

# 水寺 Water Sanctuary Storyboard 水寺

## Further Exploration by Malcolm Price

Research, Design Brief and Design Concepts



*Part 1 of the storyboard explored a variety of ideas and explorations of water and what a temple is, and whether there can be an appropriate marriage of the two ideas in our contemporary world.*

*Part 2 will further this exploration, although articulated now as a sanctuary rather than a temple. It will create an architectural brief and designs.*

A Storyboard is a record of a process and the documentation of the source materials, events, discussions and thinking that hopefully leads to the making of Water Memorials. It is not meant to be a coherent academic treatise, although it is meant to tell a story. It is like a scrapbook or a set of minutes where the ideas are documented progressively in both written and graphic form.



## Introduction

The worship, adoration or devotion and ritual use of water is not a new idea, it is at the heart of much pagan and animist belief, particularly in pre-modern times where the cause and effect of use or misuse of water had intimate life or death consequences. For example in the Celtic religion of the Orkneys it was believed that there was the presence of a deity in many springs.

*"Wherever there was a spring, there was life; wherever there was life, there was a spirit"*

Water also has great continuing symbolic significance in all of the world's great religions. In Christianity water is used for baptism and the fish was a prominent early Christian symbol.

*"Water in Hinduism has a special place because it is believed to have spiritually cleansing powers. To Hindus all water is sacred, especially rivers, and there are seven sacred rivers, namely the Ganges, Yamuna, Godavari, Sarasvati, Narmada, Sindhu and Kaveri."*

Hinduism also has a specific god of water Varuna.

*"The offering of water at Buddhist shrines symbolises the aspiration to cultivate the virtues of calmness, clarity and purity with our body, speech and mind."*

*"In Islam water is important for cleansing and purifying. Muslims must be ritually pure before approaching God in prayer. ...There are three kinds of ablutions. Firstly, ghusl, the major ablution, is the washing of the whole body in pure water, after declaring the intention to do so."*

(Taken from Water in Religion page <http://www.africanwater.org/religion.htm>)

While I am not religious myself, I understand that if this project is to have the potential of a wider audience, particularly in areas of need, it must sympathetic with established religions. If it is framed as a secular project through a scientific and management lens, then it excludes ritual, faith based activity and traditional symbolism and associations with water. This in effect, excludes it playing a role for a large proportion of the world's population. The geography of global water stress indicates that the places most likely to come under localised water stress soonest are in North Africa, the Middle East and South Asia. All these areas correspond to large populations of Muslims and Hindus.

A second factor is that in terms of conveying a simple message that leads to behaviorial change, which is the primary aim of this project, traditional religions through the art and design of their buildings and their educational methodology have much to teach.

## What Does Religion Have to Offer?

For a contemporary context, English philosopher Alain de Botton articulates in his book "Religion for Atheists" a range of value that religious practice has offered traditionally and which may have value in new types of institutions. He says religious buildings unlike secular buildings such as museums use a powerful integrated combination of art, architecture and simple ideas to reinforce a message or religious idea. The message and therefore the educational value of the building is often delivered at an emotional and visceral rather than intellectual level, and once delivered it is retold in a variety of ways to reinforce the learning. The heart of the process of going into any religious building is educational, but not simply about providing information as a museum does. The experience is meant to provide knowledge, insight or information that leads to a change in behavior related to the central religious ideas. Part of the

reason this works is that religious buildings traditionally use beauty and fear to evoke a sense of awe and transcendence to convey ideas or manipulate emotions depending on your perspective.

To change behavior it is important to tell stories and have people contemplate and reflect upon them outside their normal frame of reference. This is reinforced by a progression in the story that involves both a physical and metaphorical journey, where there is a sense of an underlying meaning. This is what traditional religious architecture did well. Finally beauty, fine craft and art are used as essential educational tools. Art was never a disjointed collection of objects as might be seen in a modern art gallery but rather always interrelated, seeking to create a narrative. The art and architecture always has a sense of there being real blood, sweat and tears shed in its service. And beauty, had a broader conception than just physical characteristics such proportion, scale, harmony, composition and balance of elements, that please our senses, it included meaning and relationship, which is imbued within an object or space by a combination of ideas, interconnected stories and the process of making. Additionally the meaning underlying the beauty of a temple while overtly transcendent, relating to the worship of a deity, or a set of religious ideas, will often also relate to a set of human relatable values or qualities, such as compassion, social justice, cooperation, community, regeneration or an ecological

understanding.

## Venues of Ritual

Modern theatres, cinemas, even the immersive qualities of the internet are where we play out many of our communal rituals now, but in most cases this is done in the dark and detached from a sense of being in a specific place. What is different about the best religious buildings is that they define places and the place is integral to the ritual.



# 11. The Context of Cultural and Religion Part 1

From the beginning of the project in May 2015 my friend Jim had said that

Water Sanctuary پانی مندر 水寺 المي اه م عبد



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## Religious Buildings As Community Centres

Religions have always understood that their role must also be practical; they need to be useful, provide sanctuary and give physical sustenance, particularly in times of need. However we perceive the limitations of stories or ideas told in the service of religion, religions generally seek to serve humans holistically, in mind, body and spirit. Secular institutions tend to rely on individuals to piece together meaning, services and rituals in a range of separate places and ways.

There is no coincidence that most charities are religious based and that religions have tended to offer services like sanctuary throughout history, up until the welfare state religions were often the only source of certain services. Religious buildings, temples, mosques etc. were the only effective community centres for much of history, providing most community services including health, education, food, shelter and refuge. A modern temple or sanctuary as proposed within this project might provide alternative services to these traditional services.

These services might include:

- Provision of clean drinking water;
- The ability to wash yourself; and
- A place to wash clothes, this is interesting particularly in relation to a service like the Orange Sky Laundry (<http://www.orangeskylaundry.com.au/>) which provides a laundry service for the homeless.

In this sense a Water Sanctuary might not be the direct provider of services, but coordinates and provides a venue for other services.

Provision of educational services including:

- Understanding the nature of water;
- Waters relationship to life; and
- Management of local water resources

Provision of a place to meet and play, this could include:

- A child's playground

The service of sanctuary or refuge is a traditional service most religions have offered. It is not as prevalent today in modern secular governed countries that don't have the same legal rights to provide asylum they once did. Additionally Christian churches in my country are now so often closed and locked for much of the time that effective sanctuary is not possible. Sanctuary in relation to this project could be interpreted differently.

- At a minimum it is a place of quiet repose that is always open to who ever needs it; and
- It is a place where people can't be easily contacted via electronic devices.

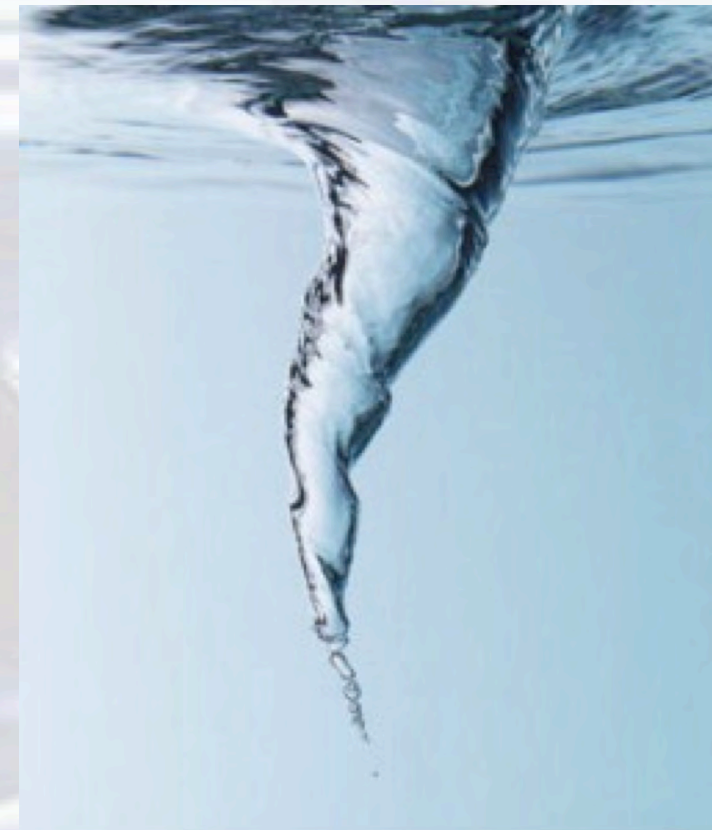
## Religion as Meme

In most cases the origins of religions are lost in the mists of time, what we know is the highly organized and branded product that we have inherited in the present. Religions are generated by powerful ideas (memes) that have meaning to many people at the time of their inception and they therefore become a people's movement. Islam for example was formed in the backwash of a brutal war between two empires that had lasted for over thirty years. One of its central tenets is the creation of an Ummah or a universal community, which is a logical idea to emerge from both its specific Arab context and the context of the divisive apocalyptic war that had occurred.

At this point in history for all the reasons discussed, this project seeks to insert a meme about the preciousness of water and its relationship to particular places that might become a people's movement.

We have learnt two things that help define the design brief.

1. Universal applicability of water temples will need to be culturally and religiously adaptable, in this sense they are like the Red Cross movement, which is also the Red Crescent movement.
2. Religions have developed and refined powerful education, artistic practice and community techniques that can be learned from and adapted for water sanctuaries.



*A water sanctuary needs to be a still beautiful place for contemplation and reflection; it should be like an elevated eddy in the flow of a dynamic river.*

# The Context of 12. Cultural and Religion Part 2

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**K on sun - David Cerny**

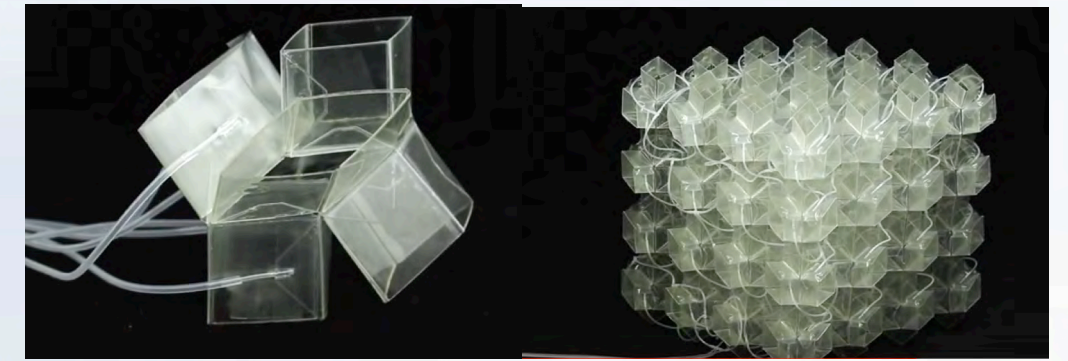
<https://www.youtube.com/watch?v=B7ZMWuNYD0Y>



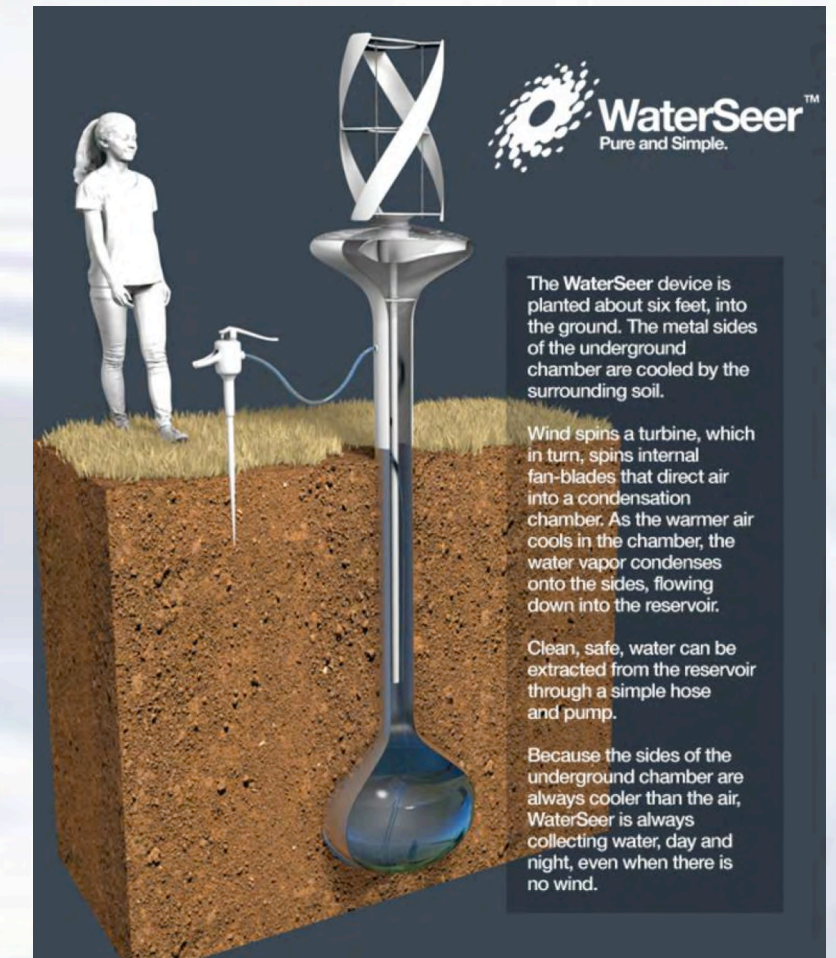
**Warka Towers - Arturo Vittori**

Warka Water Tower condenses air to collect safe drinking water for Ethiopians

<http://www.archidatum.com/projects/warka-water-architecture-and-vision-arturo-vittori/>

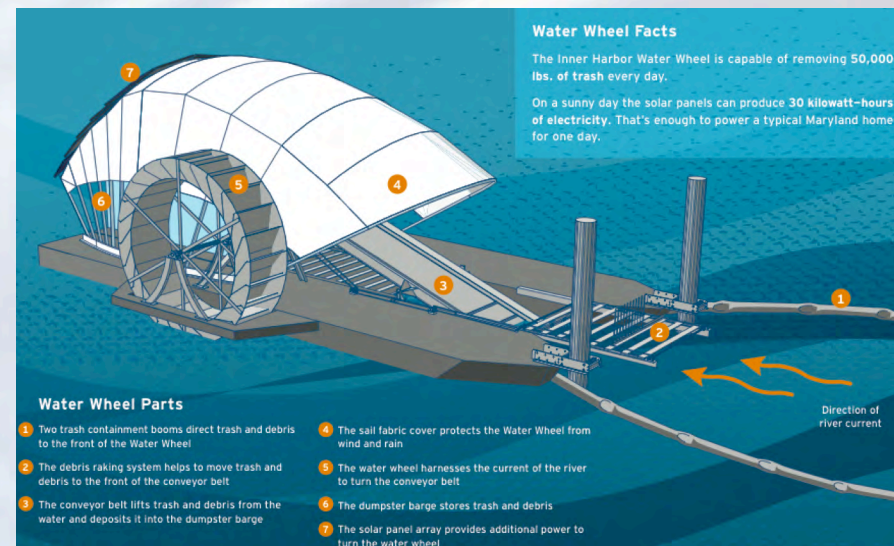


3-D Material that Folds, Bends and Shrinks on its Own  
Harvard John A. Paulson School of Engineering and Applied Sciences  
<https://www.youtube.com/watch?v=maKILHxcGAE>



**WaterSeer™** condenses pure water from the air without power or chemicals. It is green, sustainable, simple, low-maintenance, easily deployed and scalable for any community. VICI-Labs worked with UC Berkeley and the National Peace Corps Association to develop a device that yields up to 37 litres of pure water a day!

<http://waterseer.org/>



**Trash Wheel - A hydro-solar powered water wheel captures trash in international waters, a solution to pollution.**

<http://icrowdnewswire.com/2016/06/30/oceans-care-project-hydro-solar-powered-water-wheel-captures-trash-international-waters-solution-pollution/>



# 13. Inspirational Ideas

پانی مندر 水寺 المي اه م عبد Water Sanctuary



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## Brief

### 1. What makes up a Water Sanctuary

Water Sanctuary has four layers (Each will be described in greater detail in coming pages)

- Layer 1 Entry/Transition/Gatehouse
- Layer 2 Outer Sanctuary
- Layer 3 Temple Skin – Hero's Journey
- Layer 4 Inner Sanctum

### 2. What is its relationship to water, does it float?

Water Sanctuaries will be located in communities at important places related to local water ecologies. The location should as the name sanctuary suggests be a place of refuge and safety. The sanctuary should float partially or entirely on water if possible, this will depend on context. For example a larger sanctuary located on a lake or in an estuary that is not subject to dramatic storm events would be suitable to be an entirely floating structure. While a sanctuary in a desert or where there is no open water would might be like Warka Towers.

### 3. How big is it?

There is no set size for a water sanctuary; its size will be determined by the significance of the place it is located. They should be part of a family of temples like the Subak of Bali. The more important question is how big the first sanctuary that demonstrates the idea should be. The first sanctuary may not fully encompass the broader brief; it may be a work of art that demonstrates an idea or the direction of the idea. In this sense it is the smallest element that can include an inner sanctum with a temple skin that is on a floating platform. The ability to assemble and disassemble it in pieces and transport it on a reasonable sized truck or trailer will determine its size. Based on initial design concepts 3.6m by 4.8m is a minimum size.

### 4. What are the start-up requirements?

In starting this project there are two imperatives, the first is building something that is real and demonstrable, and the second is promoting the idea more generally.

#### a. Build a Small Sanctuary

It should be the smallest version of a water sanctuary possible that incorporates at least the two inner layers, as both the entry and outer sanctuary will always be more site specific. It should be relatively low cost and easily re-locatable. While I imagine the most likely place for this first version to be located in my own community it should equally be possible to imagine it sitting in a waterway adjacent to a slum in Dhaka, Bangkok or Kolkata.

#### b. Establish a People's Movement

- The idea is that "water is precious" and we are promoting water sanctuaries as a catalyst to change human behavior. Behaviorial change is to be driven by: educating people to use existing water resources more effectively, efficiently and subtly; by creating a natural venue to discuss local water management; and by promoting and demonstrating simple technology that sustainably provides new resources of clean usable water.
- Around this idea hopefully an international peoples movement can be established. In that sense

our startup requirements are about creating an effective communication platform for promoting the idea to the groups of people most receptive or having greatest need.

### 5. Where are funds coming from?

The most likely sources of funding are:

- Self funding
- Grant, possibly as a art project
- Crowd-funding

### 6. How is it transported?

Yes

### 7. Is it active or passive?

- It is a place intended to catalyse behavioural change, so in that sense it is not meant as a venue for spectators, it needs to draw people into the heart of an experience, therefore the experience should be an active one.
- It will at a minimum have active systems to pump and clean water, these systems should be self powered not powered externally, although application of human muscle power is acceptable. Use of photovoltaic or wind power with batteries is likely in the first sanctuary.
- In relation to the sanctuary moving on water it is more likely it would be towed rather than self-powered, this will also relate to its legal status as a marine craft.

### 8. Safety and Insurance requirements

In a legal sense this needs research and will relate to where and how it is located. Important factors include: whether it moves under its own power; how subject it is storm events; whether it is a surveyed craft, pontoon or some other definition. Being a public vessel rather than a private vessel will likely increase its safety and insurance requirements as will the number of people allowed on board at any given time. (See AS 4997-2005 Guidelines for the design of maritime structures)

### 9. Does it make money?

This is an open question, hopefully not.

### 10. Who is/are the target viewer/s and who will be the eventual owner?

Sanctuaries need to be the property of the communities in which they reside.



# 14. Design Brief Water Sanctuary

پانی مندر 水寺 المیاه معبد Water Sanctuary





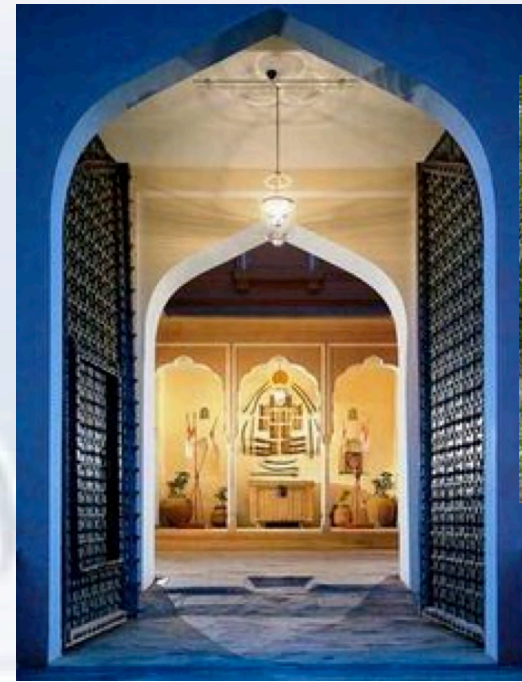
## Part 1 - Entry/Transition/Gatehouse

The entry is the transition zone between the sanctuary/temple and the wider world. In a traditional temple a doorway way defines the entry, or a type of gatehouse connected to the outer court of the sanctuary. This entry marks a distinct psychological break with the outside world to a place where worldly cares and concerns can be suspended. You leave the asylum that is the world and enter the temple; it is the penetration point through a skin/membrane between worlds. The appropriate way this membrane is resolved will be different in all locations and is rich in cultural symbolism.

It is an exit point to return to the world ideally providing a psychological half way house, a preparation to re-gather your energies to deal with the world. A floating water temple creates interesting opportunity to interpret this transition, which could involve crossing a pier or travelling by boat, in which case the transition is a journey rather than just a door.

Characteristics, purpose and functions of space:

- The journey to the temple should involve surprises that draw the viewer onward, possibly glimpses of small parts of the sanctuary, but never a comprehensive view.
- At the point of entry there needs to be a type of “gatehouse” or foyer where obligations of the world can be put aside or into care. This may involve removal or change of clothing or foot ware.
- This is also the last place where processes of the outer world can occur including administrative functions of the sanctuary, which may be as simple as a community noticeboard.
- The zone around the entry may include features like gardens or small commercial service elements like food provision.
- The journey should be a reminder of the precious nature of water and its role is sustaining life. Ideally it would be through a natural system, a grove or via an extended water journey.
- Entry of a water sanctuary presents an opportunity to expand the nature of the journey through this skin/membrane in relation to water. The medium of water and its terrestrial flowing forms like a rivers allow an exploration of the dynamic and static qualities of water both physically and metaphorically. This journey could be through a sculptural water garden where qualities such as wave motion, fluid dynamic motion around objects creating eddies, reflection, exploration of various qualities of droplets can all be explored. The purpose of the narrative here is transition not confrontation or fascination.
- Ancient metaphors like the River Styx provide other richer ideas, such as Charon the guide or ferryman, as well as the idea of payment or sacrifice in some form.



## 15. *Design Brief* **Entry - Part 1**

پانی مندر 水寺 المیاه م عبد Water Sanctuary



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## Part 2 - Outer Sanctuary

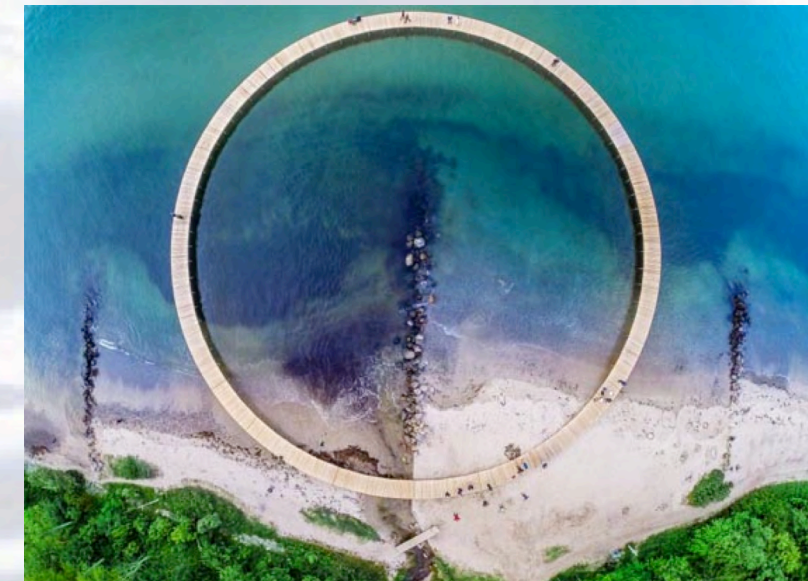
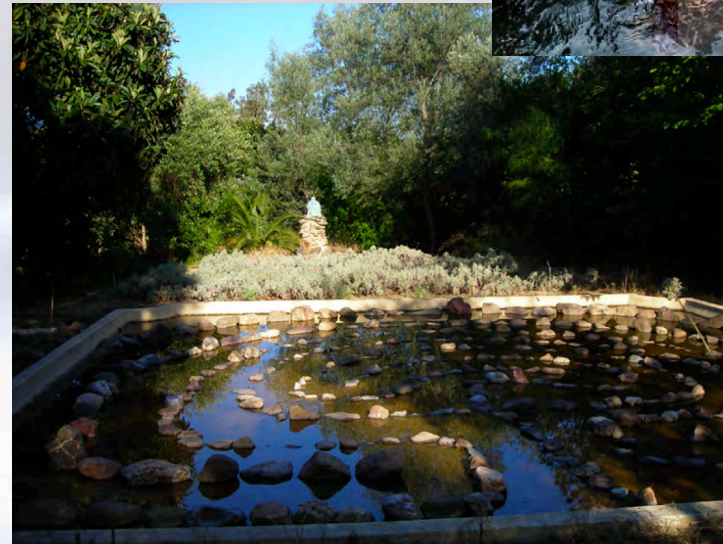
The outer sanctuary, as the name suggests is the safe zone of activity of the sanctuary. This area is more communal, where activity is related to a range of water based services, communal ritual, discussion and theatre. At one level this is a haven from the outside world, at another is a reflection or imitation. The stories and narrative of this zone told in art and ritual are related to practical considerations of water.

Characteristics, purpose and functions of space:

- A place for meeting and discussion about water use and management;
- A place to hang out, be quiet and contemplate the location around the temple on the water;
- A place of play
- A place where small inward focused ritual or performance can occur;
- A place that includes a stage for performance addressing larger audiences outside the temple possibly located on land;
- Should have differentiated levels in relation to water around it, levels above waterline, levels at or close to waterline, it could even play with the idea surface tension and walking on water;
- Potential for incorporation of water garden, both sculptural and with plants and fish;
- Is a place that provides accessible services such as
  - Provision of clean recycled water;
  - Provision of a shower for washing; and
  - Education about the nature, use and abuse of water;

Nature of stories to be told here:

- Relating to its educational function the stories told through artwork here relate to more practical description of the local catchment and water cycles both natural and man-made;



## Design Brief 16. Outer Sanctuary - Part 2

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## Part 3 – Skin/Membrane – Hero's Journey

This is the veil and filter between the inner and outer sanctums. It is a skin through which people pass physically to move from outer to inner to outer again. It is also a world in itself that has hidden space that provides alternative views and confronts individuals with the need to make choices and decisions. It is layer that is designed to subvert and provide the alternative viewpoint. It documents a story of change. Metaphorically this is the place of the "hero's Journey" as described by Joseph Campbell, because it is both harder to take this path and because the messages of the path are designed to be more confronting.

Characteristics, purpose and functions of space:

- Challenges existing human psychological state, creates possibility of changed perception intellectually about the nature of water and water use, but also wider perception of place within nature and society;
- Depending on scale of temple the skin may or may not have volume that can involve a physical journey within the skin of the building. Alternatively as a skin/membrane without volume the journey may only be accomplished by echoes and glimpses from either the inner and outer sanctums that necessitates a psychological journey;
- Involves making choices of which route to follow, choices like "the road that branched in the yellow wood". Some of these choices might provide glimpses or even physically position the hero in the inner or outer worlds along their path. The path itself might provide physical challenge, by narrowing, or being precarious, this will be matched by the stories being told through the art;

Nature of stories to be told here:

- Documents the stories of change and the states of transition of water. What happens between gas, liquid and solid states of water;
- Documents our human change of perception of the roles and functions of water and points to how we might have to change our perceptions again;
- Documents the history human water resource use and pollution, this story inevitably has the choice between toxic waste and clean fresh water.

Counterpoint

In a larger temple this area can be used as a backstage function for theatre and ritual conducted in the inner and outer sanctum.



## Design Brief 17. Skin - Part 3

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## Part 4 - Inner Sanctum

This is the still point or heart around which the water sanctuary/temple revolves; it is a place of esoteric and or hidden information.

Characteristics, purpose and functions of this space:

- Focus on quiet individual experience
- Quiet contemplation and reflection of the inner world both an individual experience and of water as a substance. Water maybe represented artistically as exploration of cellular importance of water to life or water at a quantum level in this space;
- A sense of balance and harmony is important although not necessarily symmetry.
- Imbues water with a singular sense of awe and preciousness, and importance to all life;
- Has a simple possibly mesmeric focal point;
- Psychological it is both detached and hidden from the outside world, it might be cave like;
- It might play with a vertical axis, which draws on historical ideas of temples as a connection between heaven and Earth, or in this case atmospheric water and large bodies of water that are defined by gravity. In this case the river, lake or ocean that the temple floats in;
- It needs qualities of deep time that places like caves of Altamira in Spain, a grove of ancient trees, or a geographical feature like Uluru has;

Nature of stories to be told here:

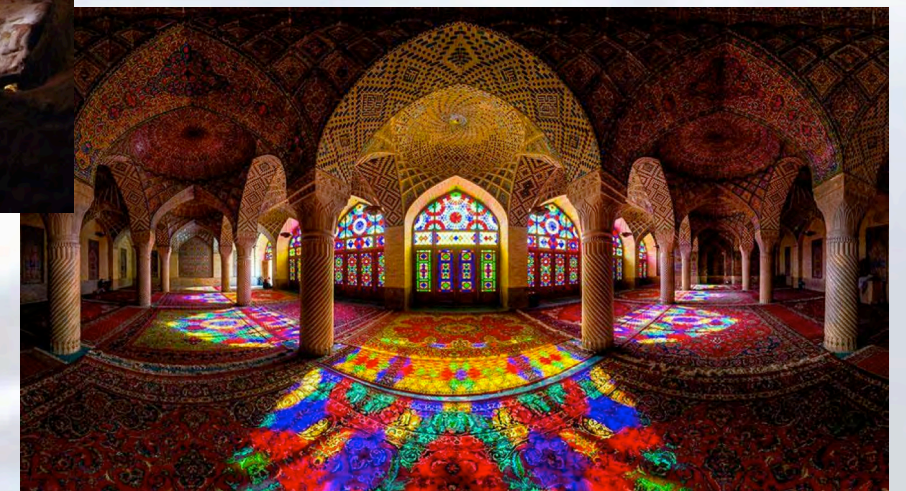
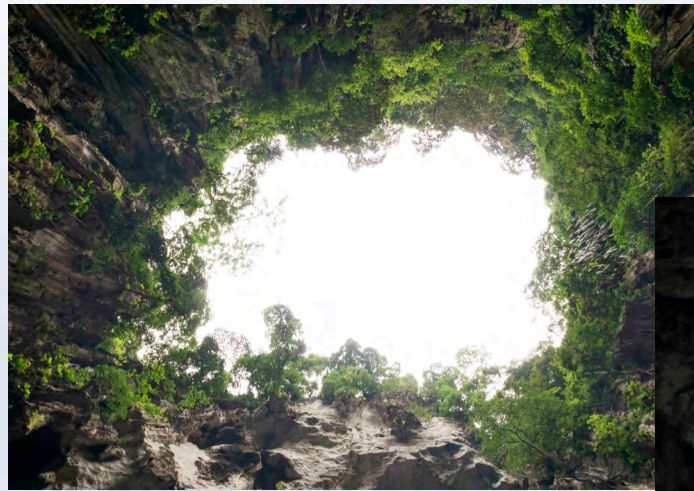
- Tells a universal and or mythical story.
- Puts water within the context of a long history that draws together threads of common perception and understanding of water throughout time.
- This story will be told slightly differently in each place, so within a local Australian context it would need to at least draw upon an Aboriginal understanding and relationship with water;

Counterpoint

- Presents an echo or shadow of stories told within "Hero's journey"
- A place potentially for important sacred decision-making related to water and natural resource use, in the way Bali "Subak" do.

The inner sanctum needs separation, acoustically, without visual distraction or outside smells. This is part of the function of the Skin/Membrane.

The skin will be a part of the experience of both the inner sanctum and outer sanctuary but not obvious. Entrance to it might also be obscured or hidden.



## Design Brief 18. Inner Sanctum - Part 4

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**What is the challenge you wish to address?**

Most Australians are intellectually and emotionally detached from the consequences of the way we use water. We buy drinking water in plastic bottles and flush clean water down the toilet with little regard for the role water plays in all aspects of life. The cost of fresh water continues to increase. However, despite investment in education programs and infrastructure projects, too often it is only drought and punitive water restrictions, which temporarily alter behaviour and attitudes to water use. My aim is to create permanent change in the way we understand and manage this most fundamental and precious resource.

**What is your idea to meet this challenge?**

Imagine a beautiful Water Sanctuary floating in a river, lake or estuary near you, a vessel for understanding water, a place of tranquillity, utility and inspiration.

Using a combination of art, design, space and technology a Water Sanctuary will be:

- Secular Temple - a tranquil space of awe and wonder, telling a four billion year creation story;
- Educational Interpretative Centre - where children and adults learn about the water cycle, and its intimate relationship to life;
- Community Facility - a meeting place to discuss and plan local community water management;
- Icon - an artistic expression of the strange and wonderful characteristics of water; and
- Sanctuary - a place located in the public domain, that offers services to even the most humble and dispossessed.

A Water Sanctuary is a new architectural form that will offer simple services such as the provision of clean drinking water and the cleansing of the waterway it inhabits. It will elegantly integrate technologies for water capture, cleaning, distribution and storage, self-generated renewable power, and educational interpretation. The novelty and complexity of this integration should provide an unforeseen opportunity to create new technical solutions, which hopefully prove valuable in other applications.

Now imagine a network of sanctuaries throughout Australia and the world, each one a local site-specific secular institution telling a slightly different story, and inspiring people to understand and value water across all its utilitarian, cultural and spiritual manifestations. This idea is a paradigm shift. It is not meant to replace current water management programs, but rather supplement the best of them. It aims to stimulate locally and globally a new 'people's movement of water empowerment' akin to "Keep Australia Beautiful", "Men's Shed" and "Permaculture", but will address climate change and access to clean water, the biggest social and environmental issues of the 21st century.

**What will you do during the nine to twelve months of the fellowship, and what are your expected outcomes?**

I will:

- Continue research on the artistic, interpretative and technological narrative of the "water sanctuary". This will include engaging with scientists, academics, story tellers and water related businesses in Australia and overseas;
- Market test the idea;
- Design and build models of a range of prototypes;
- Create a virtual Water Sanctuary, an internet repository of my research and designs to test ideas and get feedback;
- Explore ways to fund the next stage. This may include using the exposure and profile the Fellowship provides to help raise capital to build the first Water Sanctuary and launch the idea more broadly.

**Why are you the right person to do this?**

I became interested in the concept of Water Sanctuaries while still a student. I now have over twenty years professional experience as designer and project manager of complex technical and cultural projects. The new methodologies, service models and building forms I have devised underpinned by my core values of social justice and environmental sustainability. Over the years I have continued to research and contemplate our relationship to water and my passion for this idea has evolved and deepened. As a mature practitioner, I am confident I now have the technical, entrepreneurial and human skills to make this passion a reality.

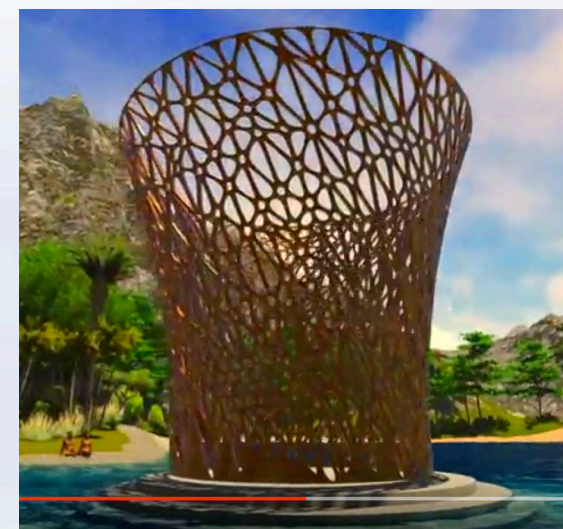
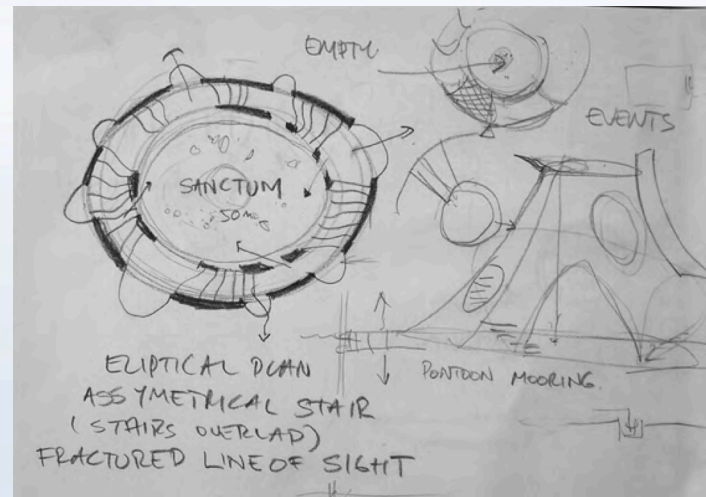
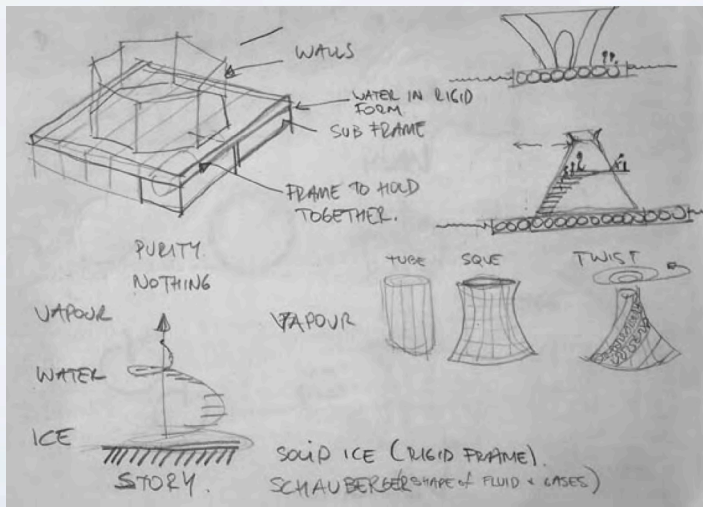
# 19. Fellowship Application

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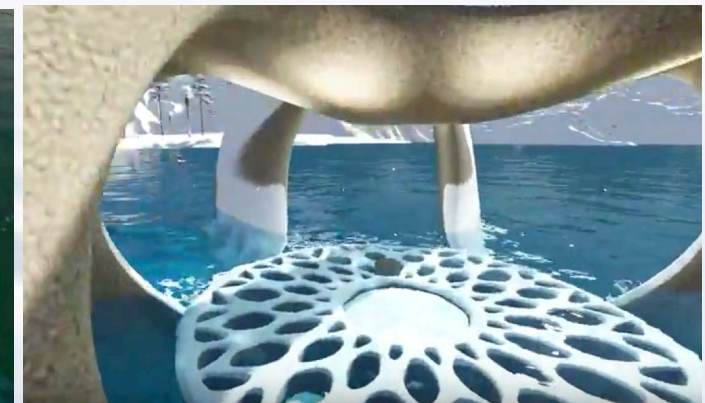
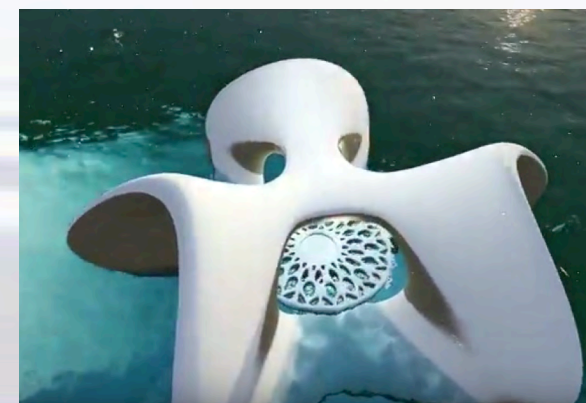
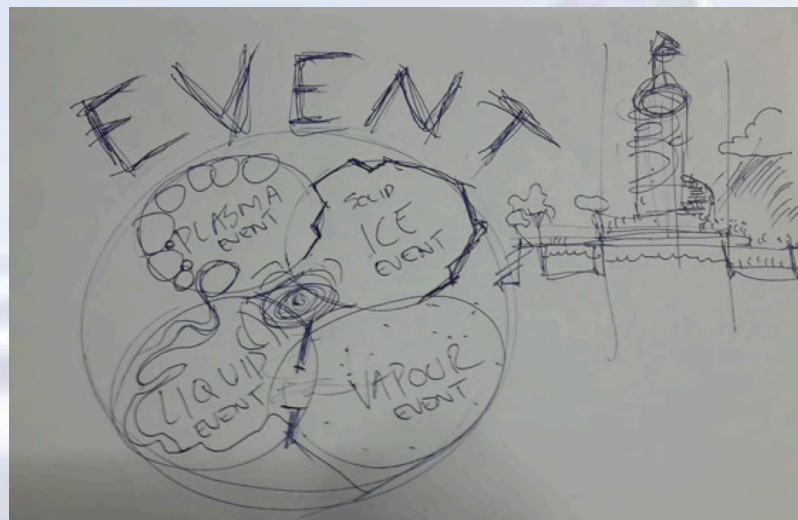
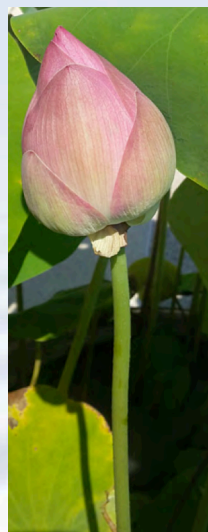
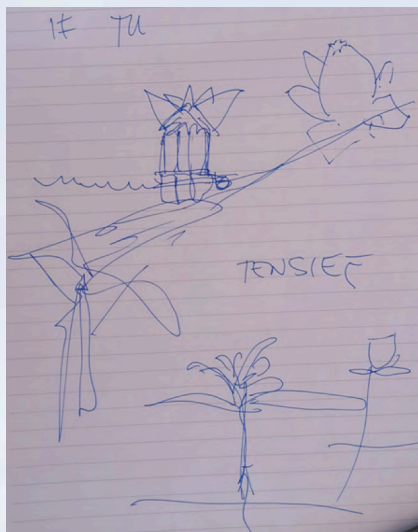


This document is a page in a set of visual minutes of the processes, key events, development of ideas and decision making related to development of a water temple. Its aim is to be an accurate and transparent account of the history of a process begun in May 2015.



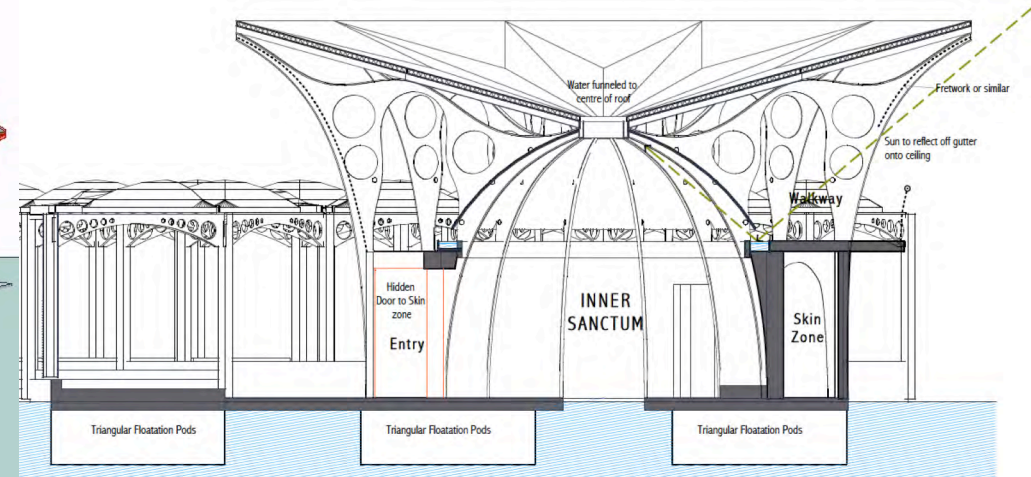
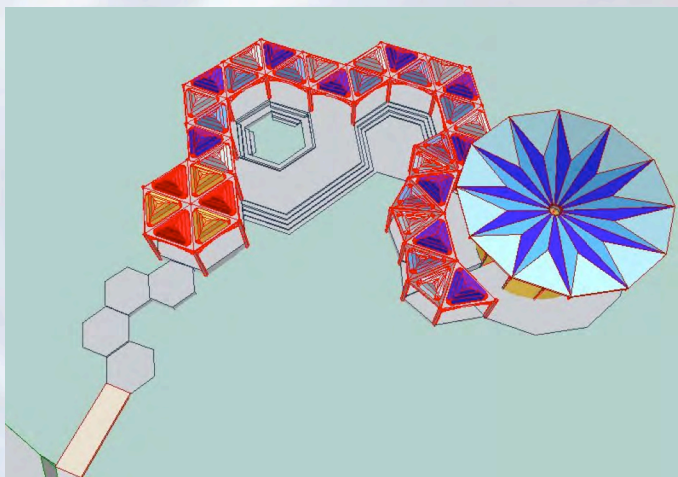


Water Experience Fractal Tree - Michael Flynn  
<https://www.youtube.com/watch?v=TgGA02IufEQ>



Inflatable Temple - Michael Flynn  
<https://www.youtube.com/watch?v=U6vL4N5PF2I>

## Ideas from the fertile minds of Moggs and Jim



## Large Floating Temple Scheme 2 - Malcolm Price

## 20. Early Design Concepts

پانی مندر 水寺 المیاه معبد Water Sanctuary



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