

# WET

## Sundry thoughts about “water” deduced from student work at RMIT

By Julian Raxworthy, for Kerb 12

Water is so fundamental to everything that it is almost impossible to meaningfully conceptualise it, which is why it forms the basis of pretty much everything. To suggest that landscape architecture has some sort of privilege with it would be deluded. But, as alchemists of “the world”, we are both expected to deal with it professionally, as well as being forced to do so practically in making anything real, built in that same “world”.

When people use words too much, that is the signifiers of things in sound, they become a kind of conceptual short hand to what they are referring to. You can hear this short hand when they use the word, as it gets grammatically dealt with differently – it becomes a conceptual object – a different type of noun. Water is one of these words, and as a supervisor I have almost universally seen students refer to it like this, by the end of their projects, and then have to force themselves to reconsider what it was about water that made them interested in water in the first place. This process is a transition of ideas and technology and technique, and will be the subject of this essay, tracking students responses to the weird substance in design subjects I have taught or projects I have supervised at RMIT since 1997, to and from and then again back to the qualities and issues of water for people generally, and landscape architecture in particular.

### ephemerality - WATER HAS INHERENT QUALITIES

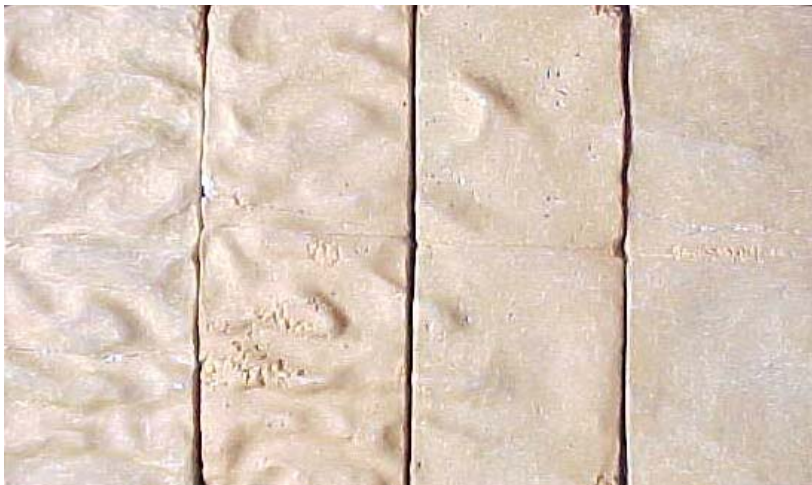


Figure 1 - Prototypes of surface drainage paving model (Ben Doughty)

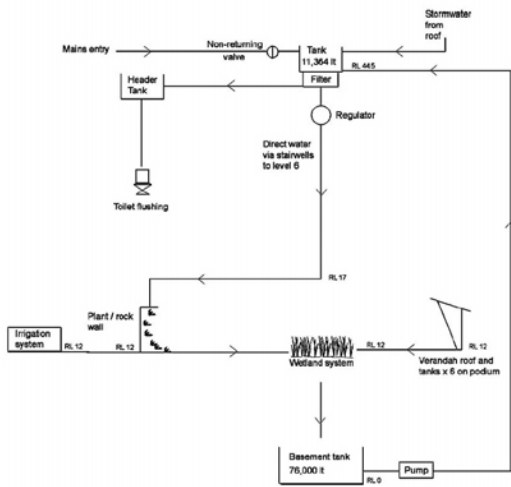
One of these terms is “ephemerality”, which is a very rightly exciting idea for landscape architects, because it begins to suggest the engagement with time, which is what every landscape architect would like to think was what they were actually designing. The problem is, however, that no one can really get their head-around it. This is except the gardeners of course, mostly amateurs, who can tell you very precise things about where and why things will grow, and exactly how to do it, even if these things are often tomatoes or glitzy perennials.

More than just change over time, though, ephemerality suggests something material too, and indeed for water, not the material, itself, water, but its conjunction with other materials. Water on its own is ambiguous and only haptic. It is its references to, and interactions with, other things that give it power, and in terms of ephemerality, it is how water registers and modifies those things. All materials in the world of any source are presented by their extent of water. Rock is only rock not mud because it is water less. It is the rock that reads the water, not the other way around. Time is only perceptible to us as the water evaporates in slides

of comprehensible time, but perhaps for the rock, this wetness is the possibility of a saturation that will never be. In its time, the wetness was not even a perceptible change of state. The following 2 projects investigate aspects of ephemerality, between registration of water to engaging in its changes of state.

*"Magic Mechanisms" group proposal from "Palate" Design Studio (2000)*

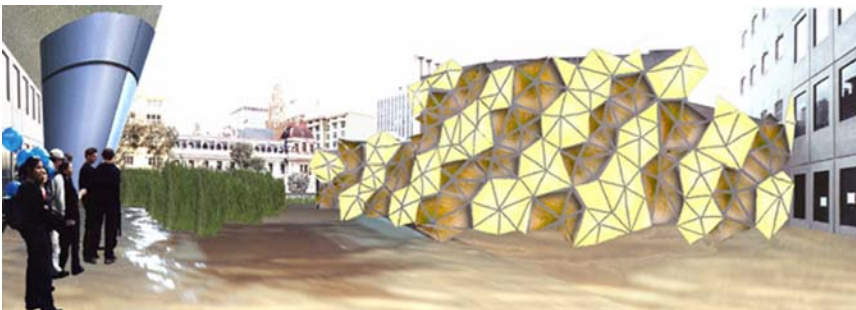
In 2000 I ran a studio / consultancy for a Rooftop garden (a level 4 podium, really), entitled "palate", (as in, the top of ones mouth) for RMIT Business's Building in Bourke Street, Melbourne. Because it was based on a feasibility model, the work was very technical and detailed, based around catching and re-using water in a bio-engineering manner. As the studio escalated into hydraulic schematic and volume calculations, the schemes had less and less engagement with the nature of water and materials, than they did with materials in terms of their evaporation or absorption possibilities, with the exception of one scheme, initially entitled "Magic Mechanisms".



**Figure 2 - Hydraulic schematic from "Magical Mechanisms" group**



**Figure 3 - Montage extrapolating a surface from the possibilities of the module – iteration 1 (Ben Doughty, Jo Douglas, James English, Erika Jeremy, Christa Mitchell)**



**Figure 4 - Montage extrapolating a surface from the possibilities of the module – iteration 2 (Ben Doughty, Jo Douglas, James English, Erika Jeremy, Christa Mitchell)**

This scheme, by Ben Doughty, Jo Douglas, James English, Erika Jeremy and Christa Mitchell, utilised a series of prefabricated modules (that Doughty built at 1 : 1 prototypes of), that directed water across their surface, by use of standardized undulations. These tiles were fabricated with different densities of undulations, with the main activity areas being relatively flat, graduating into a much denser and more obstructive surface at the edges of the space. These models were beautifully formed of concrete and when you walked across them, you could imagine a surface like a much more organic quality than sets on your feet. They

had a nice shadowy look, and neatly moved water across a surface, whilst at the same time, through a large surface area and a porous material, might evaporate a significant amount of water, as well as, at its more complex end, hold it.



**Figure 5 - Montage extrapolating a surface from the possibilities of the module – Iteration 3 (Ben Doughty, Jo Douglas, James English, Erika Jeremy, Christa Mitchell)**

The surface would graduate into a series of conditions that might cause a wetland or pool to occur, without presupposing it. It would be just what the water did, according to the climate at the time and the nature of the surface. These designs held a muddy interface with form, as the surface has no edges, only water and soil peculiarities in regions. The modules themselves either shone or had damp patches depending on the specific nature of the weather and micro-climate at that moment. The scheme also involved users in this process, as areas would wear and change according to activity and maintenance. By making the modules polished, they could be broomed or hosed and the maintenance of the surface a weird kind of topographic gardening.

#### *Anissa Webb's Project from "Terrain Op's" Design Studio (1997)*

As part of my research for my masters, I ran a studio entitled "Terrain Op's" that attempted to sophisticate the operational use of earthworks in landscape architecture, particularly by developing specific design languages for topography. In the process of doing so, I ran a series of exercises that sought to investigate the types of form that resulted from different soil saturation levels and their attendant relationship to soil structure. During the studio, as we investigations understandings of the ground, it became impossible to think of the ground without thinking about water in relation to it. Erosion seemed to result in all the forms we might know. Surface form and water movement are completely complicit. More than that though, soil is a form of water, inversely. The sense of the soil is fundamental to our own sense of the environment, as things grow in it, and the shape and colour of those things reflects that soil. By water, we are linked to those places – their wetness is ours, or rather our control of that environmental situation fundamental to our own comfort.

Anissa Webb, in a project arising from these initial investigations into water and soil, took this saturation aspect of soils to its climax. In a theme-park setting, Anissa developed a surface comprised of the same soil with different compartments for different levels of saturation. As well as this, she introduced elements that warmed or cooled, in such a way that parts were cold frozen slush while others were cracked from heat. These studies were visualized with fragments of landscapes from national geographic as well as made into models. These surfaces also gained polishes and abrasiveness in this manner, also registering this wetness. Most importantly, this project engaged with the nature of water in changes of state such as steam and ice, and in this moment achieved its greatest potential, exactly the same thing that made Peter Walker's Tanner Fountain at Harvard University, so successful. In understanding these states, we can appreciate what evaporation is and in doing so, understand the nature of water in this land. But what of it – what is water that we engage with?

Perhaps water is only ever a type of engagement, more than it is as a substance itself, a particular kind of immersion, in the extreme, but also sweaty armpits or wet feet, the setting sun.

## being aquatic - WATER IS A TYPE OF ENGAGEMENT

“WSUD, the abbreviation for “water sensitive urban design”, that always reminds me of “whassup”, the phrase from Ali G., represents an earnest attempt to engage with water by landscape architects, in a “think global, act local” manner, by dealing with situations with incremental consideration of water as an issue. These systems work at scale and through the potential “agency” of the sheer size of subdivisions and the

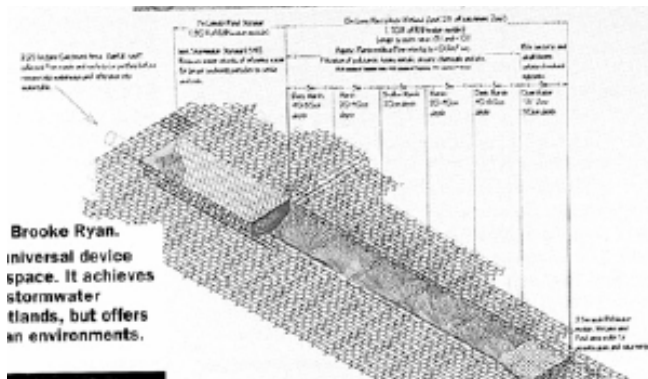


Figure 6 – Drain detail in urban residential areas from Brooke Ryan's "RainWATER Module" Final Project 1999 (Brooke Ryan)

overview of a single consultant. That said, development convention both in the form of manufacturing and building systems, not to mention the financial value of landscape for development rather than open space, means that the possibilities are limited by the importance and therefore amount of space that can be used.

As Kathy Poole notes in her discussions of “Civic hydrology”, the provision of water to the public is an important democratic standard of civilised living, and correspondingly hydrological infrastructure is one of the base landscape programs involving water. This inherent humbleness is counter-pointed by the arrogance

that we, landscape architects, engage the public with these basic functions in their everyday lives, and there is nothing more pervasive of attitudes than normal life. Our basic spatial engagements condition all our attitudes, which is why advertising is so effective. Design that engages with this potentially can create important societal change. If we substitute the substance of water into this equation then notions of sustainability can be affected in all parts of our lives. This is the premise behind WSUD, the basis of which is undoubtedly true, and this is important work for landscape architecture, however it is going to be largely the closeness, or the proximity and our relationship to water, tangibly, that is going to make us change in the ways we must to live sustain-ably. This engagement with the every day is often considered by students as they try to assert the relevance of landscape architecture to peoples lives.

### Brooke Ryan's Final Project “RainWATER Module” 1999

In her final project (which I supervised), for which she was awarded a “Churchill Fellowship”, Brooke Ryan developed a “RainWATER Module” for use in urban situations, in reaction to her view that traditionally water treatment happens “somewhere else”, such as in a rusticated, picturesque wetland, which effectively distances people from the problem of water quality. This is despite the fact that it is an issue directly relevant to their quality of life in the longer terms. She felt that the archetypal form of the wetland has become a cop-out, and, what's more, that form

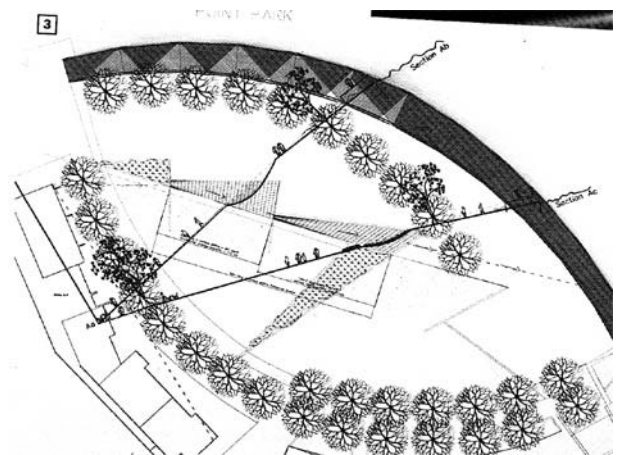


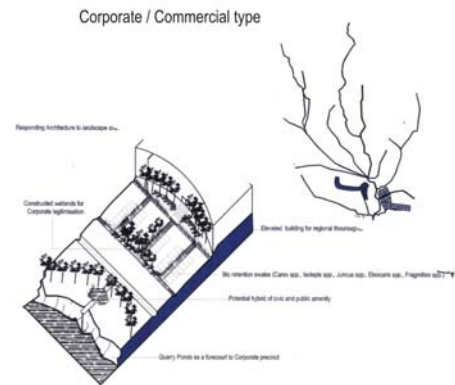
Figure 7 - Park design from Brooke Ryan's "RainWATER Module" Final Project 1999 (Brooke Ryan)



**Figure 9 - Street edge wetland kerb treatment from Brooke Ryan's "RainWATER Module" Final Project 1999 (Brooke Ryan)**

and that would incrementally, as it was repeated, begin to deal with water at source.

suggested a size and scope that automatically excluded its use in dense urban sites, where the sheer tightness of use didn't allow an element of "wetland size" In her thorough investigations of hydrological engineering, Brooke determined that the basic purification processes utilised by a wetland could operate at scale, and correspondingly she developed a series of modules that could simulate this process in a linear form of a much smaller scale. Examining infrastructure and City of Melbourne streetscape standards, this module was designed to substitute into existing road infrastructure in the kerb and gutter, and the road graded to direct water to the modules purification starting point. Further, Brooke investigated the way that urban planting is utilised as eye candy, such as the annual planters, and conceptualised of the wetlands as annual beds in the city. Her test sites were in the Docklands, and it was envisaged that gradually this treatment might form a mosaic that would become familiar in the familiar places where people live,

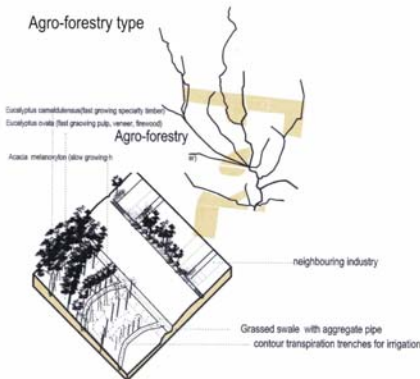


**Figure 8 - Corporate typology in Heath Gifford's Project for "the Floppy Studio" (Heath Gifford)**

*Heath Gifford's Project for "The Floppy Studio", 2000*

In a studio I ran in 2000, we investigated corporate and industrial development typologies at play in the outskirts of Melbourne, using the site of Cooper Street,

in Epping, in the City of Whittlesea. This studio was conceptualised in relation to the then upcoming MESH conference, to investigate how infrastructure influenced development. The title of the studio referred to a "floppy disk", which was utilised for storage throughout for its finite limitation, of 1.4 megabytes, an analogy to the way that infrastructure might limit development. The disk had to be used for all files, starting full, with the design necessarily over writing site information. This grappling attempted to provide the notion of a finite resource supplied via infrastructure=, rather than blank pipes and wires that would, presumably, never stop.



**Figure 10 - Agro-forestry typology in Heath Gifford's Project for "the Floppy Studio" (Heath Gifford)**

In this context it is obvious that water would be seized upon as one of these resources, and the central one which landscape architecture could seize in its normal professional scope. One of

the key difficulties was how to come to terms with the quantities and units of infrastructure, in such a way that they could be meaningfully handled. Heath Gifford, in an early study for the studio, examined how many Eucalypts it would take to evapo-transpire water units of the size of the MCG, thereby creating units that could be handled.



**Figure 11 - Light industrial typology in Heath Gifford's Project for "the Floppy Studio" (Heath Gifford)**

His resultant scheme for the studio comprised a series of development types and guidelines that might be expected to occur in an industrial development, and to build these units of water and evapo-transpiration into them. By reading the nature of the hydrological structure of the site, he also developed a system of infrastructure such as roads and the like that utilised this form. Additionally, he then colonised this master form with more detailed infrastructure configurations, such as easements, access ways, corporate address and the like in such a way that water was both utilised and engaged with. This hierarchy meant that the patina of working life might move through stages in hydrological or rather site specific landscape typologies in daily working practice.

### *Conclusion*

Many of these schemes attempt to engage sustainability and water as a part of "daily life" thereby breaking down the issues into things that aren't special just normal. Whether these issues were engaged in as being actually about the substance of water is a different question. But is it this which we drink, bathe in and that comprises everything. How much more obvious can you get? Why is it so hard?

In all these examples, the clearest thing that comes through is that it may be our sense of traditional landscape architecture scope, and its normal practices that limit our possibilities with water. As we operate at the margins of things, our ability to operate effectively, with a mandate on the scale of territories, like Heath's MCG units, is limited to continuous ad-hoc moves, seized opportunistically as they arise in practice.

Water constantly defers to other things besides itself, and as those things that affect it, topography, plants, etc fit easily within what we do, these things become the focus: water is only dealt with in a manner that influences it, or at a remove, rather than directly, unless we do water features, which may celebrate qualities of water, but does so in a manner that doesn't engage with the strategic or biological importance of water. And it is, therefore, those associations of water and things that make it important. It is a zone between these two that we must work towards: where we understand the beautiful qualities of water, but also its fundamental involvement in other things.

Recently I was on a panel to examine candidates for AILA Associate membership. When asked what they were currently interested in, almost all cited "water based urban design", so clearly this is a very present concept for the profession. To be seen to be interested in water, and to be "good at it" is to indulge the ecological ethic behind our profession, however this is still largely seen as a technical exercise. To

understand water is not necessarily to be better ability estimate it, move it, etc, but also to condition the engagement with it, and this must be the next priority for landscape architecture, even if we are working in places where that relationship will only be one of dryness.

For me, it is as a gardener that water becomes most vivid as a resource, when trying to maintain the life of a plants in a park I was re-vegetating. We would clear weeds and plant things, indigenous to the region, only to find that we couldn't keep the water up to them. The soil was from a tip, and was almost completely water repellent. Drops of water would form on the surface and roll off the surface, with the soild sticking to THEM. While eventually the soil structure might change as organic matter from the plants themselves accumulated over time, right now, this water WAS NOT going to go in there. It may as well have been stone. On the other hand, in regeneration work I was also doing at the time, water borne phosphates were permeating the soil profile and causing unbalanced plant communities to develop, notably weeds. Again, it was never the presence of water on its own that I was dealing with, but always other things that interacted with it. We are, after all, just membranes designed to keep or wet masses from spilling in the world

