Design Skills

Enquiry-by-design

Drawing by Peter Edgeley, most of the rest by Peter R
Observations of **design processes**  what is designing

**Working through** the design  drawings to reveal and test ideas

Design **thinking** drawing  drawings that represent and communicate conclusions

Understanding the DNA of **urbanism**  place and building types

Examples of workshop **drawings**  plans at different scales sections, diagrams
"When Urban Design Flim Flam Obstructs Good Urban Planning Outcomes."

When Lewis Keeble first began the town planning courses at the University of Queensland, at the end of the sixties, he brought a rich diet of British post-war planning, which included prescriptive master plans for whole towns, wrought in elaborate detail. By 1974, the emphasis had changed radically. Significant texts by Friend and Jessup (1969) and Faludi (1973) emphasised the futility of “blue print planning” and pointed to the uncertainties involved in planning complex large scale, urban situations, which required a more dynamic, process-oriented approach. (Friend & Hickling [1987], Faludi [1987]) People working in urban design and planning who come from a more architectural/design background sometimes seem not to have caught up with that sea change in planning theory, that emerged thirty years ago (or so), and which provides the best explanation of how cities are developed and “planned”. Sometimes, urban designers get too focused on end states in dealing with dynamic, large scale environments. In complex situations like rapidly growing urban centres, there is typically little certainty about important factors, that may critically determine the ultimate shape of the centre. When charrettes and workshops throw up “design solutions” for complex situations, which are only going to evolve over time, and where determining parameters will only be known in the future, they can obstruct a more appropriate approach to the planning of that area. Coomera Charrette is a classic case. Enormous resources were invested in producing a detailed “preferred design”, for a future centre that would be developed over twenty years and more, by a large range of stakeholders, most of whom could not be involved in the charrette process, because we could not know who they would be. The water colour paints were barely dry on the beautiful Charrette schematics, before there had been a change of government and the potential town centre access system, fundamental to the town centre design, had been changed by the decision to build the Brisbane-Gold Coast Motorway. When the Motorway was finally designed, three previously planned highway exits had been replaced with one motorway exit route, which just happened to be the planned town centre main street. The Council had nevertheless spent substantial political and financial resources on the Charrette, engaging with the community about all of the issues, and now found themselves with a fundamentally flawed concept, some years before anything substantial was built or likely to be built. That is not to say that there shouldn’t be urban design visioning, as part of the planning process for complex environments with a large number of players. However any broad scale urban design work must take place in a context where it is clearly understood that it will need to be continuing and iterative, and that the designs are scenarios rather than prescriptions. Master plan end states for large scale and/or long term subjects can distract decision-makers and the community, and when because of their brittleness they inevitably fall apart, leave a policy void and disillusionment; whereas an urban design approach that is better tailored to the uncertainties of the planning process will contribute to a more durable planning outcome. Sandman says.... To be ... continued” Jeff Humphries UDF Dec 2000

ACNU11Masterclass Perth  E-b-D Design Skills
All design problems are complex

How do you deal with complexity?

….seek ‘Perfect’ knowledge to make the best decisions?

…or do four options and commit to none

…or do nothing, (but do it well)
Some design concepts

‘Computer says no…’ (phrase)
Through too much analysis, a design problem is found to be too hard to solve, usually demonstrated on a computer drawn constraints plan

Stradivarius (n)
A design problem or solution that is perfect in every way ie it cannot be questioned or changed in any way, often found in road design

Flog the dead horse (phrase)
A design investigation of an option that (apparently) has no merit. The purpose is to understand why the horse should be dead and see if any DNA can be extracted to reveal why alive horses should be alive, not to show that the dead horse can be resuscitated
Some design concepts

We need to know the hand we are dealt and play our cards well. We think we have aces when we actually have two’s.

It is hard to juggle (and think about) more than 7 things at a time. Even 3 is hard. In the design problem, choose the balls to juggle and those to leave until later.

complex patterns can be made with simple strategies and tactics. Good design ideas weave together the threads of the problem (note these are traditional designs, each row has 2 colours with 5 row types)
The task of design is to make complexity, simpler and clearer
The hardest part of the drawing is knowing what to draw
The act of drawing helps you know what to draw

We draw to....
reveal ideas
test ideas
communicate ideas

Drawings have meanings
Lines have meanings - relative weights, thin and thick, importance, shadows
Lines are straight, dashed.....
curved, vegetation,
shapes, circles, squares,
Colours red, yellow green, intensity
Draw a Diagram how do you greet women in various countries of the world?
**design process observations**

The strategic informs the detail and vice versa

That is why you work at different scales and drawing types **at the same time**

Different scales suggest different foci of investigation

(heard in a workshop some time ago, I can’t design at 1:10000, only 1:5000 but dealt with issues at 1:2000 or 1000 thinking)

Do not make long lists, if you have a long list make it **shorter, group, prioritise, remove** or **leave until later**

Good ideas do more than one thing

Find ideas that connect different objectives **strategic** concepts

And begin to know the scale of the **DNA** of urbanism
Understand

Get to know the scale of urbanism and what could be solution types. Edinbarcortslomstertonby not a bad place to start.
design workshops: be prepared

Base Mapping
Good base mapping and recent aerial photography to scale, oblique aerial photography

Background Reports
Technical analysis to inform the design process, traffic, environment, economics, etc available well before the workshop. Draft constraints analysis (know about the hairy joint grass)

Workshop Logistics
Venue, equipment, food, drink, transport, accommodation, equipment resources, etc etc
Draw

Get used to drawing with fat pens and crayons and writing big
Be sure of the desired outputs

Drawings:
Issues, structure and detailed concept plans, sections, sketches, design rationale diagrams

Statements:
Vision Statements / Policy Objectives

Vision:
... rural lifestyle with the convenience of the town... Integrated...

Thrumster is to become an integrated community living in harmony in its unique setting and with its diverse flora and fauna communities. It will be a model development for sustainable living in the mid north coast region, containing distinct neighbourhoods defined by the topographic, bushland and other natural features of the location.

All Creatures Great & Small
Development does not compromise the maintenance of a viable Koala Population in the Thrumster area.

Actions
- subdivision pattern based on tree retention and fauna movement not based on lot yield
- lot size reflects the role of the subject land in regard to its role for wildlife movement or habitat retention.

A Place to Call Home
Creation of a series of community focused centres that allows for the establishment of well designed, self contained neighbourhoods with their own sense of place, character & identity.

Actions
- neighbourhoods based on walkable catchments
- neighbourhoods have the ability to be serviced by public transport
- neighbourhoods are defined by open space and other fauna movement corridors
- neighbourhoods have a discernible centre not necessarily anchored by retail uses

Civilise the Car
The movement network seeks the movement and connection of communities through a combination of public transport, bike and pedestrian networks.

Actions
- connections through the area are not all car based
- road connections north of the site facilitate access to areas of employment
- the internal street network is interconnected and avoids directing unnecessary traffic through residential neighbourhoods
Work at the best scale

Different scales require different design consideration

1:10000, 1:5000, 1:2000, 1:1000 and 1:500 1:250, 1:100
Drawings for Area 13 new town, Hastings, NSW
The drawing needs to communicate the essential ideas
Line types and thickness, line colour, fill colour vegetation
Synthesise constraints – Structure the problem

By drawing it you understand the issues better
Power of options, 3 (competing) teams with no scenarios
(but draw your plan the right way around)
Refined Plans 1:5000
Key shared ideas and points of difference revealed
Rochedale Urban Community
Do a drawing not a scribble

‘Quick and dirty’ has to become more refined, 1:5000
**Draw and Redraw**

*Do a draft to work it out and redraw as the final, 1:2000*
‘Detailed Plan, 1:1000 on an A1 sheet
Pick the range of drawings needed to explain the ideas
Plans and Principles

Drawings do not only need to represent a design solution:

*design rationale diagrams, draft guidelines, built form controls*
Plans and Principles

Wynnum Charrette
Day 6 21.02.06

Public building/monument
Active frontages
Street trees
Parks
Paths
Walkways/bike path

Footpath
6m setback to 2 storey
1m setback to 2 storey
1m setback to 2 storey

6m setback
1m retaining wall
1m from boundary
3m setback
6-8 slope down

16-8 slope down

Visual impact of roadway minimized

Wyburne Planting setback

5m setback to southern boundary

1m retaining zone
1m from boundary

entry visible from street

Frontage on

2 storeys
1 storey
2 storeys
1 storey

16-8 slope down

1m setback

16-8 slope down

16-8 slope down

16-8 slope down

16-8 slope down

16-8 slope down

16-8 slope down
Plans and Principles
We are designing places

- Private housing + public housing
- Footage over creek
- Green walk lane / creek, wetland, etc.
- View of green walk / lane
- Option 7
We are designing places

**CAD models, perspectives:**

Model, print, trace, scan or photograph
We are designing places
We are designing places (Onslow WA for TPG)
Finish well and document outcomes quickly

Workshops must finish with a formal final presentation
All participants attend and others (Decision makers)
Pinup of all the drawings, supporting presentations powerpoint, InDesign Reports PDF full screen Movies!
This work becomes the Workshop Outcomes Report
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