Prototypes in Pinkenba

This paper will address the agency of prototypes as landscape design interventions that trigger other processes and events, through a planning and design methodology developed by Chora.

Given that the network city challenges the case for a determinate master planning in favour of an indeterminate approach, I ask why do some projects trigger further reactions and others do not? The answer is in the level of contextual networking in a project. The Chora method describes a way of tapping into the rhizomatic and networked landscape and designing with it.

The paper describes a test of the Chora methodology, called the 'Urban Gallery' through a graduate level design studio project at Queensland University of Technology, Australia. The case site is the Brisbane suburb of Pinkenba. Prototyping offers an alternative strategy to master planning, but is likely to be more successful when used as a complementary approach.

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INTRODUCTION

Prototypes are architectural and programmatic interventions that are open to changing political, economic, ecological and social dynamics over time and space. On a landscape architectural and urban scale, they present a more strategic, canny and fluid approach than determinate strategies like master planning. Prototypes work with uncertainty by creating and maintaining a spatial dialogue of sorts over time.

Prototypes are a particularly useful strategy when dealing with large-scale urban landscapes such as that currently enveloping a 200km long coastal stretch in South Eastern Queensland, between the Sunshine Coast and the Gold Coast - the fastest growing urban area in Australia. This conurbation, like most contemporary urban landscapes, is characterised by everincreasing complexity in social and political structures that are difficult to grasp using traditional research, design and planning methods. Coupled with complexity, the sheer magnitude of uncertainty inherent in this type of contemporary urban realm, means that, in designing and intervening in the highly networked space, master plans are rarely completed, and have sometimes even been accused of preventing development [9]. We need an approach that yields results flexible enough to adapt to changing demands over time, yet solid enough to affect anticipated and desired change. A prototypical approach, offers a more readily realisable, even subversive, alternative to master planning.

Not catalysts

Like catalysts, prototypes are precipitators of further processes and events, causing and being linked with other reactions (Figure 1). They differ in that catalysts, by definition, remain unchanged in the reaction that they cause while it is a requirement of prototypes that they are open to change and adaptation over time. Although some analogy may be drawn, and catalyst is often used in design terminology, the terms are not strictly speaking interchangeable.

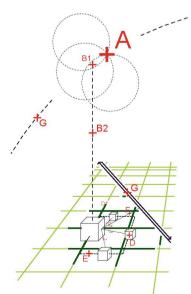


Fig. 1: A prototype and it's contextual relationships (author: D. Wright)

The prototypical success of a landscape intervention is determined by the level of its networking in the surrounding landscape: physically, politically, ecologically, economically and/or socially. In this sense, the prototype occurs at the intersections of the flows of the network, as defined by Manuel Castells [4] or, the buds of the rhizome, using the term as introduced into design terminology by Deleuze and Guattari [7]. Easterling [8] develops this point by saying that the real power in urban organizations lies in the relationships between sites that are individually and collectively adjustable:

"...It pursues a fascination with simple components that gain complexity by their relative position to each other. For example, it is possible to understand sites as separate agents that remotely affect each other – that is, the way one can affect point C by affecting points A and B..."

It is through unravelling and understanding the network that we can predict and understand the particular points, or prototypes, with precision. Traditional methods of analysis and surveying are not rigorous enough to develop the sort of precise and strategic intervention required of prototypes. Precision, paradoxically, needs lyricism. We need to know of the operations and the nuances of a site, its realities and also its emotions, dreams and ambitions and moods to be able to precisely intervene prototypically in it.

METHODOLOGY

The 'Urban Gallery' methodology developed by the London based architecture and urbanism practice of CHORA, is an example of a design methodology that has the potential to reveal comprehensive nuances of a site as well as its scientific and social strata. The Urban Gallery is a digital tool designed to uncover, design and manage complex urban phenomena. It is, according to the founder of CHORA and, with Takuro Hoshino, co-author of the methodology, Raoul Bunschoten, 'a peripatetic instrument that supports the planning of complex environments in which many different parties and interests intertwine' [2].

A semester long project carried out at the School of Design at Queensland University of Technology (QUT) involving graduate level diploma and masters students of landscape architecture and urban design is a practical example of how the Urban Gallery can be applied and utilised in an urban landscape. The aim was to predict and design a series of prototype projects for the Brisbane suburb of Pinkenba (Fig. 1) and to negotiate their placing and hybridising over time. The project was led by the author and Dr Danny O'Hare, assisted by Assoc. Professor Glenn S. Thomas of QUT and consisted of nineteen graduate level students of landscape architecture and urban design.

Pinkenba



Figure 2: Pinkenba, 5km northeast of Brisbane's CBD

Pinkenba, is a fairly quiet part of Brisbane and one that so far has escaped being knit into the ever-expanding urban network of South East Queensland (the subject of the 2004 conference of the Australian Institute of Landscape Architects, AILA). However, Pinkenba's proximity to Brisbane's Central Business District (CBD), the Port of Brisbane, the Brisbane River, Brisbane Airport, and new shopping developments make it a prime target to be subsumed as a service and storage area for the ever-encroaching metropolitan condition. How to deal with potential development, and how to manage it, and perhaps even, how to thwart development?





Figures 3 & 4: Local suburb of Pinkenba beside global flows

FIELDWORK / DATABASE

The studio project, entitled 'Prototypes in Pinkenba', was established with the dual purpose of finding answers to the above questions through the Chora methodology and of testing the methodology in the process [2]. It began with the ostensibly random throwing of beans over a map centred on Pinkenba (Figure 5) but also including other areas adjacent to and having influence over the suburb. The investigation also led to the investigation of the source and course of the Brisbane River.



Figure 5: Beans are thrown over a site map

Miniscenarios

Beans are thrown on the map for their poetic reference – the potential exists for new life to grow from the points on which the beans fall. Each of the beansites are investigated using a method of miniscenarios. Miniscenarios are short stories written on the beansite. The stories are short texts framed under the headings of Erasure, Origination, Transformation and Migration (EOTM), four categories that Chora use to frame urban and landscape processes [2].

An analogy Chora use in their seminal book, 'Urban Flotsam' [3] describes a person drinking a cup of coffee. The coffee is *erased* from the cup; the cup is left to one side - it *originates* as a dirty cup waiting for the waiter to take it away; the dirty cup is *transformed* into a clean cup and the dirty water is washed down the sink and *migrates* into the waste water disposal of the city.

What began as a personal affair – drinking a cup of coffee – is in fact dependant on various scales of urban operations – from the local scale of the waiter to the city and regional scale of waste disposal to the global issues of the farmer who grew the coffee at it's point of origin. The strength of the design of the miniscenario is that they expose these complexities and make them real. The EOTM of the miniscenario reveals the unexpected as well as the expected which later helps prepare for the unexpected.

Operational Fields

Together with the written narrative, researchers record the miniscenario using a contrasting means, such as photography, diagrams, staining, sound recordings, interviews. The resulting dichotomy animates and helps interpret the text of the miniscenario. From the miniscenario we can summarise the workings of the site, the operational fields, which Bunschoten terms the 'engines of change' [1]. Operational fields can be either reality or dreams. Another way of looking at them could be as the strands of the network society [4] as discussed by Castells. One might think of them as angels whose invisible presence can be called upon. The actors (the neutral users) and agents (those who have power over a process or space) are also identified and recorded, however, the prime objective of the database is the finding and recording of operational fields.

A typical mini-scenario from the 'Prototypes in Pinkenba' project is:

- E The view of the industrial buildings next to the road and adjacent to Pinkenba State School
- O The tree screen planting has grown to approx. 4000mm high along the fence-line of the private property
- T The view from roadside has changed from hard metal to green lush screen plantings providing amenity
- M The green screen leaves the entrance of the Pinkenba State School with more of a human scale and softer texter and the impression of the school migrates in peoples minds as a place with better amenity

Actors: Schoolchildren, parents, drivers on Eagle Farm Rd. Agents: Queensland State Government, Dept. of Public Works, Pinkenba State School

Operational Fields

- Screen planting from industrial sheds adjacent to Pinkenba State School
- 2. Noise buffer
- 3. Wildlife corridor
- 4. Shelter zone for schoolchildren during rain
- 5. Pedestrian refuge from rain
- 6. Collection strip for road side rubbish

(authors: C. Callinan, M. Reynolds and E. He Ban)

The Power of Randomness

There are apparent methodological weaknesses in this process: beans fall on a two-dimensional map (it remains a real challenge to develop a three-dimensional method of beansites); they can miss the obvious and the significant; how to determine the epicentre of the bean? Determining the epicentre of the beans demands much subjectivity. However, beansites can lead to remarkably divergent places: into kitchens, bedrooms, closets, lives, backyards, breakfasts, dinners, front yards, bedrock, pastures, swamps, cars, riverbeds, airspace, treetops, historical events, tourists, etc. Beansites are framed by the attitude of the researchers and as Wood would advocate [10] the attitude or point of view of the researcher/author is formed by the process. Morten Daugaard [6], the architectural theorist, suggests that the power of the randomness, in knowing divergent participants can throw the beans again and again and never get the same results, builds a new form of knowledge: 'the possibilities for new taxonomies created out of memories and interests of the participants, combined with unmarketable local issues and more streamlined points of views makes a genuine workable 'gameboard' for a new 'urbanism'.

PROTOTYPES

The second stage of the methodology involves the mixing of operational fields to form prototype projects. The theory is that the project proposals are rooted in the operations, the workings of the site, and because of this grounding are thus more likely to adapt and proliferate [2]. It is a requirement of prototypes that they be capable of hybridising and multiplying. This mixing is usually done by intuition. Participants ask what operational field would contrast with another? Or what would work with another? Sometimes it is done randomly.

If the database stage is the equivalent of site analysis, prototype development is much the same as design development, except that projects are developed under the headings of Branding, Earth, Flow and Incorporation (BEFI). These four basic layers provide another way of categorising and constructing projects, another way of looking and framing a project's phenomena, interweaving its development in innovative ways.



Figure 6: Fish Frame (temporary fishing-related structures to be sited along the Brisbane River, author: S. Johnson).

There are a number of questions we need to answer about what a prototype is and how it may function. What makes a project a successful prototype? How to determine success or failure? Can prototypes, by design, work as blockages to further development as well as promoters of development, i.e. can or ought they be depressants? What rigor ought we to employ to determine a project's prototypical strength?

SCENARIO GAMES

In the next stage of the process the actual actors and agents involved with prototypes are identified and invited to participate in a scenario game. In Pinkenba, local residents, politicians, representatives of industry and the Australian Army and the media participated. A scenario game needs a table, four chairs, four players, an animator to control the game and a site

map with four colours of pens (Figure 7). The aim of the game is to test the prototypes and to find and suggest new ones. Each move is recorded on the map, a hugely important aspect as it makes the negotiations spatial.



Figure 7: Scenario Game - 4 players around a table with map

The game begins on a beansite in much the same way as a miniscenario except it keeps going through several loops of the scenario gradually spiralling around possible and sometimes highly improbable scenarios. The game winds through the processes of E, O, T, M. Normally, eight, nine or ten loops of the game are played with mayors, local residents, and property developers, and the like, sitting around a table. Each of the actors and agents speaks from the role of E,O,T,M, as assigned by the animator.

The real strength is that the games bring together parties who might never normally have the occasion to meet and talk. They may be local residents and powerful politicians, for example, but the power of the game to break ice and professional boundaries should not be under-estimated.

ACTION PLAN

An action plans consist of strategies for the development and initiation of prototypes and the description of potential relationships between prototypes. Prototypes are situated in space and time and negotiations continues between various parties. The development of the Action Plans is framed under the headings of the BEFI or the Prototype layer, but the main thrust of the action plan is the implementation of prototypes. Thus, the nature of the plan changes from project to project.

In the Pinkenba studio summary descriptions of the prototypes were simply pinned on a wall, their commonalities identified and the linkages marked with coloured threads (Figure 8).



Figure 8: diagram of relationships between prototypes (prototypes occur at the intersections of the strands of the network or rhizome)

The result is on the one hand a diagram of the process and on the other, a springboard for further action and associations. New alliances are formed as projects negotiate their realisation. Prototype C joins with H to form CH and have a greater chance of being built and so forth. These alliances come to the fore on the Action Map where prototypes are placed and negotiated (see Figure 9). Some projects dominate while others are content to sit it out for a few years, or, like E, to proceed outside of the system. Moves, counter-moves, strategies and tactics come to the fore. In this case, the prototypes were negotiated spatially on the map. Prototypes vie for dominance and attention through scale and colour (Fig. 9).

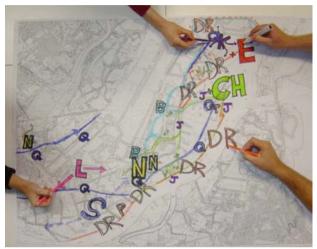


Figure 9: Spatial negotiations on the map

CONCLUSIONS

The plethora of spatial demands caused by the uncertainty and complexity of the contemporary city calls for more complex methods of understanding it and of working and living and ultimately designing for the landscape.

The Urban Gallery bridges the gap between creative mapping and projecting projects. It does this by grounding it's suggestions in well-researched landscape phenomena, the operational fields, that exist or lie latent within a site. One of it's greatest strengths is that it is one of the few methodologies that responds to the challenge set by James Corner: "... the unfolding nature of mapping may allow designers and planners not only to see certain possibilities in the complexity and contradiction of what already exists but also to actualize that potential. This instrumental function is particularly important in a world where it is becoming increasingly difficult to both *imagine* and actually to *create* anything outside of the normative." [5].

The method is not flawless -more rigorous ways for the researching of beansites and finding operational fields are needed, for instance, and for the development of control models for prototypes.

The real strength of the four-step process, lies not in its being a radical new alternative strategy, but rather a complement to traditional methods of design and master planning. Their real agency probably exists alongside traditional ways rather than in opposition to them.

The objective of the Chora methodology, of developing and situating prototypes, is a more canny and fluid way of designing and of influencing and predicting the future development of a space. Landscape architects and urbanists have the responsibility to explore and develop new and more

refined ways of understanding space and the workings of the land. A prototypical urbanism has the potential to make a very real and ongoing difference to contemporary urbanisation.

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