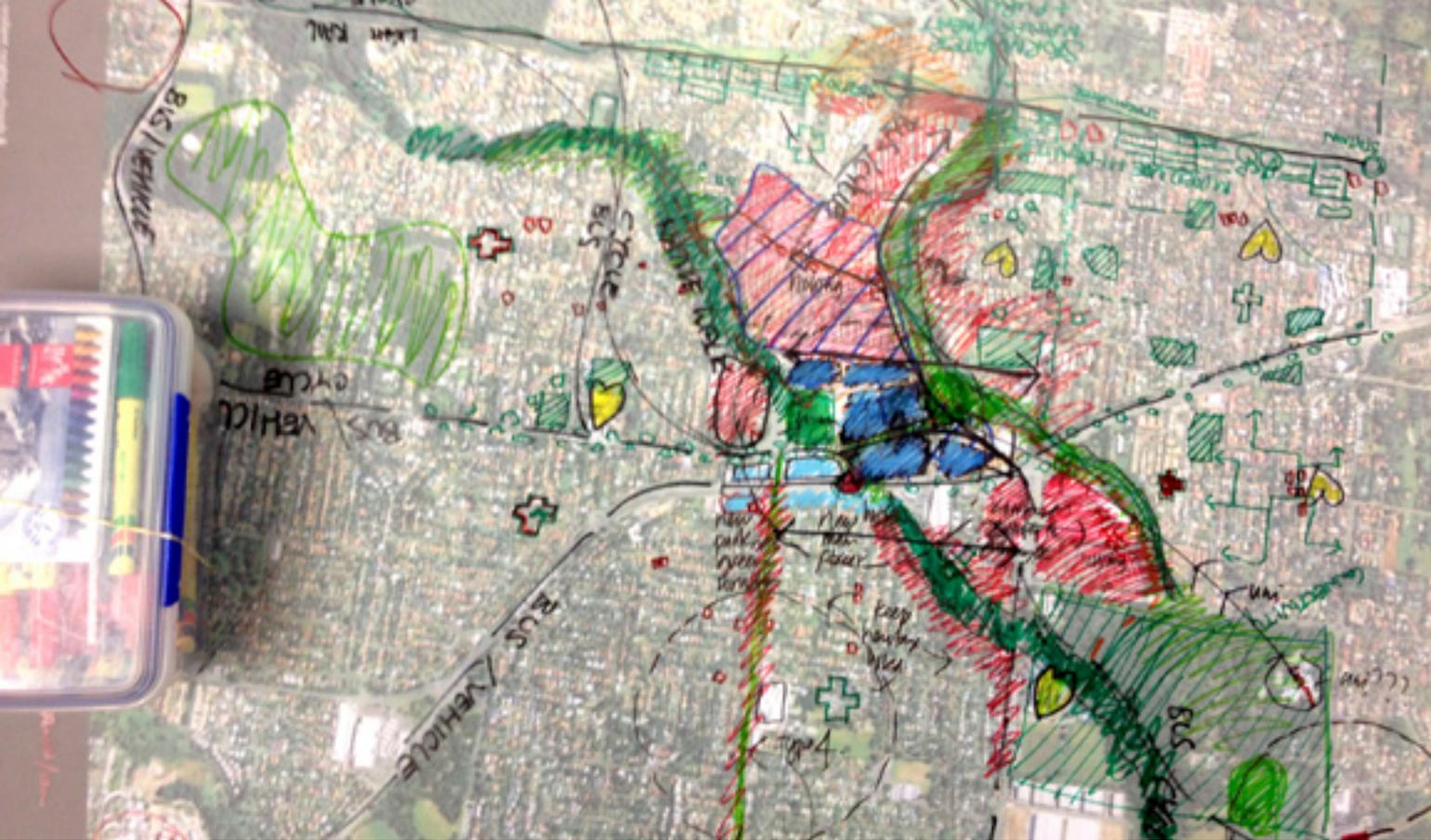
The research study shows clearly that seniors are ready for change. Location becomes more important with ageing. Sustainable choice is informed by the physiological, due to limitations coming with age.

Seniors value access to young people. Actually the preferences for young and old are convergent. There are wider benefits to this. There are remarkable links between the elderly and the young. Both live in smaller households. The MacMansions don't fit either of them. The 7 typologies are also compatible for young people. Young people want apartments, not houses, and iPhones, not cars. The integrated solutions must change our cities. The transformation of suburbs instigated by the ageing residents is good for the whole urban population.

Right: the publication can be downloaded from www.usc.edu.au/seniorliving.

Below: starting the workshop





Speed-Workshop

For the second part of the forum, Phil and Stephanie host a speed workshop to apply lateral design thinking to an existing suburb, Aspley, a northern suburb of Brisbane. The groups are given two questions to discuss:

- What challenges do you observe from the urban structure, demography, economy, etc.?
- What opportunities do you observe in the suburb?

Every group member is given a theme to represent in the discussion: infrastructure, aging, technology, housing, community, localising and climate change.

Half way through the workshop every table receives a wildcard - a statement that changed the suburbs demographics or commercial and planning scheme - which provokes a change in the discussion, in a positive or controversial direction. For example, groups have to cater for a wildcard like "Incorporate a 24 hours entertainment complex" or "Population will double by 2050".



Workshop results

- Change the shopping centre from introvert to extrovert, with lively streets, alleys and (small) squares. That liveliness is visible from the streets around. Paths connect straight into the surrounding neighbourhoods.
- Use the open parking space around the shops in the centre to start the first transformations. Keep the buildings and transform them bit-by-bit, instead of a complete demolish and rebuild strategy.
- Swap a location in the centre with the University campus in the park. This can be a catalyst for improvements, without causing too many funding issues.
- There is a lot of discussion about the retirement village adjoining the centre. Everybody agrees that it will need to be integrated. But there are different views on the speed and method of this integration. Some see it as a perfect area to start transformation, others as a living environment that people have deliberately chosen for and can change only with care.
- Make the creek-lands into backbones of the suburb, with continuous foot and bicycle paths, well connected into the adjoining neighbourhoods and over Gympie Road. A bit more development freedom along the edges to create liveliness and social safety (front sides, a bit more density with 3 story terrace housing).
- Connect the creeks into a functioning water system that can be experienced by locals, with natural water, stormwater buffering, stormwater connections to the surrounding streets, artificial lively water features in the centre. Maybe even changing the Gympie road crossing into bridges over the creeks, so people on the road experience the water system and the pedestrian flow can continue underneath the bridge.
- Cluster facilities with schools to create active cores in the community.
- Add dwellings to the small facility clusters spread over the suburb. To make them more lively, by adding people and eyes on the street. And to create an alternative for elderly and young to live on walking distance to facilities.
- Create different atmospheres around the facility-clusters, so they provide different experiences, extra reasons to go to visit one and the next.



The 8 wildcards





- Opportunity for urban farming in a less developed area of the suburb. Combined with farmers market, a facility cluster and some housing, this could create a new social and economical hub in the suburb.
- The industrial area next to the train station should be protected to keep light industry employment should in the suburb.
- The vicinity of the train stations gives opportunities for densification. The combination with work (industrial zone) or park can create different living environments. It's a shame the stations are not close to the suburbs centre.
- Add small, low-cost interventions to uplift the suburb. Like free Wifi to stimulate the use of public space and parks. Let people build in their backyards and subdivide.







BEYOND ACCESSIBILITY: CITY OF 7 SENSES

Forum | May 2013 at King George Square, Brisbane



Summary by Hans Oerlemans

Forum Chair: Tobias Volbert, UDAL Practice Pillar Chair

Presenters:

- *Linda Cupitt, Director, Miovn Consulting*
- *Tobias Volbert, Project Development Manager & Landscape Architect at Playscape Creations*



Introduction by Tobias Volbert

The workshop is part of the Brisbane City Councils Ideas Fiesta, which is organised in regards to the new City Centre Master Plan. The participants gather on the public balcony at the King George Square, where Tobias welcomes everybody and opens the event. After two short introductions, the participants will work in groups on ideas to improve accessibility in neighbourhood streets and through pop-up interventions. First they discuss general ideas to improve our daily environment, then apply them on two sites in the Brisbane CBD.



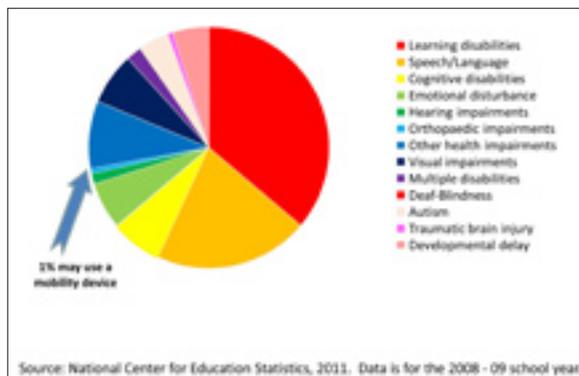
Tobias and Linda giving a radio interview prior to the workshop, to promote UDAL and the 7 Senses to the general public.

Why the need for a City of 7 Senses?

by **Linda Cupitt**

Linda provides a broad overview of the need for design and planning to move beyond our current take on accessibility. She refers to the aim of new City Centre Master Plan (CCMP) to create the vision for the city for the next 20 years, a 'new world city' - one that embraces innovation, provides accessibility and promotes inclusion. This poses the question: What innovations do we want to be renowned for? How do we create an inclusive 'new world city'?

Current thinking has accessible and inclusive innovation largely driven by the requirement to ensure that those with mobility aid, like wheelchairs, have equal access to our public spaces. Only 2.7% of the Queensland population



however has a physical disability that requires a mobility aid. Wheelchair accessibility represents a small fraction of physical disabilities. And what of non-physical disabilities? How are we planning for the whole spectrum of disability, which is actually a rapidly growing health problem? How we consider disability today, significantly impacts the potential for community inclusion in the future.

Some facts

By 2030, the Australian population is expected to increase by 15%, but the rates of disability prevalence are exponentially growing. By 2030, at least 25% of the Brisbane population will have a non-physical disability. One in four people.

Considering the growing rates of disabling mental illness, we shouldn't be that surprised by the figure. In fact, the World Health Organisation estimates that depression and anxiety conditions will be the number one health burden in both the developed and developing nations by 2030; greater than cancer, greater than heart conditions or diabetes.

Common disorders that can lead to crippling disability, such as anxiety conditions, are currently experienced by 14% of all Queenslanders. It is estimated that this will rise to as high as 30% by 2030.

But it's not just mental illness that is growing. So too are sensory disabilities. Currently 1 in 6 Australians are affected by hearing loss. This is projected to be 1 in every 4 by 2050. The numbers of people with low vision and blindness are projected to almost double by 2024.

Neurological and sensory processing disorders, such as Autism, are also on the rise. One in every 100 children in Queensland has Autism. This rate doubles every 5 years. Dementia rates are currently 1 in every 10 older person over age of 65. This is expected to triple by 2030.

So why are these facts and figures important?

If we aim to create an accessible, inclusive, liveable, 'new world' city, we need to consider who in the community can participate in our city centre spaces, and how readily they can.

Cities that do not consider and plan for growing disability:

- increase the rate of exclusion and isolation amongst residents;
- increase the long term costs of health services funded by city and State;
- increase long term soft infrastructure costs funded by the city;
- decrease economic productivity of the city centre.

Currently there are about 500 families in the Brisbane City Council catchment, who have a child with autism. The current design of key city places, such as King George Square, Botanic Gardens and South Bank, make it near on impossible for these families to access and enjoy community events held there. Parents of children with autism commonly state they feel isolated and guilty that their other children are 'missing out' due to their inability to participate as a family in the community.

We need to consider how everybody, also disabled people, can easily transit through our city centre. For instance: how does our city centre support someone with a disabling mental health disorder to transit from Central Station to the to the Queen Street Mall Busway? This is a common transit path for someone living in an outer suburb and needing to get to the Royal Brisbane and Women's Hospital. Barriers in transport accessibility are one of the primary reasons people 'drop out' of specialist secondary and tertiary care, leaving their conditions to deteriorate further and increasing the life-long cost to our health system.

Finally, these facts and figures have a significant impact on the city centre economy. Small businesses loose potential revenue when entire families avoid the city due one

member of the family having a disability. Significant losses to economic productivity occur when workers become full time carers – something that is necessary in a city that ignores its disability fringe. And retrofitting space for new accessibility is expensive to the city.

Moving forward

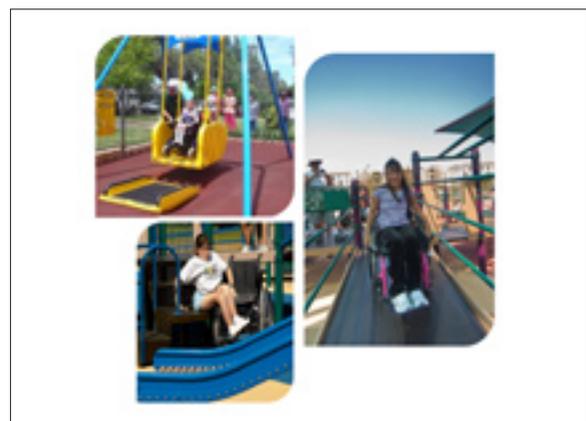
Our city and its design needs to move past current thinking on accessibility; move past considering the legal requirements for wheelchair accessibility and towards thinking about how we create spaces that include all abilities.

By considering the 7 senses, not only do we improve the accessibility and liveability of our city in 2030 for our growing disabled population. It will also enhance the experience for the other 75% of the population fortunate to live without significant impairment.

Inclusive playground design, what does this mean?

by Tobias Volbert

Inclusive design is often a very limited concept in the current practice of playground design. Add a wheelchair swing or slide and you're done. But is that inclusive? These items are only usable for wheelchairs, so in reality they exclude more than they include! For every 1,000 children, 132 are registered as having a disability. Of those, only 1% requires a mobility device. Over the last twenty years, this



percentage has not changed. Learning disabilities didn't change either; stayed at about 5.2%. Rates of Autism, however, have increased dramatically, from 1:1000 at the end of the 90's to 1:100 now.

What can playgrounds do to include all children with disabilities? There are three primary elements that need to be considered.

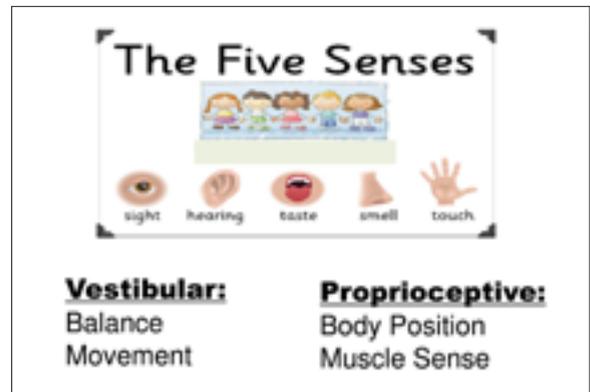
First, the design needs to consider all aspects of play:

- sensory - sliding, spinning, swinging, running, climbing, etc.
- social - elements that stimulate children to interact with each other; and
- imaginary - elements that stimulate creativity and imagination.



Secondly, the design needs to consider all 7 human senses. Not five, seven! Everybody is familiar with the five senses - **sight, hearing, taste, smell and touch**. But an inclusive design also considers the **vestibular** and **proprioceptive** senses. The vestibular system is located in the inner ear and provides our sense of balance and movement. The proprioceptive system is based in our muscles, tendons and joints. It tells us about body position and muscle tension, for instance so that we can touch our nose with our eyes closed or know how much pressure to use when writing with a pencil.

Thirdly, inclusive design must recognise the sensory input differences. Most children are in the middle of the sensory

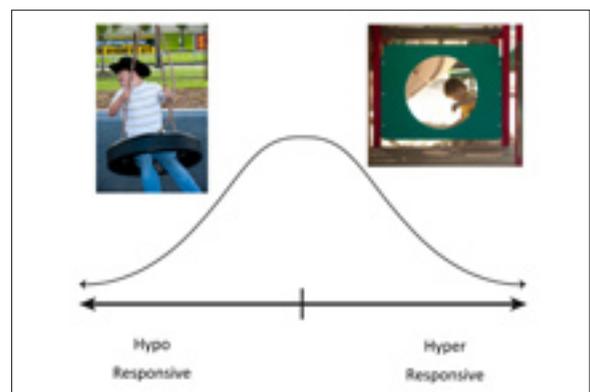


input registration spectrum. This includes the stimulus of all 7 senses. Children who have heightened or dulled sensory input (on the hypo and hyper spectrum) are excluded by current design practice.

Tobias concludes with a series of examples of playground designs and equipment that can be used by all children alike, making it possible for disabled and non-disabled to interact. Elements that stimulate all 7 senses and playground layouts that create natural zonings, so different children with different needs can use the same playground at the same time. For instance to make sure the older kids don't push away the young ones and that the hyper-responsive children have a safe place to go too and are not scared away by the more active ones.

Want to know more? These websites might interest you:

- [7 Senses Foundation](#)
- [Innovations archive of Playscape Creations](#)
- [Landscape Structures](#)





and stimulating people to pick and eat, creating continuous street picnics.

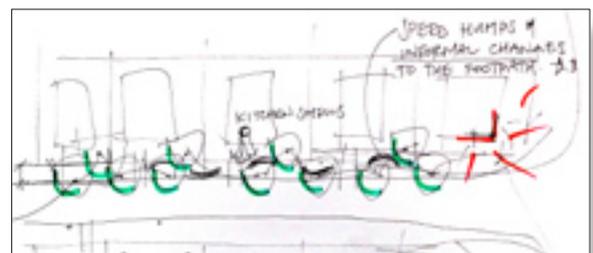
- Free up regulations to make street-side entrepreneurs possible: stalls that sell food and drinks, adding smell and taste to the streets, umbrella sellers reacting on the weather.
- Life street music (not the shopping mall music), piano's and instruments left on spots for public use.
- Kinetic sculptures that emphasize changes in wind and water and water sculptures, mist screens and jets, changing the experience of sound and temperature.
- Challenge the view with visual projections on screens and buildings, street cinema, light show, carnival mirrors on the sidewalks, maze of flags and drapes.
- Integrate animals in the street-design: singing birds in the streets, fishes in shop-windows, chickens in the park, etc.

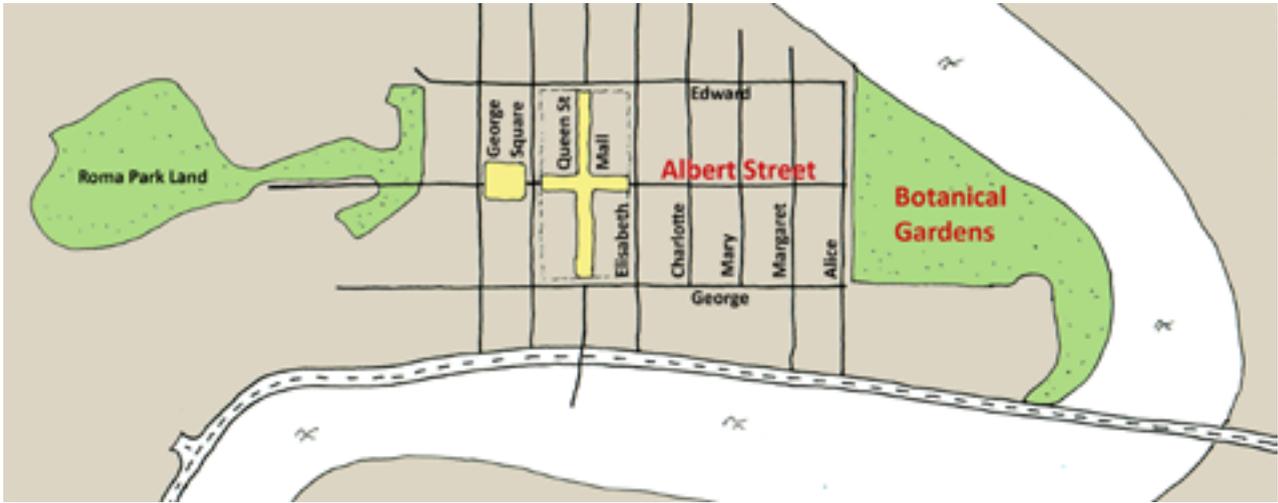
birds year around, creating various bird-sounds.

- Edible plants in the street verges and front yards, for people to pick and stimulate community interaction.
- Exhaust hood outlets to the street, scenting the street with cooking smells.
- Street corner pocket parks with a tree and a bench, to see and meet.
- Meandering tree avenues, changing the way you walk on the sidewalk, perspective, etc.
- Play boards on the paths. Stimulate chalking on the pavement.
- Street closures rolling though the neighbourhood, turning one street at a time into temporary playgrounds and meeting places: street painting, inflatable pool party, cart races, community gatherings.

Neighbourhood streets

- Use tactile fences along the street, fences with a different touch or temperature reflection, hedges with different fragrances.
- Integrate informal exercise equipment in the streets, swing ropes on trees, etc. to stimulate proprioception.
- Speed humps and rectangular curbs for informal balance games.
- Glow in the night features, fences, garage doors, to change the experience at night.
- Diversity of trees in the sidewalks and gardens to attract





Round 2: Applying ideas to 2 sites

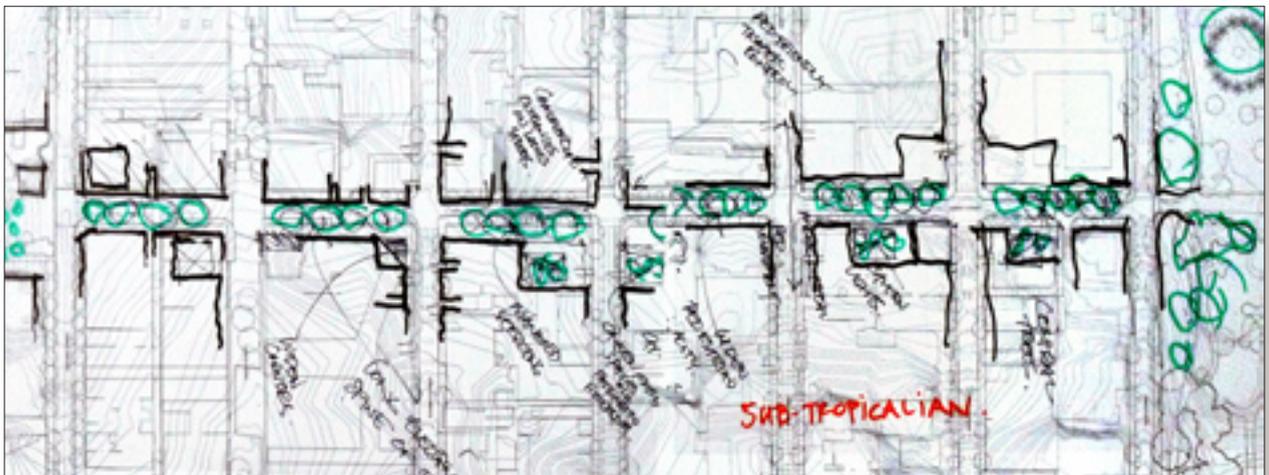
Two sites in the Brisbane CBD are chosen for workshoping: Albert Street and the Botanic Gardens. Tables are joined together to three groups, who all work on both sites.

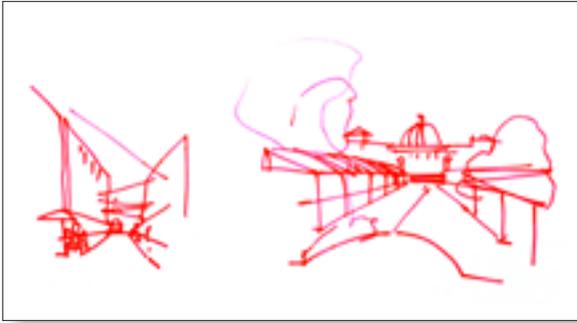
It is striking that most of the groups don't directly apply the ideas generated in Round 1 to the two sites. Instead much of the creativity is spent on improving the spatial structure. In the case of Albert Street, a lot of attention is placed on creating more space for pedestrians. Groups then conclude that many of the ideas from Round 1 can be applied in this new structure. Regarding the Botanical Gardens, much

of the focus goes to the connection between the gardens and the rest of the city. Again, participants believe that if the space are better connected, they will be used by more people and interventions for the 7 senses will be more effective.

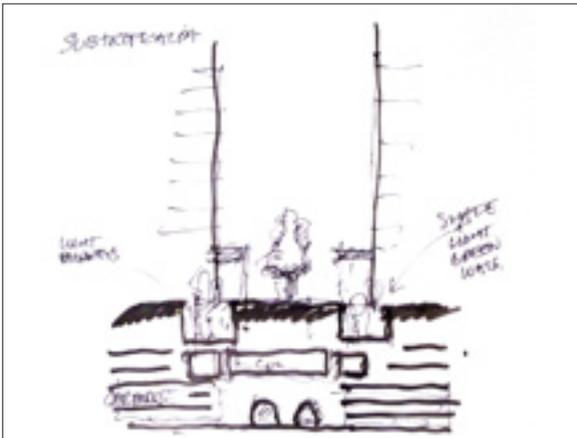
Albert Street

- There is consensus that Albert Street will be the main axis between Roma Parklands / George Square / Queen Street Mall and Botanical Gardens. Therefore it is crucial that all the cross sections on Albert Street become more pedestrian friendly.
- One group suggests temporarily closing Mary and Charlotte Street to cars, as these streets are not

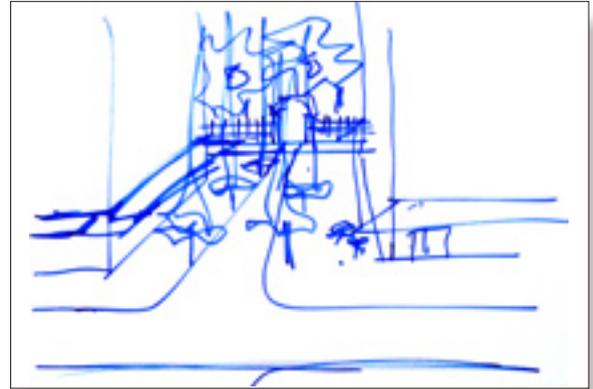




connected to the freeway, thus not vital to the traffic system. Between 10am and 4pm Mary and Charlotte Streets become the domain of pedestrians. All the pup-up ideas of Round 1 can then be applied. This closure will also compensate for the fact that there are no squares and (pocket) parks in this part of the CBD.



- The second group argues for the full closing of Albert Street to cars. To make Albert Street a true pedestrian axis through town, the sidewalks need to be 16m wide, not 4m like now. This means there is no space left for cars. All car and commercial access should be organised via the side streets, like Mary and Charlotte. Along Albert Street, a whole series of public spaces under and above ground will be developed for a more diverse and lively street experience. The trees are placed in the middle of the street, to create optimum (visual) interaction between the street and the adjoining spaces. Buildings are set back on strategic places to allow an abundance of light into the street.



- Group 3 focuses on different experiences per block on Albert Street. They state that each block should have its own coherent language. Verandahs, projections, water features, planting and textures together reflect the cities history. The crossings are accentuated with bells. The whole of Albert Street becomes a touch & smell walking experience.

Botanical Gardens

- One group focuses on Alice Street connection to the Botanical Gardens. They state it's a shame you can't experience the Botanical Gardens along this edge. Alice Street needs to change from a barrier to a connector, a beautiful promenade with mature street trees. The group tears down the park fence and opens the Gardens to the city. The pedestrian path on the other side is widened by taking out one traffic lane. At the end of Alice a bridge connects the CBD with Kangaroo Point.





- This proposition raises a lively discussion about car access in this street. In contrast to the proposal, some participants argued that keeping car traffic in Alice Street increases the amount of people who enjoy the presence of the park, e.g. on their way home. Someone puts this into perspective by stating, out of personal experience, that the people who drive here at the end of the day, on their way home, have no eye for the park, just want to be out of the city as fast as possible.

- Another group proposes to open the whole section of the Botanical Gardens between Parliament House and the river. They turn this area into a green civic square, available for celebrating democracy, demonstrations, gatherings, etc. This green square becomes the intermediate between city and park, inviting city life into the park.
- A workshop participant adds that special attention is needed for the Gardens after dark. At the moment the



Botanical Gardens are not inviting and hardly usable in the evening. Adding better lighting and some evening program, sports for instance, could make a significant difference.

- The third group looks beyond the boundaries of the CBD. Just outside of the CBD, there are so many different experiences available already: West End, Southbank, Powerhouse, all kinds of markets, etc. It will be hard to impossible to create these experiences within the CBD. The group connects all these existing urban conditions to the river and uses the CityCat ferry as the connector, creating a water and wind induced calming environment.

Conclusion

After a fruitful 2 hours, Linda closes the workshop and thanks everybody for their time and creativity.

Pool party on closed off Charlete or Mary Street







URBAN INFORMATICS

Forum 20 June 2013 at Z-Block, QUT Gardens Point, Brisbane



Summary by Hans Oerlemans

Forum Chair: John Loneragan, UDAL Vice President

Presenters:

- *Associate Professor Marcus Foth, Director and Principal Research Fellow, Urban Informatics Research Lab, QUT*
- *Kirralie Houghton, PhD Candidate, Urban Informatics Research Lab, QUT*



Introduction

by: John Loneragan

The forum is opened by John. He welcomes everybody and introduces the forum's subject with 2 observations on the current state of planning.

- Many people are upset about the community consultation process, as it is usually done nowadays.
- In the Venice Biennale of 2012 spontaneous interventions was a major theme. Do it yourself projects, by architects, community groups, etc. were abundantly present; like the 125 small projects for positive improvements for cities in the USA.

Both developments show a frustration with current planning framework, felt on both sides: by the planners and designers and by the community. So it will be very interesting to see what the June forum can contribute to solve this tension and innovate our profession.

The forum is a dual-presentation by Marcus Foth and Kirralie Houghton. Marcus is the founder and director of the Urban Informatics Research Lab. at QUT. Kirralie is at the time of the forum finishing her PhD on social interactions for design of public space. Before starting the PhD she worked as a planner in NSW and Canada.

The presentation includes many interesting examples of Urban Informatics in practice. Many of these examples are described in this summary, however please visit the referenced websites for illustrations, videos and more information on the projects. You can find more interesting projects on the websites:

- [QUT Urban Informatics](#)
- [Urban Atmospheres](#).



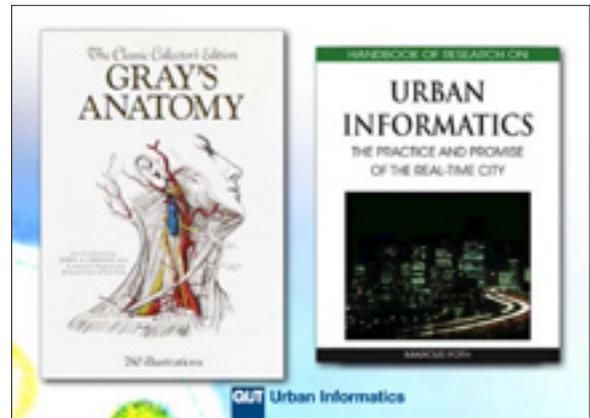
Kirralie Houghton and Marcus Foth, our presenters of the night

Urban Informatics for planners and designers

by Marcus Foth and Kirralie Houghton

Marcus begins the presentation by introducing the Urban Informatics Research Lab and the diverse backgrounds of its multi-disciplinary team.

To explain what the Research Lab focuses on, Marcus makes an analogy with mapping in human science. The book "Gray's Anatomy" was one of the first textbooks to provide an integrated picture of the human body. This pictorial 'mapping' massively improved our understanding of the body and had a huge impact on health. Similarly,



aerial photography and cartographic mapping had a huge influence on the practice of planning. Urban Informatics is a different kind of mapping. It is the practice and promise of mapping the real time city, using information technology and social media.

Place analysis

When information technology (IT) began to evolve rapidly, the idea emerged that it would dramatically alter the professional world, providing tele-working, distance education, etc. Now it is clear that the social impact of IT is far more extensive. Social interaction is completely changing due to social media. People for instance now virtually log-in to physical places to show where they are. Other people react on that: leaving comments, rock up themselves, and so on. This creates a whole new dynamic in the social world. With the roll-out of the NBN this will only become bigger.

Some people believe these changes will destroy place and distance. Marcus believes that will not be the case. People will still meet in café's, walk in the park, etc. IT does, however, add a new dimension to the physical place.

A city is never the same for everyone. There is not ONE Brisbane experience, or a London one, or Singapore, or any other city. Urban Informatics can help to map these different experiences, render different views, needs and contents depending on the people. It creates a better understanding of a place and can do so in a real-time data

collection. Marcus shows some intriguing examples of real-time data projects.

Taxis in Accra, Ghana

Like many cities, Accra struggles with air pollution. For a long time there were only two points used to measure pollution - not enough to give clear data. To collect a wider spread set of data, measurement devices were attached to taxis. As they drove through the city they collected pollution data. This resulted in a more detailed mapping, revealing which areas of the city and even which streets were highly polluted. After a while however, the taxi drivers began responding to the data. They started to take different routes to avoid the polluted areas. With taxis being a part of the pollution problem, this changed the spread of the pollution. Collecting the data itself changed the data.

For images and more information, check out [Participatory Urbanism](#).

Density and rain in Singapore

In Singapore the density of people in the centre was mapped through recording the signals that are sent by mobile devices. This was also done during a Formula One Gran Prix. The pattern now spotlighted the track, with huge crowds lightened up along the route.

The demand for taxis in Singapore is very much affected by tropical showers. When it starts to rain, the demand in that area raises exponentially. The taxis can't meet that sudden increase in demand, because they are spread out through the city. The presence of certain clouds in the Singapore sky however gives a good prediction where it will rain, so where an extra need for taxis is likely to occur. Providing this information to the taxi drivers, is making the taxi system much more effective.

These sets of data are beautifully visualised on [LIVE Singapore!](#) On this website you can also find other examples.

Making Rio smarter

In Rio de Janeiro IBM has a central control room, where a variety of data is collected: traffic, electricity use, etc. This data is gathered for the Council to help them make decisions. Marcus notes that this broad collection of information should be publicly available. "I want this data on my Iphone!" So everybody can profit from and react on this data in their daily behaviour.

Read more about this in these articles:

- [Building a smarter favela: IBM signs up Rio](#), by Greg Lindsay.
- [How Data is Making Rio de Janeiro a Smarter City](#), by Anna Heim.



Smart electricity use monitor

Closer to home

A good example of the use of real-time data is being able to measure of your electricity usage at home. As the electricity bills are only issued every few months, it becomes hard to track in time when anything goes wrong. With the new home monitors, however, consumers can see their usage real time, while the electricity is being used. In the graphic you can recognize the fridge, the morning shower, the dishwasher after dinner, and so on. People change their behaviour when they can access this data. A part of the energy saving program in Queensland is based on this effect. And it works. QUT Urban Informatics did a research project on this. For a summary, see [Smartfutures](#).

Place Engagement

Social media is no longer an exclusive tool for the IT elite. It is used extensively by all age groups and not just to chat, but also for environmental engagement, political movements, education, to name a few. Marcus shares some revealing data:

- in 2012 Social Media overtook porn as #1 activity on the Web;
- if Facebook were a country, it would be the world's 3rd most populated with twice the size of the USA population;
- Lady Gaga, Justin Bieber and Britney Spears have more Twitter followers than the entire population of Australia;
- eReaders have surpassed traditional book sales on amazon.com.



FixVegas

FixVegas

Urban Informatics is not only about collecting data. It can also be used to get people directly involved in their environment and place. An example is the FixVegas application, developed by the QUT Research Lab for the Brisbane City Council. This smart phone app allows users to take a photo of something in the public realm that needs to be fixed, attach some basic details and submit it to Council. GPS automatically registers the location. The app has proven to be very successful. Only the back-end systems are falling behind. For instance, when the same issue is

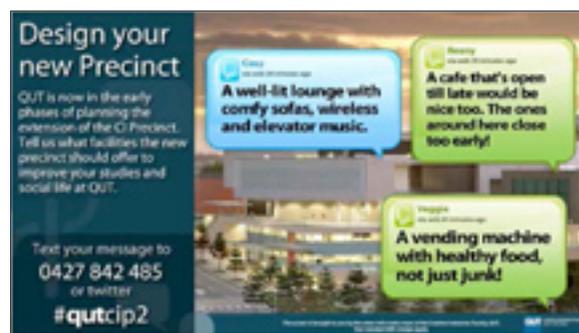
submitted through both FixVegas and the Council website, the duplication is not recognised and two repair teams are sent out.

You can find more information on the [UrbanInformatics](#) website and download the app yourself.

Public Consultation

Urban informatics makes it also easier to participate in public consultation. As part of the Brisbane City Council planning consultation, display booths were set up at different spots in the city. The booths displayed a question and people could reply to the question with a single SMS (shown in blue), while other people could react to these answers with their own SMS statements (shown in green). Both answers and comments were shown directly on the display, so people could see their message appear and know it was registered. Even though responses were short, limited in their number of characters, the urban planners who were working on the project reported that this consultation method gave quite good insight.

Read more on this [Discussions in Space](#) project on the Urban Informatics site.



Public consultation board for the QUT precinct

The Cube

The new P-Block at QUT's Gardens Point Campus is home to 'The Cube', a very large interactive visualisation space that can be used for public consultation. This space allows for the public to experience a proposed project as if



The cube in P-Block

it is built. In July 2013, after the forum, The Cube was used to present design ideas for South Bank. The Cube has been useful for many more projects, see [The Cube](#) website.

If you'd like to know more how these new technologies can support citizen engagement: check out the book "From Social Butterfly to Engaged Citizen", by Marcus Foth, Laura Forlano, Christine Satchell, and Martin Gibbs.

Place making

Kirralie takes over the presentation and illustrates how Urban Informatics can change the experience of a place. Kirralie displays a wide range of examples, starting with the screen on Federation Square in Melbourne. When Evans



Public gathering around the screen on Federation Square, to watch the Prime Minister's speech in 2008

won the Tour de France, the screen became a celebration board, where people posted their messages and reacted on each other's texts. The technology added a whole new layer of experience to the square.

Whole facades of buildings can be interactive. They can change if the function of the building changes, become an art display, or show data on how many people there are inside using the building. On the [Urbanscreen](#) website there is an amazing clip of the Hamburger Kunsthalle. Projections make the building appear to change completely, in 3 dimensions. This example shows how dynamic our cityscapes potentially can become. The website of the [Media Architecture Institute](#) shows many more examples.

The possibilities are tremendous. Information can be displayed on a bus stop, as a computer screen where travellers can find all the real-time travel information they could need. In Korea you can shop while waiting for the train. You scan the QR codes of products you want to buy and collect your shopping at the station where you leave the train.

Informatics can connect distant places, like in the '[Hole in the Earth](#)' project. Screens placed in a street in Rotterdam, the Netherlands, and its sister-city Shanghai, China, showed viewers a real-time visual of what was happening at the other side of the world.

Urban informatics doesn't need to be restricted to the visual experience - all senses can be used. The [Flow-wall](#) of Studio Roosegaarde produces a gentle breeze when you move past; the [Digital Water Pavilion](#) in Zaragoza, create walls made of water and sensors register someone approaching, stop the water flow and create an entry point. Playground equipment and street furniture can be interactive, encouraging people to actively engage with their surrounding.

Mobile devices can show layers of information that are otherwise hidden. The Acrossair [Nearest Places app](#) in London gives users information on nearby sites and



Screen regularly showing films on Northbridge Piazza in Perth

buildings in an augmented reality view. Users can hold their phone to view overlaid information on the landscape before them, or view a map with marked sites. Similarly, the '*Streetmuseum*' of London, an *application* by the Museum of London, enables people to walk the streets and overlay on their smartphone images of the same street during World War 2.

Marcus concludes the presentation with the announcement that the QUT Research Lab, in collaboration with UDAL and PIA, is planning to organise a Master Class on the use of Urban Informatics; how to make it happen. Keep an eye on the website www.urbaninformatics.net or facebook page facebook.com/urbaninformatics.

Question time

The presentation is followed by a lively discussion around questions raised by the audience. A few highlights:

Screen or no screen?

The screen at Federation Square is often used as an example to show what technology can bring to urban spaces. The screen at King George Square however is not interactive, instead it shows commercial TV. Many at the forum consider this very disappointing. It exhibits clearly that just putting up a screen is not making a place more interesting. You need to take the audience into consideration, how a screen is going to work, how to manage it, and so on. A screen is not a plain element. It needs a concept: this is what we want a place to do. What kind of technology can support that? The goal defines the hardware and software, programming and maintenance.

You need to take expectations into account. If it looks like a TV, people will treat it as a TV. You need to put effort in breaking the expectations before people start to interact. When you install something, you need to know what your goal is.

How much does effectively implementing a screen cost? There is no formula for costs and effects – implementation depends completely on the place, context and effect you want to create. With the right mechanisms and facilities, simple and cheap interventions can have incredible positive impacts. Putting up a 'big screen' is just one obvious option, but certainly not the only one and not necessarily the best.

Technology just for the young

Does urban informatics isolate some users of the public realm due to their lack of knowledge about the technology? Some people say there is a big generational difference in the appreciation of Urban Informatics and the new media, but that is deceiving. Young people are

challenged too. It's just the wizz-kid examples that stand out and there is a range of IT savvy at all ages.

A beautiful example is shared of e-health. A group of children with a learning difficulty due to autism is given an education program through touch screens. Learning how to operate the screens is done with personal contact, but then the educators can withdraw their physical presence. As soon as the children are used to the system, they perform very well. At this moment it is mainly the educators who are struggling to use the technology and adapt their teaching to optimise this method.

An example of heritage trails around a retirement village shows the positive effects for elderly citizens. They share their stories through the trails. The trails encourage them to exercise, physically and mentally, strengthening their health. And at the same time it is a way of archiving their stories for future generations.



Social media is just another way to reach people. Everybody knows people you can better reach by phone, whilst others you can only reach by email, Facebook, or by meeting them on the street. During the Queensland floods in 2011, information spread very fast through social media, and then on to other people in the community. It is all about different channels that add up.

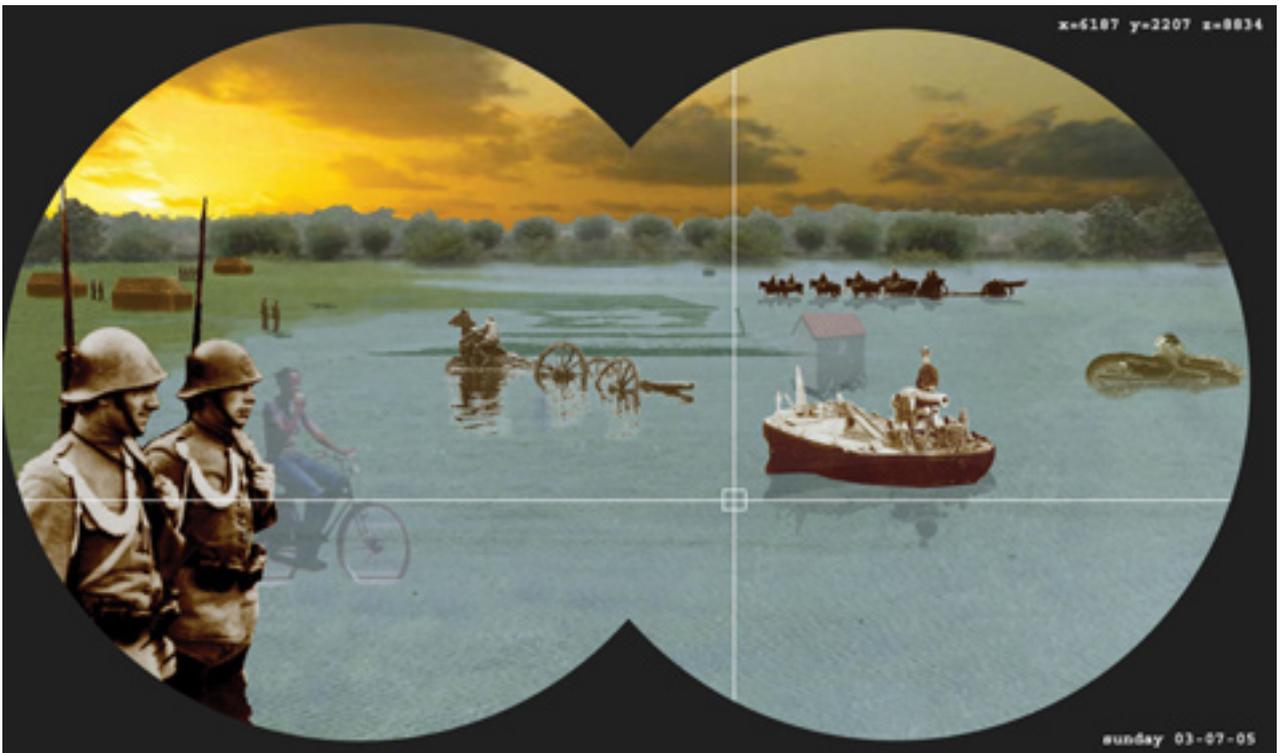
Food for further thoughts

When using Urban Informatics for consultation, the challenge is how do you use the feedback and how do you make people realize their feedback is used. Posting their messages on a screen, fast enough so they can see it appear, is one way.

It would be interesting to do research on the return of the investments in Urban Informatics. Gathering data, like is done through city bicycles in Copenhagen, and knowing how people move through the city, could lead to different investments, or even saving investments. For instance not

building that expensive car tunnel, but investing in much cheaper bicycle lanes. When you look at the bigger picture this way, collecting the data can become very beneficial, for both society and the individual users.

Same concept as the streetmuseum of London is developed for several parts of the New Dutch Waterline in the Netherlands. Illustration shows the concept, developed by OKRA landscape architects in 2001.







CITY-MAKING

**Super Forum 17 July 2013 at D-block, QUT Gardens Point,
Brisbane**



Summary by Tobias Volbert

Forum Chair: Malcolm Snow, former UDAL President

Creative Director and Key Initiator: Peter Richards



Introduction

More than two dozen local speakers address a number of themes: on the inner city, transport and TODs, regional cities and special uses urbanism such as the Brisbane Airport master plan, Commonwealth Games Village and the Sunshine Coast University Hospital. Malcolm Snow, former UDAL President, now based in Victoria, has flown in and very ably acts as MC for the day. In the Super Forum plenary, State Government Architect Malcolm Middleton provides incisive reflections on the current state of urban design in Queensland.

Ten questions to be answered are:

- What are the big urban issues facing Queensland in 2013 and beyond?
- What are the barriers to finding and implementing long-term, sustainable solutions to those issues?
- How well is current urban design practice in

Queensland addressing the challenge of sustainability in all its forms?

- Has the goal of sustainable urban development become mainstream or marginalized?
- Is there a unique urbanism emerging for the South-East Region and if so, what are its defining characteristics?
- Do we need a different urbanism to reinforce regional place identity and quality?
- Is there a common DNA in the urban design response to the opportunities presented by urban growth and the threats posed by decline?
- How successful have we really been since 2003 in realizing our (QUDAL) stated aspiration for an Agenda for Urban Quality in Queensland?
- Are we in better shape (as place influencers/shapers) than we were a decade ago and if so, what is the proof?
- If we were to choose a transformational trajectory - as opposed to a 'steady as it goes' mindset - in our practice of urban design in Queensland what would we need to start doing differently, who would be the key players, and how would they go about it?

Session I: Inner City Urbanism

Exploring Sustainable Communities: Kelvin Grove Urban Village

by **John Bryne**

*John is an urban designer/
planner with a strong
supporting background in
architecture and social policy.
He is the author of the radical
Queensland CPTED Guidelines,
he has recently co-edited
Urban Voices celebrating Urban Design in Australia, and was chief
salesman on the day.*



The Kelvin Grove Urban Village has been a radical development, conceived at the end of the 1990s. It has received many awards from a broad range of professions and industry groups. A decade on from its opening, it is time

to review it and ask whether it continues to be a relevant exemplar of best practice sustainable urban design and what if any lessons it has for the coming decades.

Herston Health Precinct by **Adam Davies**

*Adam is an urban planner/
designer, specialising in health,
education and science precincts
for the global design firm
HASSELL. He is an urbanist, who
champions the value of good
design for a sustainable future.*



The proposition to develop the Herston Health Precinct as an outstanding centre of health innovation in Australia is based on the expressed desire of the Precinct partners to transform the physical form of the Precinct. Herston must be able to offer a place that will attract and retain exceptional talent. The quality of place, led through the socialisation of a range of internal and external spaces, will play a vital role. It will foster an atmosphere of innovation and creativity, whilst providing for the daily needs of one of Brisbane's largest and most significant employment precincts. Importantly, the plan aims to encourage optimism that these changes can contribute to a sustainable, healthy, liveable and prosperous future.

The presentation outlines:

- the role of city and precinct competitiveness in attracting and retaining talent,
- the importance of exemplary leadership in establishing a clear direction and ambition for the Precinct,
- the role of collaborative governance frameworks in representing stakeholder interests for the betterment of the whole precinct,
- the importance of a rich mix of uses and activities that attracts and supports a critical mass of high value workers,
- the value of a well-connected precinct that values interaction, socialisation and collaboration as an enabler

- for discovery and care, and
- the drivers that established a need for a transformation and growth platform working towards an urbanised precinct form that effortlessly connects with its rich and evolving context.

Brisbane City Centre Master Plan by James Tuma

James leads the design studio for Urbis in Brisbane and, over the past 18 years, has led a significant number of nationally and internationally recognised integrated development and master planning projects.



Following almost two years of background research, in mid-2012 Brisbane City Council embarks on the journey of preparing a new master plan for Brisbane's heart. In the presentation, James Tuma and Brian Donovan co-present their observations on the process, highlight the unique facets of the plan, and explored one of the key urban strategies around 'buildings that breathe'. As the Master Plan is currently in draft form, this presentation is not so much about the content of the master plan, but rather about the component parts that make it a distinctive approach to Inner City urbanism, and the importance of looking at the City as a system and not as a physical Master Plan on paper. Another important point made by the presenters is the critical fact of language to ensure the public understands.

Session 2 - Transport and TOD Urbanism

Cross River Rail and Gold Coast Rapid Transit

by Toby Lodge

Toby is leading and working in collaborative teams at HASSELL for over fifteen years in the fields of urban renewal, transit orientated development and urban infill growth management.



Toby speaks about 'Thinking beyond the ticket line', the relationship between urbanism and major transport projects referring to Brisbane's Cross River Rail and Gold Coast Rapid Transit as case studies. He explores some of the challenges for achieving more urbane infrastructure, and how urban design can facilitate the 'city building' opportunities these projects create. Holistic thinking within transport is necessary and part of city making.

Kallangular and Coomera by Alex Cohn

Alex is a qualified and experienced urban designer and architect at Place Design Group. Alex has developed his extensive range of design skills over 30 years of professional design practice and has been awarded



nationally and internationally. Recent project experience includes Genesis master planned community, Coomera, Northshore inner-city urban renewal project at Hamilton, and Northern Busway and Airport Link.

The presentation focuses around design thinking for TOD projects. We have to understand that these projects will be there for many years to come and, during that time, change is a certainty and 'unbelievable' innovations will certainly challenge and change our living – think of robots entering

our urban space. The presentation aims to question the premises and priorities with which we, as designers, form a vision and prepare for change.

Varsity and Woolloongabba TOD's by Cameron Davies

Cameron of Deicke Richards is a respected urban designer and registered architect with a developed understanding of broad strategic urban design through to completed buildings and places.



Cameron explains that if you think house lots are getting smaller, you should look at the TOD's. South East Queensland's urban morphology is undergoing a shift, not a trend. Denser transit-oriented communities might just save us from the gluttony of McMansions, but often the opportunities for change are small and constrained. The presentation looks at two compact TOD sites; why we need them, and how hard it can be to keep them in play.

Session 3 - Regional City Urbanism

Toowoomba, Townsville and Ipswich City Centre Master Plans

by James Tuma

James also talks about 'Urbanism in the Regions: Ideas, observations and patterns from 10 Years of Master Planning'. There are more regional cities in



Queensland in than in any other state of Australia. So, what are the challenges that regional cities face in creating urban places? James explores some of the common threads, unique challenges, and the key insights from this depth of experience.

Urbanism in the Torrid Zone

by Caroline Stalker

Caroline is a director of Architectus Brisbane. Her career over 25 years has demonstrated a consistent commitment to making engaging people places. Caroline has served on and chaired numerous awards juries



in architecture and urban design, is an Honorary Life Fellow of the Urban Design Alliance of Queensland, and is also a member of The Queensland Board for Urban Places.

Aristotle's 4th century BC climatic classification of the earth's regions into 'frigid temperate, and torrid' zones would have defined Cairns and Townsville as uninhabitable. In the 21st century, these well and truly established regional cities are seeking ways to create a more sustainable urbanism which is more compact, less reliant on air-conditioned internal and car based lifestyles, and suited to the local climate and culture.

Recent and ongoing projects in these cities, particularly the Cairns City Centre Master Plan and James Cook University Discovery Rise, have offered Architectus the opportunity to posit solutions for both a Wet Tropical and Dry Tropical Urbanism, which have been embraced by Cairns Regional Council and James Cook University.

The projects describe an urbanism where buildings are more like perforated shade screens than solid volumes, where streets and public spaces become cool, shaded Tropical Living Rooms which offer respite and invite occupation even when it's very hot, and very wet. It's a looser-fit urbanism than the walled urbanism of southern cities that emphasizes landscape integration with mega-shade trees and woven or layered shade to mark and create urban places – albeit differently in Wet vs Dry Tropical conditions.

Session 4 - Major Events and Uses

Commonwealth Games

by Peter Edwards

Peter is an architect, accomplished and recognised urbanist and a leading figure in this region's urban design community. He is director and co-founder of the new architecture and urban design practice



– Archipelago, president of the Urban Design Alliance Qld, a member of the Board for Urban Places and recently appointed to the Toowoomba Region Urban Design and Placemaking Panel.

Archipelago was commissioned by the 2018 Commonwealth Games Bid Company at the beginning of 2011 to design the master plan for the Athletes Village. The master plan draws on the many constraints of the site as opportunities for a successful place - for a strongly structured collection of connected uses robustly proposed within a pattern of people focused streets, plazas, places and parklands. The master plan makes strong overtures to the legacy of the Games Village, including the subsequent structuring of the Health and Knowledge Precinct.

Most importantly the master plan looks to maximize synergy with the adjoining Hospital, University and co-located infrastructure by accommodating complimentary uses to connect and integrate across what was once thought of as boundaries to the site. It strives to complete the tripartite catalyst of Health, Knowledge and Industry through the delivery of a lifestyle focused, transit facilitated place for living, working and learning.

Brisbane Airport Property Development Master Plan

by **Cathryn Chatburn**

Cathryn is an enthusiastic and creative designer, and highly effective project manager with a diverse portfolio of project experience gained over 20 years of practice across the United Kingdom and Australia. She has worked on a variety of projects, for both public sector and private clients, including significant involvement in large-scale urban regeneration projects.



Cathryn discusses the following points and highlighted that the Master Plan is only the beginning.

- Creating platforms for collaboration
- Speaking in many professional tongues
- Looking beyond the next horizon
- The importance of engaging narratives
- Delivering the 'Integrated City'
- Making it happen – the delivery of 'Spatial Business Plans'

Sunshine Coast University Hospital by Dr Stephen Long

Stephen is an associate at Architectus and senior design architect within the Sunshine Coast Architects joint venture on the Sunshine Coast University Hospital project. He has been part of the bid team and is currently focussing on the design of the Skills and Academic Research Centre component of the project.



Stephen discusses the Sunshine Coast University Project, which is located on a 20 hectare integrated health campus on a green field site at Kawana. The presentation describes how the design team has responded to reference designs, international hospital typologies, the scale of the project and local qualities of place to create an urban environment that has a Sunshine Coast identity.







CREATING SUSTAINABLE URBAN TRANSIT

Forum 29 August 2013 at Urbis training room, Brisbane



Summary by Hans Oerlemans

Forum Chair: Tobias Volbert, UDAL Practice Pillar Chair

Presenters:

- *Bronwyn Buksh, Project Coordinator of The Digital Work Hub Project, Regional Development Australia, Sunshine Coast*
- *Dr. Nicholas Stevens, Lecturer Regional & Urban Planning, University of the Sunshine Coast*
- *Toby Lodge, Principal, HASSELL Brisbane*

Introduction

by Tobias Volbert

Tobias welcomes all attendants and introduces the speakers of this forum. Since we have three presentations, and limited time, Bronwyn starts straight away.

Tobias has just asked who are the urban planners in the room



Digital working hubs: changing our daily commute

by Bronwyn Buksh



Bronwyn begins with a rhetorical question: "What is the future workplace going to look like?". According to 2013 Human Capital Global trends report, "Resetting Horizons" by Deloitte, it is one of the major questions for international businesses. The last two decades have seen some major changes already. Take for instance the way people informally connect in the workplace. In the 1990's organisational change focused on people connecting around the copier or a water tap in the office. Now more and more people work from home. This gives great flexibility for employees to combine work with other activities and duties, like taking care of kids or sick relatives. Adriana Lopez writes in Forbes magazine: "While the workforce continues to shift, traditional office settings will become as obsolete as fax machines and dial up Internet."

In the future, this shift will only increase. Work will be more and more a combination of going to the central office a few days and teleworking (working from home, co-working space or smart work centre). The active work model will allow people to work from a variety of spaces, and is central to the Digital Work Hub Project. The 12 month project is not going to build the hubs, but will provide the research to enable a development network of Digital Workhubs across South East Queensland (SEQ). The aim is to avoid a brain-drain from the regions, diversify the employment base and increase participation opportuni-

ties. The Project is a collaborative initiative between five Regional Development Australia committees (Gold Coast, Moreton Bay, Logan Redlands, Brisbane and Sunshine Coast).

Developments in communication technology will deeply influence our way of life: the way we communicate, how we work and how we use space in the city. At the moment we are only experiencing the start of these changes. We need to understand the principles of this Digital Urbanism if we effectively want to facilitate, design and build smart cities. It can be a catalyst for revitalising urban areas: in the city, on the fringe and in the regions.

The number of co-working places has grown dramatically around the world. In some places growth rates are over 1000%. There are several places in Melbourne, Sydney and Perth. BIZ DOJO, for instance, is a frontrunner in co-worker places in New Zealand and is providing an activation framework for South East Queensland. The growth figures of co-working places, however, do not show how many initiatives fail. Many don't make it because they do not pay enough attention to the curation of the spaces and to their place within the wider city/region. How do we attune the technology to how people want to live and work?

The Digital Workhubs Project looked at successful examples to research how they are organised. The City



Number of registered co-worker spaces worldwide as of Febr. '13



Overview of commuters in SEQ, as mapped by the Project

of Amsterdam, for examples, collaborated with seven companies to pilot co-working spaces in 2009. The pilot worked really well and by 2011 there were already 120 private owned co-working centres. The City now saves more than 10 million per year on office space costs by hiring workspaces in these centres instead. Another interesting example is Cisco, the US internet networking company, who developed a blueprint for smart and connected communities (see link). The company has partnered with many cities to work on the realisation of smart and connected cities.

Why are these developments of interest for SEQ? Is there a market for Digital Work Hubs in this region? To answer this, the Project will carry out a market research, regional analysis and economic analysis. The market research is mostly complete and the rest will follow soon. The work will include investigating the impact of additional residents and jobs in regional centres. A net benefits for infrastructure, transport and land-use will be made, comparing Business-As-Usual with moving toward more compact cities, supported by better transport linkages .

Bronwyn shows some of the market data that has been collected and mapped so far. In total for instance 190,842 people commute daily from the Sunshine Coast region to Brisbane. Additionally many people commute between the region's districts. The Project has mapped where these people come from and where they are going too. (For



On of the regional maps, mapped by the Digital Workhub Project

more maps, see the market-research on the [Digital Work Hub](#) website.)

The number of commuters from the Sunshine Coast to Brisbane increased 38% since 2006. From the Gold Coast this is even more. One of the reasons for this increase is that many people moved to the coasts for a lifestyle change prior to the Global Financial Crisis (GFC). After the GFC, many people had to return to jobs in Brisbane, choosing to commute instead of moving. This creates a huge pressure on the infrastructure network.

The commuters are then divided into knowledge workers and workers who need the interaction with colleagues to do their job. The first group are commuters with a high potential for working in Digital Workhubs. The second have a medium potential.

Other parts of the research show that every knowledge worker job that is created, produces five additional other jobs. Combined with the commuter data, this gives Local Governments the incentive to promote and support businesses that will start Digital Workhubs in the region and outer city suburbs.

Bronwyn underlines that this is work in progress. The Digital Workhub Project is constantly adding information to the website. The project is also looking for personal experiences. People are invited to share their stories (and

frustrations) about commuting and co-working. Everybody can upload and share their story on the 'Get involved' page of the website.

Interesting links:

- *The Digital Workhub Project*, website
- *It's (almost) all about me; workplace 2030*, publication by Deloitte Australia
- *Coworking, is it just a fad or the future business*, article by Adriana Lopez on the Forbes website
- *Amsterdam Smart City*, website
- *Smart City Framework, a systematic process for enabling Smart+Connected communities*, publication by Cisco

Sustainable urban transport corridors

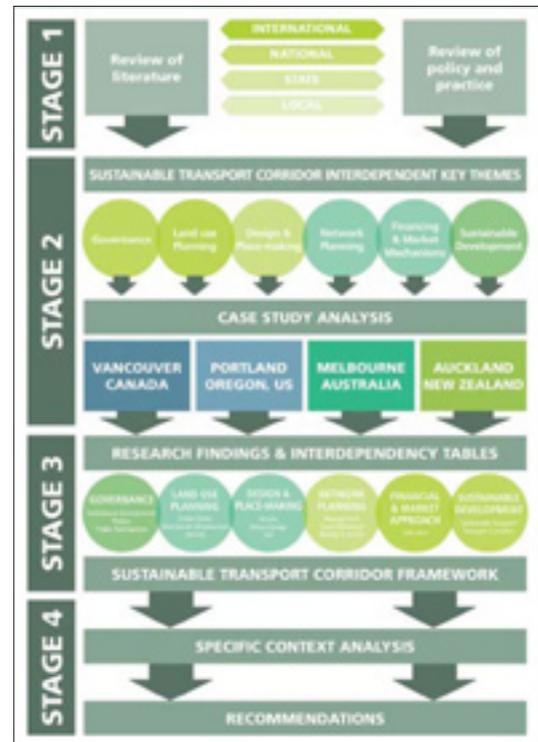
by Nicholas Stevens



The research that Nick presents has been undertaken by himself and Bronwyn, the first presenter, and with the support of the Queensland Department of Transport and Main Roads. The research does not strive to come up with detailed design solutions. It rather aims to examine existing national and international policy and practice, to provide perspective on SEQ urban road corridors. The result is a practitioner's resource to better understand and plan these corridors. In the research it has become clear that we should look at these corridors not just as roads. We have to consider the adjoining zones that are influenced, as a greater urban corridor, up to 300 metres on either side.

The research is done in 4 steps:

- Review of national and international literature and policy;
- Case study investigations;
- Findings and interdependence of the issues; and
- Application to SEQ and the Sunshine Coast.



The four stages of the research project

The literature shows that there are many interpretations of what a transport corridor is. Some important aspects are often not considered, like the connection to the people who use it and to place, and to the urban context within which they operate.

The literature study generates 6 key themes:

- Governance; not only the political process, but also for instance community consultation;
- Land use planning; including density;
- Design and place-making; including function, context and Transit Oriented Developments (TOD);
- Network planning;

- Finance and market mechanisms; like economical development and value capture;
- Sustainable development.

Case studies

Transport corridors in four cities are reviewed, regarding the 6 key themes. The cities are Vancouver (Canada), Portland (Oregon - USA), Melbourne (Australia) and Auckland (New Zealand).

This review gives a wealth of information. The document, "A Leading Practice Framework for Sustainable Transport Corridors; Sustainable Transport Corridor Research", gives an elaborate report of the case study results. Nick highlighted a few of the results per city.

In **Vancouver** three corridors are analysed: an established Rapid Bus Line, the Cambie Road TOD corridor, and an inner city separate cycle corridor. This city has a 30-year trajectory and strong urban growth boundaries. In **Portland**, the point of interest is the strong community participation processes. The city has a distinct light rail TOD strategy, with notable network management and quality of service. Here two corridors are studied: a streetcar line in the inner city and the mature TriMet Yellow line, a light rail corridor based on TOD-principles. In **Melbourne** the 'Urban Corridor Plan of 2009' is examined. Striking is how the sustainability aspect of the transport network deteriorates outside of the CBD. The network is partly privatised and the management is disjointed. The urban growth boundaries are negotiable and the construction of tollways continues. In **Auckland** the focus is on governance and financing, with a strong path dependency on roadway funding. Two corridors are reviewed here. The central connector corridor shows a great coordination of the works, while a highway corridor plan put more emphasis on building professional relationships.

Framework and conclusions

The literature and case study results are developed into a framework to provide better understanding urban



Main conclusions of the Auckland case study

transport corridors. For each key theme the framework gives a list of best-practice aspects that are deduced from the literature and case studies. Each theme is considered at four scales (regional, local, corridor and site). A matrix shows to which other key themes each aspect is related.

In addition to the study, 35 recommendations are formulated for SEQ and the Sunshine Coast. (The recommendations are not available in the research report.) Many of the recommendations are about the alignment of ideas, regulations, priorities and the allocation of funding. Nick reveals a few examples.

- Transport corridor design in itself is interesting, but only few are done well. Too many different ideas, competing

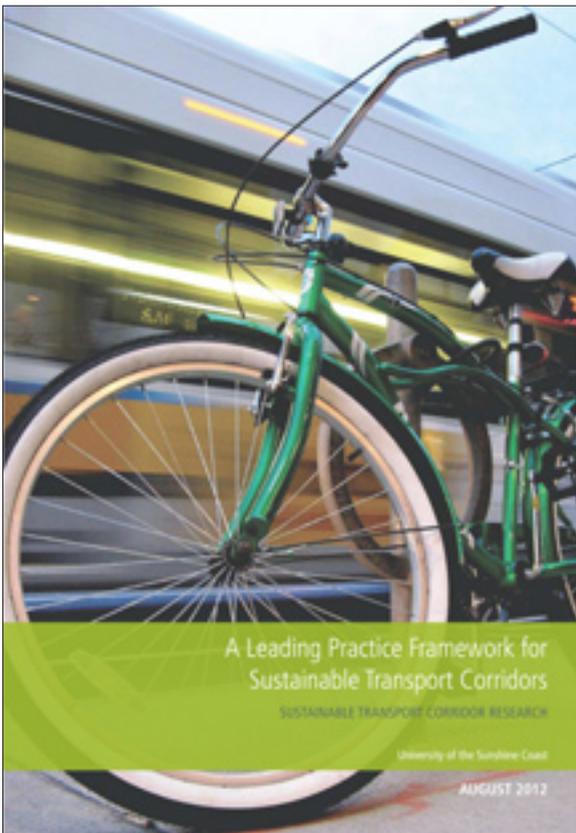


Example of the framework pages

priorities and fragmentation across stakeholders reduce the effectiveness of the result.

- A threat that needs to be addressed is the fear by the community for higher density that might accompany the corridor development and how that might look like.
- On the Sunshine Coast 10% of commuters walk or cycle, while only 2% uses public transport. This is alarmingly low. The substantial contribution cycling can provide is often overlooked and neglected.

The purpose of the study is to make information of best practices readily available and to stimulate the further development of knowledge. Building partnerships and collaborations are essential to learn and realise better results.



Cover of the research report

Transit urbanism; thinking beyond the ticket line

by Toby Lodge



Before elaborating on two urban transit projects, Toby first provides a few striking statistics.

- 15 years ago, 80% of people chose a job first and then where they wanted to live. Now 64% choose a location first.
- Cities define the quality of life for most people, certainly in Australia, since 80% of our population lives in cities.
- 80% of the economical value is made in cities.

There is a rising awareness that making good places for people is important for the quality of cities. We can no longer rely on just private cars for our transport and keep the quality of life we want. We need to invest in alternatives, like public transport. How we stack up the advantages of public transport for politicians and treasury will depend on three factors: encouraged use, value capture, and integrated decisions.

Toby presents several aspects of the Cross River Rail project. The Government's announcements about the Brisbane Underground, have added a different complexity to the project. Therefore we have left this part of the presentation out of the summary. If you are interested to know more about the plans, you can check out the [project page](#) on the Queensland State Department of Transport and Main Roads.

Gold Coast Rapid Transit Corridor study

The Gold Coast Rapid Transit Corridor Study explores the interaction between the city fabric and the new light rail alignment. The 17km rail line, which is under construction as of August 2013, travels through the 'glitter strip' of the Gold Coast, capturing 2000 hectares of prime real estate.

A closer look at this area shows series of towers, built around views to the sea and distant mountains. The boom / bust property cycle has left gaps in the urban fabric at ground level. Much of the Gold Coast's development has occurred after the 1950's, when the car emerged as a major factor in city and urban design. The resulting streetscape is now dominated by cars with limited provision for pedestrians.

By 2031, the Gold Coast is projected to have a population growth in the order of 50% and employment growth of around 100%. How can this growth be accommodated? This projected growth equates to nearly 50,000 additional dwellings or 5 million m² of floor space - almost equivalent to the size of Brisbane CBD (6 million m²). Using an average 25 floors per tower building, accommodating this



Overview of the vision impact on the corridor study area

growth would mean a dense forest of towers, completely covering the skyline of the strip. This is clearly not a desirable scenario. So how is this avoided?

The current development is predominantly a single tower on a plot primarily focussed on views, and resulting in a less active, car-dominated streetscape. The same volume of development could also be built using a range of development forms including mid-rise development, with street-level integration, which is a form presently lacking on the Gold Coast. The latter would create better urban streets and a diversity of housing, and even present cost savings when compared with the high-rise tower. HASSELL has worked out a few demonstration projects to prove the case. The variation of built form, combined with a polycentric approach can create a logical and connected city structure. A combination of high-rise, mid-rise and low-rise renewal focused around stations can deliver a diversity of streetscapes and a responsive city form and skyline.



Example of the street-oriented, mid-rise development

A similar exercise is completed for streets, including 10 street typologies designed to improve active transport opportunities, accommodate street trees, and provide a more walkable and pleasant pedestrian environment.

The Gold Coast is often thought of as a beach city, but another characteristic of the city is its canals. Many great cities in the world are canal cities. The Gold Coast has



Impression of the densification and varied skyline.

more waterways than Amsterdam and Venice combined, however, on the Gold Coast these canals are hard to access as most of the water edges are privatised. Analysis indicates that Amsterdam offers high levels of accessibility with 52 bridges in a single square kilometre, whereas the Gold Coast, in its most 'bridge rich' area has only 3. The study contemplates the addition of many new bridges, in combination with the street framework to create a walkable city.

The study demonstrates it is possible to create a better city by combining the Rapid Transit system with better buildings, better streets and better places.

Interesting links:

- Gold Coast Rapid Transit Corridor study: [GCRT page](#) on the City of Gold Coast website. On this page you can find a link to the [full report](#).
- Summary of the [GCRT study](#) on HASSELL website.

Question time

The presentations are followed by a lively discussion. A few highlights:

Between the 2006 and the 2011 census, there has been no change in the amount of people working at home. But there is no information about the changes in transport behaviour in the census.

Talking to people, who use the co-working places in New Zealand, shows they do not really like working at home. It tends to be not very productive. That is a main reason why the co-working places work and attract people. Seeing other people work motivates. Users also influence each other in other ways, for instance to bicycle to work. One does it, shares the positive experience and others try it too.

A lot of media attention has been given to Brisbane Underground and its predecessor Cross River Rail. Emerging commitments are still yet to be matched with firm proposals or funding arrangements – but it was generally agreed that this type of project would be a 'game changer' for Brisbane. Rates on roads and petrol have been cut in recent years, not generating enough funds to improve the transport system. For developers it is logical to pay for the benefits they receive, e.g. through rail. This is however not used as a funding mechanism, because of a political fear to charge developers. Instead it all needs to

be funded by taxpayers' money. In Japan, 40-50% is funded through value capture. It is questionable though if land is valuable enough in Australia to pay for these kinds of investments. On the other hand, value capture is not the only possibility. Crossrail London, for instance, has begun to look a variety of funding models. Another reason that is brought up, is that the financial model for investment is wrong. A 20-year return is logical for road investments, but it is also used for rail, that is build for a 100 years.

The behaviour perspective in Australia is still completely based on cars. We need 'training' to appreciate rail. Younger people are already changing in this way. More and more young people not wanting a car! Although a big part of the population still clings to the 'quarter acre block with a Holden on the driveway'. How can we change that? It is believed that affordability of housing, the demographic shift

and the generation shift will have a big impact. It requires strong leadership, like shown on the Gold Coast, to anticipate on these changes and prepare for them. The real attitude change in the general public only happens when the rail is in operation, when shops notice the difference, etc. The chain of car use and everyday life (drop off at day care, sports, etc.) creates car-dependant behaviour. This can only change if the connections between the functions can efficiently be made through other means than the car.



Will the car always be a status symbol, or will it become as old fashioned as the carriage and replaced by something better







HEALTH AND THE CITY: GROWING PAINS

Forum 19 September 2013 at the TRI building, the PA Hospital
Campus, Brisbane



Summary by Hans Oerlemans

Forum Chair: John Loneragan, UDAL Vice President

Presenters:

- *Dr. Jeannette Young, Chief Health Officer, Queensland Health*
- *Angela Wright, Open Space Planner, Redland City Council.*
- *Prof. Øyvind Ellingsen MD PhD, Professor of Cellular Cardiology, Norwegian University of Science and Technology*
- *Prof. Billie Giles-Corti, Director of the Melbourne University School of Population and Global Health, VicHealth Centre for Community Wellbeing*

Introduction *by John Loneragan*

John starts with recognising the traditional owners of the land and welcoming all attendants. We have four speakers today. Jeannette Young will talk on the relation between health and the built environment. Angela Wright will



At the start of the forum

show us an innovative approach to open space planning, activating people in their own neighbourhood and at the same time reducing the costs of public space. Øyvind Ellingsen will share some research results on the effects of exercise on health. Melbourne based Professor Billie Giles-Corti will round the forum up with a reaction on the other three presentations.

But before we start, John thanks Wilson Architects and Donovan Hill, who sponsored today's forum. They are the designers of the building where we are today: the Translational Research Institute. John Thong of Wilson Architects gives a quick introduction to the design of the building, explaining how it provides connections on many levels. The building brings together four research institutes into one centre. It is designed in such a way that researchers see each other work and can easily meet, for instance in one of the many informal meeting places. On the hospital campus level, the building connects the bio-pharmaceutical research, manufacturing and hospital trials. It is connected with the city and other sites of the Brisbane Knowledge Corridor through public transport. The campus pedestrian route from the station leads through the building. The core of the building is the garden plaza, another informal meeting place, creating a big window to the city.

The Health of Queenslanders & improving the built environment

by Jeannette Young

For health professionals it is clear that the built environment has a big influence on our health. This raises the question: what is the best way to manage our environment, in order to support our health?

Queensland has one of the best health standards in the world. We are proud to have such a great climate, ideal for healthy living conditions. However, some real problems exist when it comes to urban environments that support healthy and active living. It is obvious that other countries, with worse climates, are doing better than us, often because they have less space and need to be more efficient. We still have a long way to go.

As health providers, we know that physical activity and healthy eating are a result of individual behaviour. But this is strongly influenced by a person's environment. We

acknowledge the need to work with the community and with urban design to create environments that encourage healthy and active lifestyles.

Huge challenge

At the moment we are one of the wealthiest countries in the world. But our way of life is not sustainable. We can't keep paying for the poor lifestyle choices we continue to make. The state health budget has increased a lot over the last decade and currently makes up 26% of the budget. The demand for health services will only grow further: People continue to live longer. Medical research advances and people expect access to the range of treatments that are possible. Reducing demand on the health system will be a difficult challenge. This requires society to adopt healthier and more active lifestyles.

In health, we have achieved a lot. Over the last decade, we gained 2 to 3 years of life expectancy. Deaths due to smoking have decreased 37% in the last decade and due to heart disease by 65% over the last 25 years. Vaccination has helped a lot and more cancer is detected earlier through screening. But where in the 20th century smoking was the issue, in the 21st century obesity will be the biggest challenge. It will have a huge impact on the health, productivity and wellbeing of Queenslanders. Jeannette illustrates this with some shocking facts.

- Already 1 in 3 adults is overweight and 1 in 4 is obese. And this is according to what people measured themselves. It is very likely the reality is worse.
- In 2008 obesity alone costed the Queensland community almost \$12 billion.
- The number of obese adults has doubled in the last 16 years. In the last 20 years it increased by 55,000 each year.
- One generation ago, kids were not overweight. Now 25% are and 10% are obese.
- All of this equates to a big health risk. Obesity shortens life expectancy by 2-4 years and severe obesity even by 10 years. That is the same health risk as smoking.

The urban design factor

In essence obesity is caused by consuming more calories than you use. This is strongly influenced by the access to healthy food and opportunities for physical activity in normal daily life. Both are affected by the design of our living environment.

Our modern environment is designed around the car, pushing active behaviour out of our daily life. At this moment only 58.9% of adults have sufficient physical activity for health benefits, which is as little as 30 min/day, 5 days a week. Only 6% of the adults cycle for transport at least 1 day a week. Only two-thirds of adults walk for transport at least 1 day a week. Only 44% of our children are active for at least 1 hour a day. 47% of children travel only by car to and from school.



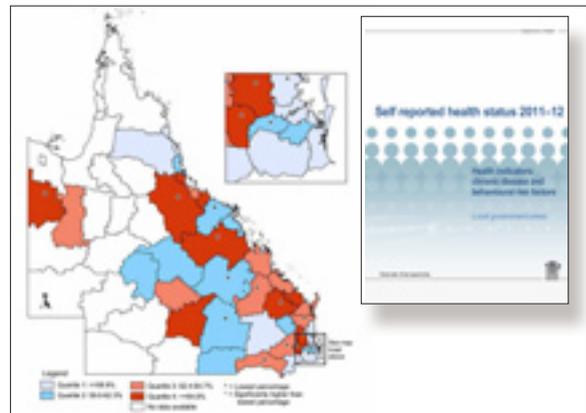
In a regular suburb the garage door is more important than the front door.

The car made it possible to travel longer distances. This led to suburban sprawl with large single-use areas, in decreasing density, well segregated from other uses. Key destinations, like work, schools and shops, are at such a distance that active transport, such as walking or cycling, is discouraged. Although cycle paths are increasing, it tends to stay a scattered patchwork, due to the layout of the suburbs. Patterns with heavy traffic roads and an abundance of cul-de-sacs and large blocks, makes even short trips difficult by any other mode than the car. Public transport is under developed. Stairs are often discouraged from dwelling designs and in other areas replaced by escalators.

Since 1945 urban sprawl has swallowed up more than 1 million hectares of agricultural land close to the city. The increasing distance and transport costs led to a reduction of affordable fresh food in cities. Fast food outlets have taken advantage of this situation, offering high sugar, high fat, energy dense food, in locations that are easily accessible by car and promoting it with big signs. In Queensland we allow massive signs for fast food chains, more and bigger than in Europe. All in all, the World Health Organisation (WHO) has described western environments as obesity-promoting.

Healthier through better design

If we want to lessen the burden of the health budget, we need to change our environment to support daily healthy living. While the provision of a health care system is a state responsibility, the design of our urban areas is largely the responsibility of local councils. To support councils, the Department of Health has released the *“Self reported health status 2011–12”*, with health information at the local governmental level, in the hope of raising awareness and thinking about the risks in the local community and their relation to the urban form.



Report by the Department of Health, with a figure showing percentage of adults who are overweight per council. Red = more than 64.8% is overweight!

There are several things that can be done. Jeannette points out that the ideas she presents are not new. They can all be found in the various brochures of the Heart Foundation .



Community garden on the Sunshine Coast

Urban agriculture helps to promote healthy food. The [Permaculture Townsville](#) and [Stephanie Alexander's kitchen garden](#) program are some great examples. Community gardens and farmers markets bring people in contact with healthy food. Educating children, through school gardens for instance, brings the message home very effectively.

(Also interesting: Michelle Obama [Let's move initiative](#) promotes community gardens for exactly this reason. The US Department of Agriculture has a whole [section on community gardens](#) on their website.)

Changing the uniform suburbs into a variety of uses and more compact developments, will lead to shorter

trip distances and encourage active transport. We need attractive and well-maintained walk and cycle ways and to provide better outdoor space to use. Improving the environment can increase physical activity by as much as 161%. As support, Jeannette mentions several studies in the US.

- Research on walkable neighbourhoods showed that in highly walkable areas, the amount of walking doubles and half as many residents are overweight.
- Light rail increases walking too. A study showed a sizable weight loss among people using light rail compared to non-users.
- [New bike lanes in New Orleans](#) increased the amount of users on an average day by 57%.
- A study with 10,000 participants, on the relation between travel patterns and obesity, concluded that the land-use mix had a strong association with obesity. Increasing the mix by 25% was associated with a 12% reduction in likelihood of obesity. Each additional hour in the car per day related to a 6% increase in the likelihood of obesity.

All in all there is plentiful evidence that our health is strongly affected by the design of our cities. At this moment, that design burdens many people with poor health environments. We have to make the individual responsible for their health. Therefore we have to make the healthy option easier, or maybe even the only choice.



Some of the brochures available on the Heart Foundation's website

Interesting to check:

- Heart Foundation - [active living](#) information page
- “[Active Living Resources Flyer](#)” gives an overview of 9 brochures available
- Or download one of the [many brochures](#) through this link to the Heart Foundations website.

A Physical activity approach to planning Open Space

by Angela Wright

While Angela presents, she shows a film of a bicycle tour through Redland.

Angela states that her work is highly influenced by the Heart Foundation ideas. She will show a different approach to open space planning: based on activities instead of the traditional approaches that depart from percentages and surface areas per ratio of residents. This leads to better outcomes for the users and a better use of the limited council resources.

It is clear that regular physical activity leads to less disease and can easily be facilitated by public space. The second reason to innovate open space planning is economic: local government, as well as developers, cannot afford to acquire and maintain public space that is not used.

The practical question is however: which activities should be facilitated and where? How is the flow from house to road and footpath and on to parks and public space perceived? Are people doing this at ease? How is the mix of ages in public space? What can stimulate a greater diversity of activities? To find out how people use these areas, and what people would like to do close to where they live, Redland has organised “walk and talk” events with many community members.

The outcomes have been used to elaborate the analysis of the open space use. Redland now knows exactly:

- what type of land is needed,

- for what type of activities
- and at which locations it is needed.

The city has developed this into activity standards on two levels: the neighbourhood and the suburb. For each level the activities that are needed on that level are defined. For neighbourhoods these are for instance: a community garden, walking, socialising, toddler play, teenage hangout, a physical activity park and dog exercising. On the suburb-level these are activities as picnic facilities, integrated play, bushland walking, space for weddings, for events and festivals and a skate or BMX park. In medium density and isolated areas it becomes necessary to combine activities of both levels through more multi-use areas.

This has led to an activity bases approach, moving away from standards like 4.3 ha. / 1,000 people. Instead of achieving the numbers, the objective is now to increase the diversity of activities; not amount of space, but how that space is used and how the network binds them together.

Through the process, Redland has discovered that there was not much diversity in their open spaces. You find the same activities everywhere, so people have no incentive to walk to another place for a different experience.



Activity Based Open Space Planning Resource Toolkit, Part 1 and Part 2, available through the Redland City Council website.

To make the approach effective, it is important to implement it at the systems level. All stakeholders are needed in changing the systems, schemes and reality. The process has started only 10 months ago now, but already the council systems are changing into a more integrated approach.

Redland City Council, together with the LGAQ and QLD government, has made a toolkit for other councils on this approach. You can download the Activity Based Open Space Planning Resource Toolkit, [Part 1](#) and [Part 2](#), from the Redland City Council website.

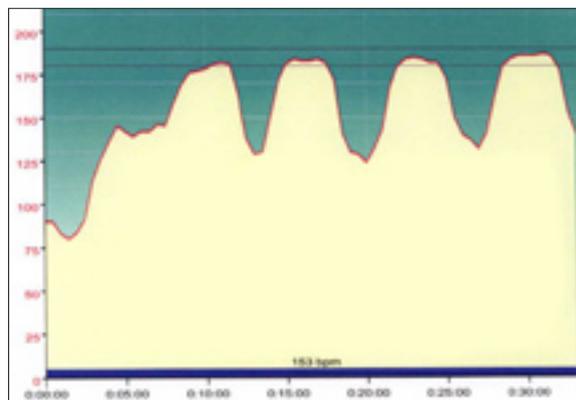
Stairs and pathways for fitness and health

by Øyvind Ellingsen

Øyvind first introduces the [Cardiac Exercise Research Group](#) (CERG) of which he is part. They are based at the Norwegian University of Science and Technology in Trondheim. In Norway they are not blessed with an agreeable climate like in Queensland. The winters are mostly icy and slippery, not ideal for an outdoor lifestyle. But people still have the same possibilities for exercise close to where they live. Øyvind is presenting some of the results from scientific research that has been done on the health effects of exercise.

CERG has done much research on the effects of interval training: 4x4 minutes of intense exercise at 90-95% of the maximum heart rate, creating a shortness of breath, just out of the comfort zone. This does not need to be running or jogging. Brisk walking or walking stairs is often enough. The team studies the larger health effects and the cellular mechanisms. They are also interested in what is practically feasible and efficiency versus volume of exercise. With how little pain can you reach cardiac gain?

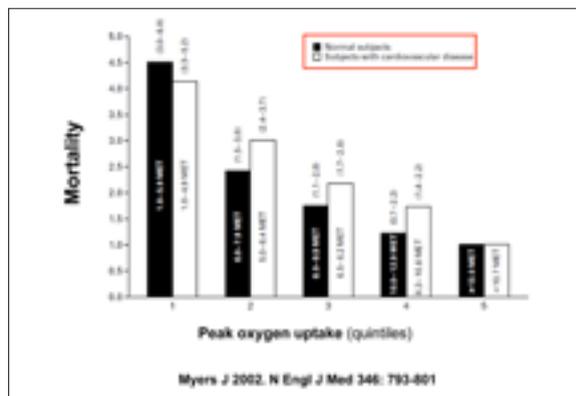
Some of the findings come from the [‘HUNT study’](#), a series of 3 big studies done between 1998 and 2008, with more than 100,000 participants in total. They have found



Principle of interval training (hor. = minutes, vert. = heart rate)

that only one single exercise session at high intensity per week, can have a big effect on the cardiovascular mortality. It reduces mortality by women with 51% and by men with 39%. A higher exercise frequency has little further effect.

The outcomes are in line with a 2002 US study, on the correlation between fitness level and survival. They have researched the relation between fitness and several risk factors such as diabetes, smoking and overweight. The study shows that high interval exercise makes a difference of 1 to 1.5 years. Also, the largest improvement comes from the first step: moving a little instead of nothing. So it is better to help people, who don't walk at all to start moving, then to encourage for instance cyclists, who are already activated, to do more.



First steps are important

How does this work on a physiological level? This has much to do with the maximal oxygen uptake mechanisms. Improving the oxygen uptake,

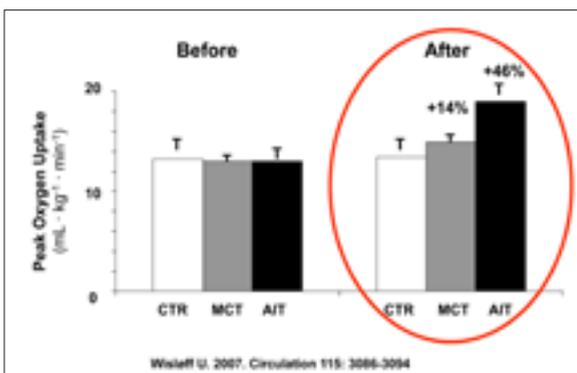
- improves the pump function of the heart, which reduced the risk of sudden death,
- enhances the arteries, by increasing blood flow and preventing clogging, thus reduces the risk of stroke and heart attack, and
- increases metabolism through influencing the skeletal muscles, which reduces the risk of diabetes.

These effects have been researched through animal tests. They have let rats run at different intensity levels. Moderate exercise (easy jogging at 65-70% of the Heart Rate peak) showed a 100% increase of the maximal oxygen uptake. High intensity exercise (vigorous running at 85-90% HR peak) however did increase the uptake by 300%.

But that are animals. Would a failing human heart be able to take it? This has been tested through three intervention groups that were put on different exercise regime:

- high interval training at 95% HR peak,
- moderate continuous training at 70% HR peak and same distance,
- control group with no special program, just the general exercise advice from the GP.

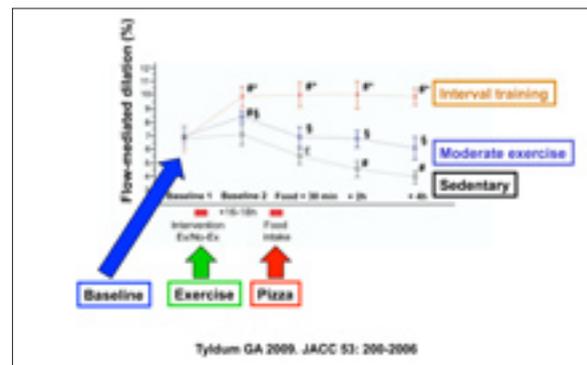
After 12 weeks doing the exercise program at home, the groups were tested again. The high intensity group showed an increase of their maximal oxygen uptake by 46%. The



Aerobic capacity - VO_2 peak

moderate group increased 14% and the control group stayed the same. They also asked the participants how they felt. The moderate group felt better and the high one even more.

The arterial function was measured in another research, where young people were asked to exercise and then were given a pizza, to measure the impact on their blood flow. The same three levels of exercise were used. The blood flow of the control group declined greatly after the pizza. The moderate group declined too, although less. The high intensity group however was resistant to the effects of the pizza.



Arterial function, exercise and pizza

A last study that Øyvind presents, researched the effects of training on metabolic syndrome, a combination of obesity, glucose intolerance, high blood pressure and lipids. Three groups were put on an exercise program of 3 times a week, 16 weeks long. The high group lost 3% of their weight, the moderate 4% and the control group had no change. The arterial functions and blood pressure improved in the moderate and high group. The insulin receptor improved massively in the high group, but stayed the same in the moderate group. This research is now done with many different groups, with different ages and different risks. Every time the results are the same.

It is clear that even a little bit of high intensity exercise in our weekly life can increase health dramatically. So which

physical activities should the built environment support, so that people can enjoy these health benefits? Øyvind lists three things:

- a minimum of 30-60 min. brisk walking every day,
- some exercise, challenging the comfort zone, once or twice a week, and
- walking circuits, active transport, recreational and social activities that reduce sitting. Because the more active we are in our daily life, the better our health will be.

Co-benefits - Developing a more complex response

by **Billie Giles-Corti**

Billie talks to us through a video connection with Melbourne. She thanks the other 3 speakers for their presentations and mentions the talks made her think of an expression she once used in an article: *“death by urban sprawl”*. Physical activity is the magic bullet for our health. We need activating built environments to cash in on it. At this moment only 15% of the Australian population is physically active. The health sector can't solve the problems that this causes. The built environment will need to provide the right circumstances to do so.

We need walkable neighbourhoods. But what does walkability mean? It is not just mixed use or more density. Getting to 15 du/ha. is not enough. We need a minimum of 19 du/ha. to make a difference. Walkability also involves a network, like Angela pointed out. We need to rethink the way we deal with traffic, especially in relation to our children. Take the schools for instance. They are planned with a focus on cars: well connected to roads, for drop-off and pick-up, resulting in situations that are not planned for children to walk. We should maximise connectivity and minimise conflicts of pedestrians with motorised traffic.

Mixed use is an important ingredient to improve walkability. Big shopping centres reduce walking, while main streets make a better walking environment. A bit more terrain, with some light slopes, might help too. They

integrate the exercise challenges Øyvind talked about in our environment, reducing diabetes through living our daily life.

Low density is certainly part of the problem. There is nothing to walk too. But high density also has its challenges. Noise for instance. Or respiratory problems due to pollution of cars, especially since we tend to plan high density along the busy roads. Or social issues: who is going to live there? How do we organise the social interaction that is needed for a healthy society? And where is that higher density located? We need to specifically design for every situation, to level out the negative aspects. High density could be located close to recreational space, to compensate for the reduced amount of private recreational space.

Three to six storeys high is very effective to improve walkability. You don't need high-rise for that. We should pay more attention to stairs in our buildings, making the use attractive instead of stashing them away in dark corners. Also the experience of nature in our environment makes walking more attractive.

In the 19th century, sanitation was the challenge that drove urban innovation. Health and city planning together attacked the issues. Water and sewer systems were installed to protect health and fight diseases. Now these services are an ordinary right of life. The issues of the 21st century are about active life. Again the health and space disciplines need to work together. This time to include incentives and services for active living. Services like Public Transport at the start of building neighbourhoods, not afterwards. We need to build communities in a more integrated way.

Closing time

John thanks all four speakers for their highly informative and inspiring presentations. It is clear that we can only solve this through collaboration. Not one person has the solution. The forum has been a long event already, so instead of doing questions, John suggests continuing the conversation over drinks in the garden plaza.





ILLUSTRATION SOURCES

Amanda Sutherland / Playscape Creations:

page 34 bottom, 35 left-top & left-middle, 39 top & bottom, 47 top & middle & bottom-left & bottom-right, 48 middle & bottom, 49 bottom

Ben Buxton:

page 36 left-middle

Ben ter Mull / OKRA landscape architects:

page 21 right, 22 left, 27, 30 left, 34 top, 38 middle-right

Brisbane Heritage (brisbaneheritage.org.au):

page:35 right-middle & right-bottom

Deicke Richards / Phil Smith:

page 44, 45 left-top & left-bottom & right-top & right-middle

Deparment of Health, Queensland:

page 96 right

Juris Greste / UDAL archive:

page 8 top & bottom, 13 top & botton

Helene Høyer / OKRA landscape architects:

page 29 left

Hans Oerlemans / wOnder city+landscape:

page 2, 4, 6/7, 14/15, 18, 20 middle & bottom, 21 left, 22 right, 23 left & right, 24 top & bottom-left & bottom-right, 25 middle & bottom, 26 left & right, 28, 29 right, 30 right, 31 top & middle, 32/33, 36 right-top, 38 middle-left, 40/41, 42 bottom, 43 top, 46 bottom, 48 top, 49 top, 50/51, 52 top, 56 top-left & top-right, 57 top-left & top-right, 58 top, 60 top, 62/63, 64 bottom, 65 left, 69, 72/73, 74 top, 80/81, 82 top & bottom, 83 top, 85 left, 87 right, 90, 91, 92/93, 94 top & bottom, 96 left, 100/101

Hans Oerlemans, drawings by participants Beyond Accessibility workshop:

page 56 bottom- left & bottom-right, 57 bottom, 58 bottom, 60 bottom-left & bottom-right, 61

HASSELL / Toby Lodge:

page 88 left & right, 89

Heart Foundation:

page 97 bottom

Landscape Structures:

page 53 bottom, 55 top & middle & bottom

National Archives of Australia (primeministers.naa.gov.au):

page 68 bottom

Norwegian University of Science and Technology / Øyvind Ellingsen:

page 99 top & bottom, 100 left & right

OKRA landscape architects:

page 36 right-bottom, 37 left-middle & left bottom & right-bottom, 38 left-top, 70, 71

Peter Edwards / Archipelago:

page 74 bottom

Peter van Bolhuis / Pandion:

page 36 left-bottom

QUT The Cube:

page 68 top

QUT Urban Informatics / Marcus Foth:

page 64 top, 65 right, 66, 67 left & right

Redland City Council:

page 98

RTV Oost (www.rtvooost.nl):

page 37 right-middle

Sharyn Kerrigan / Beach House Architecture:

page 97 top

The Digital Work Hub Project / Bronwyn Buksh:

page 83 bottom, 84 top-left & top-right

Tobias Volbert / Playscape Creations:

page 54, 79 bottom

UDAL archive:

page 16, 75 left & right, 76 left & right-top & right-bottom,
77 left & right-top & right-bottom, 78, 79 top-left &
top-right

University of the Sunshine Coast:

page 46 top

University of the Sunshine Coast / Nicholas Stevens:

page 85 right, 86 top & bottom, 87 left

Urbis / Stephanie Wyeth:

page 42 top, 43 middle & bottom

LINKS

Continuity of Culture

Belvedere Memorandum

http://www.belvedere.nu/download/belvedere_memorandum.pdf

Province of Utrecht

<https://www.provincie-utrecht.nl/onderwerpen/alle-onderwerpen/kwaliteitsgids/>

Project page Quality Guides

<http://wonder-cl.com/quality-guides-national-landscapes/>

paper "Continuity of Culture"

http://wonder-cl.com/wp-content/uploads/2013/03/PIA13-Paper_Continuity-of-culture_Oerlemans-Stevens.pdf

wOnder city+landscape

<http://wonder-cl.com/quality-guides-national-landscapes/>

New-peat-lands, Meppel

<http://wonder-cl.com/nieuwveense-landen-new-peat-lands/>

Heart of South, Hengelo

<http://wonder-cl.com/heart-of-south/>

Dom Square, Utrecht

<http://wonder-cl.com/dom-square-marking/>

Designing Resilient Neighbourhoods; Building the Case for Change

www.usc.edu.au/seniorliving

<http://www.usc.edu.au/seniorliving>

Beyond Accessibility: City of 7 Senses

7 Senses Foundation

<http://www.7senses.org.au>

Innovations archive of Playscape Creations

<http://www.playscapecreations.com.au/category/innovation-archive/>

Landscape Structures

<http://www.playlsi.com/>

Urban Informatics

QUT Urban Informatics

<http://www.urbaninformatics.net/projects/>

Urban Atmospheres

<http://www.urban-atmospheres.net/projects.htm>

Participatory Urbanism

<http://www.urban-atmospheres.net/ParticipatoryUrbanism/index.html>

LIVE Singapore!

<http://senseable.mit.edu/livesingapore/visualizations.html>

Building a smarter favela: IBM signs up Rio

<http://www.fastcompany.com/1712443/building-smarter-favela-ibm-signs-rio>

How Data is Making Rio de Janeiro a Smarter City

<http://thenextweb.com/la/2011/07/13/how-data-is-making-rio-de-janeiro-a-smarter-city/>

Smartfutures

<http://www.urbaninformatics.net/projects/smartfutures/>

UrbanInformatics

<http://www.urbaninformatics.net/media/>

Discussions in Space

<http://www.urbaninformatics.net/media/dis/>

The Cube

<http://www.thecube.qut.edu.au/>

Urbanscreen

<http://www.urbanscreen.com/usc/41>

Media Architecture Institute

<http://www.mediaarchitecture.org/category/media-facades/>

hole in the earth

<http://v2.nl/archive/works/hole-in-the-earth>

flow-wall

<http://www.studioroosegaard.net/project/flow/photo/#flow-5-0>

digital water pavilion

<http://www.carloratti.com/project/digital-water-pavillion/>

nearest places app

http://acrossair.com/acrossair_app_augmented_reality_nearest_places.htm

[streetmuseum](http://www.museumoflondon.org.uk/corporate/press-media/press-releases/streetmuseum-hits-streets-london/) <http://www.museumoflondon.org.uk/corporate/press-media/press-releases/streetmuseum-hits-streets-london/>

[application](http://www.museumoflondon.org.uk/Resources/app/you-are-here-app/home.html) <http://www.museumoflondon.org.uk/Resources/app/you-are-here-app/home.html>

[facebook.com/urbaninformatics](https://www.facebook.com/urbaninformatics) <https://www.facebook.com/urbaninformatics>

Creating Sustainable Urban Transit

[digital work hub](http://www.digitalworkhub.com.au/research/market-research/) <http://www.digitalworkhub.com.au/research/market-research/>

[The Digital Workhub Project](http://www.digitalworkhub.com.au/) <http://www.digitalworkhub.com.au/>

[It's \(almost\) all about me; workplace 2030](http://www.deloitte.com/assets/Dcom-Australia/Local Assets/Documents/Services/Consulting/Human Capital/Deloitte_report_Workplace_of_the_future_Jul2013.pdf) http://www.deloitte.com/assets/Dcom-Australia/Local Assets/Documents/Services/Consulting/Human Capital/Deloitte_report_Workplace_of_the_future_Jul2013.pdf

[Coworking, is it just a fad or the future business](http://www.forbes.com/sites/adrianalopez/2013/04/25/coworking-is-it-just-a-fad-or-the-future-of-business/) <http://www.forbes.com/sites/adrianalopez/2013/04/25/coworking-is-it-just-a-fad-or-the-future-of-business/>

[Amsterdam Smart City](http://amsterdamsmartcity.com/) <http://amsterdamsmartcity.com/>

[Smart City Framework, A systematic process for enabling Smart+Connected communities](http://www.cisco.com/web/about/ac79/docs/ps/motm/Smart-City-Framework.pdf) <http://www.cisco.com/web/about/ac79/docs/ps/motm/Smart-City-Framework.pdf>

[project page](http://www.tmr.qld.gov.au/Projects/Name/C/Cross-River-Rail.aspx) <http://www.tmr.qld.gov.au/Projects/Name/C/Cross-River-Rail.aspx>

[GCRT page](http://www.goldcoast.qld.gov.au/rapid-transit-gcrt-corridor-study-6008.html) <http://www.goldcoast.qld.gov.au/rapid-transit-gcrt-corridor-study-6008.html>

[full report](http://www.goldcoast.qld.gov.au/rapid-transit-corridor-study-august-2011-6120.html) <http://www.goldcoast.qld.gov.au/rapid-transit-corridor-study-august-2011-6120.html>

[GCRT study](http://www.hassellstudio.com/en/cms-projects/detail/gold-coast-rapid-transit-corridor-study-phase-2/) <http://www.hassellstudio.com/en/cms-projects/detail/gold-coast-rapid-transit-corridor-study-phase-2/>

Health and The City: Growing Pains

["Self reported health status 2011-12"](http://www.health.qld.gov.au/epidemiology/documents/srhs-localgovarea-2011-2012.pdf) <http://www.health.qld.gov.au/epidemiology/documents/srhs-localgovarea-2011-2012.pdf>

[Permaculture Townsville](http://permaculturetownsville.org/) <http://permaculturetownsville.org/>

[Stephanie Alexander's kitchen garden](http://www.kitchengardenfoundation.org.au/) <http://www.kitchengardenfoundation.org.au/>

[Let's move](http://www.letsmove.gov/) <http://www.letsmove.gov/>

[section on community gardens](http://afsic.nal.usda.gov/farms-and-community/community-gardening) <http://afsic.nal.usda.gov/farms-and-community/community-gardening>

[New bike lanes in New Orleans](http://activelivingresearch.org/health-impact-bike-lanes-new-orleans-louisiana) <http://activelivingresearch.org/health-impact-bike-lanes-new-orleans-louisiana>

[active living](http://www.heartfoundation.org.au/active-living/pages/welcome.aspx) <http://www.heartfoundation.org.au/active-living/pages/welcome.aspx>

["Active Living Resources Flyer"](http://www.heartfoundation.org.au/SiteCollectionDocuments/Active-Living-Resources-Flyer.pdf) <http://www.heartfoundation.org.au/SiteCollectionDocuments/Active-Living-Resources-Flyer.pdf>

[many other brochures](http://www.heartfoundation.org.au/active-living/Pages/active-living-resources.aspx) <http://www.heartfoundation.org.au/active-living/Pages/active-living-resources.aspx>

[Part 1](http://www.redland.qld.gov.au/SiteCollectionDocuments/_Recreation_%20Facilities/Parks/Toolkit-Activity_Based_Open_Space_Planning_part1.FINAL.pdf) http://www.redland.qld.gov.au/SiteCollectionDocuments/_Recreation_%20Facilities/Parks/Toolkit-Activity_Based_Open_Space_Planning_part1.FINAL.pdf

[Part 2](http://www.redland.qld.gov.au/SiteCollectionDocuments/_Recreation_%20Facilities/Parks/Toolkit-Activity_Based_Open_Space_Planning_part2.FINAL.pdf) http://www.redland.qld.gov.au/SiteCollectionDocuments/_Recreation_%20Facilities/Parks/Toolkit-Activity_Based_Open_Space_Planning_part2.FINAL.pdf

[Cardiac Exercise Research Group](http://www.ntnu.edu/cerg) www.ntnu.edu/cerg

['HUNT study'](http://www.ntnu.edu/research/research_excellence/hunt) http://www.ntnu.edu/research/research_excellence/hunt

["death by urban sprawl"](http://theconversation.com/death-by-suburban-sprawl-better-urban-planning-will-combat-sedentary-lifestyles-3395) <http://theconversation.com/death-by-suburban-sprawl-better-urban-planning-will-combat-sedentary-lifestyles-3395>

COLOFON

Title:

Practice Pillar 2013 Year Book

Editor:

Hans Oerlemans

Authors:

Hans Oerlemans, Juris Greste, Tobias Volbert

Text review:

Linda Cupitt, UDAL

Lay-out:

Hans Oerlemans, wOnder city+landscape

Published by:

Urban Design Alliance Queensland - Brisbane

www.UDAL.org.au

March 2014

ISBN 978-0-9924423-1-6

© 2014 UDAL Queensland

**Urban Design Alliance Queensland
Practice Pillar - 2013 Year Book**