A photograph of a cave interior. A large waterfall cascades down a rocky wall on the left side of the frame. The cave floor is covered in water, reflecting the light from the waterfall. Several people are visible in the cave, some standing near the waterfall and others further back. The lighting is dim, with the waterfall providing the primary source of illumination. The overall atmosphere is mysterious and natural.

Beyond Sustainability – New visions of human Econnection in Early Childhood and Primary School Education

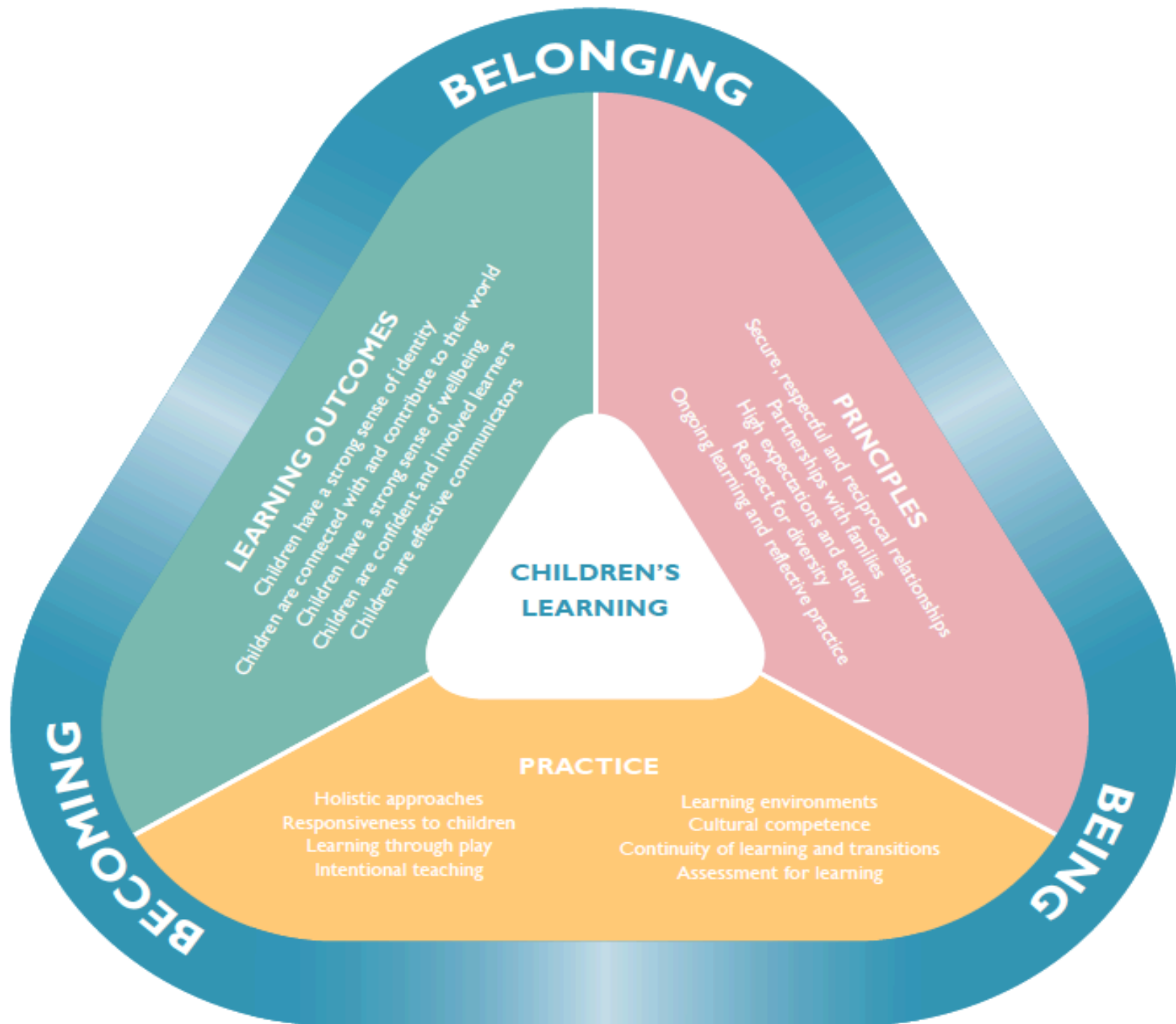
New Imaginings for Sustainability
University of Lincoln Nebraska. April 2015

National Quality Framework

- Department of Education and Training (DET): National Quality Framework for Early Childhood Care Education and Care –
 - Education and Care Services National Regulations
 - National Quality Standards
 - Quality Rating System
 - Universal Access to Preschool for 4 yr old children 15 hrs per week with a qualified ECT: funded.
 - Work place credentials for early childhood educators
 - Australian Children's Education and Care Quality Authority: ACECQA
 - Early Years Learning Framework: EYLF

National Quality Standards

- Standard 3.3 The service takes an active role in caring for its environment and contributes to a sustainable future.
 - Element 3.3.1 Sustainable practices are embedded in service operations.
 - Element 3.3.2 Children are supported to become environmentally responsible and show respect for the environment.
- This standard represented the 2nd highest number of services that were working towards (not yet met) the quality standards. (ACECQA 2014)



Early Years Learning Framework

- EYLF a series of Principles, Practices and Outcomes:
- Embodies socio-cultural perspectives
 - Belonging, Being, Becoming
- Outcome 2: Children are Connected With and Contribute to their World.
 - Element 3: Children become socially responsible and show respect for the environment

Sustainability curriculum

ACARA Sustainability as a cross-curricula priority:

- Actions to improve sustainability are both individual and collective endeavours shared across local and global communities. They necessitate a renewed and balanced approach to the way humans interact with each other and the environment.
- Education for sustainability ... enables individuals and communities to reflect on ways of interpreting and engaging with the world. Sustainability education is futures-oriented, focusing on protecting environments and creating a more ecologically and socially just world through informed action.
- Code of organising ideas:
 - Systems
 - Worldviews
 - Futures
 - <http://www.australiancurriculum.edu.au/CrossCurriculumPriorities/Sustainability>

Barriers to Implementation

- Traditional outdoor play in nature is enough...however:
 - Play spaces being eroded
 - Time is limited for children to engage in self-selected play in the outdoor – i.e recess being taken away and real learning happens indoors
 - Need for learning outdoor is mitigated by technological advances
- Sustainability issues too complex for children...however:
 - Children have a right to engage – we all share the same water and air
 - Children are capable and active learners
 - Time spent in the natural world with capable adults predisposes children toward environmental thinking and stewardship

Adapted from Elliot and Davis: 2009

New human and relational perspectives – the world is alive!

- Renewed and balanced approach: Recognising the agency of the other than human world
- Effects of and responses to the other than human world
- Embodiment and representation of the relationship between human and other than human worlds through the arts



Embedding the human and other than human relationship

A morning verse:

In the morning light, we stand upright

The strength in our limbs renewed

As we greet the day we are happy and gay

and find pleasure and wonder in all that we do

We seek knowledge and truth with an active mind

Every new step, the light we will find

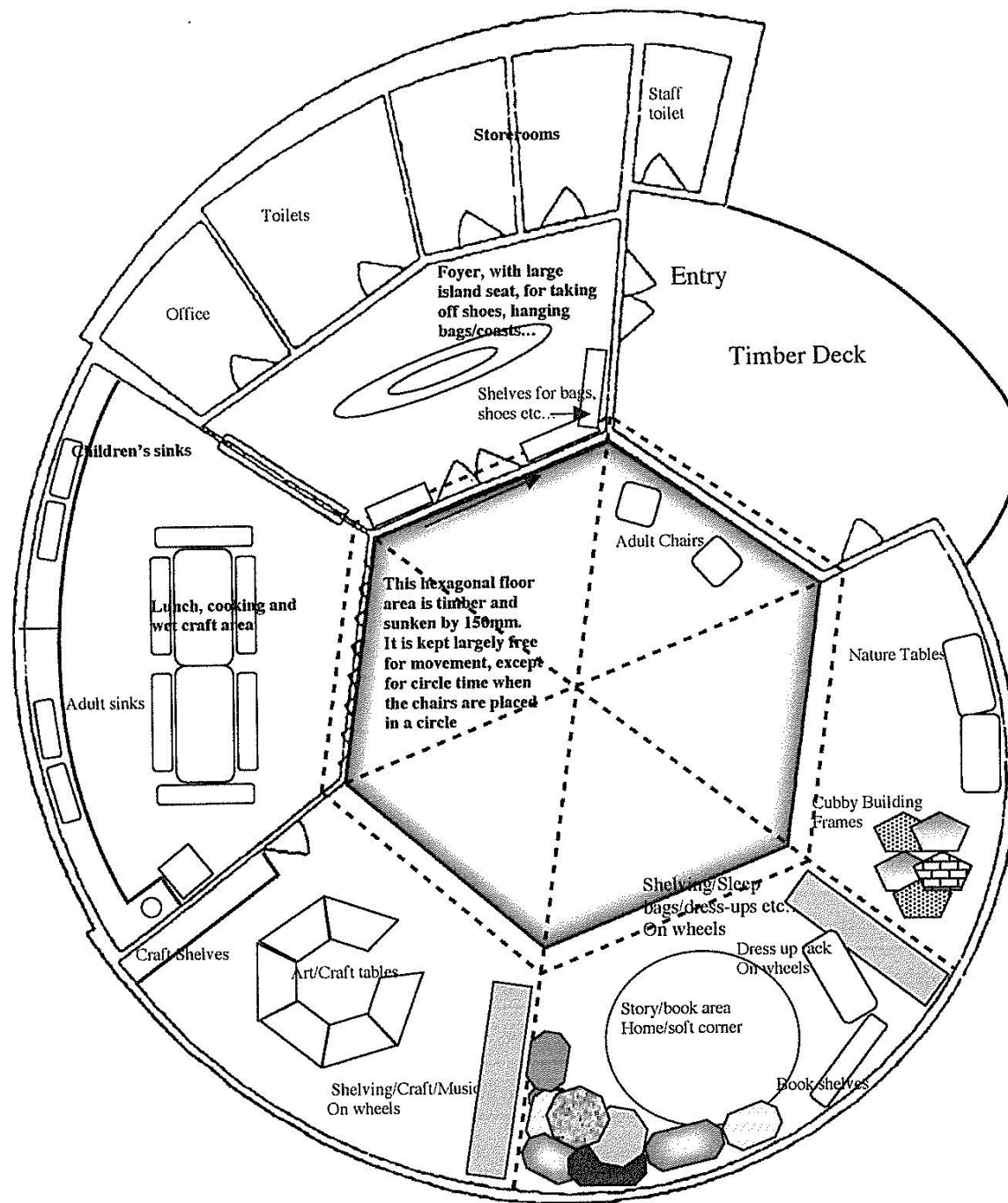
Each day, each step, brings something new

In all that we think, feel and do.



Living architecture





The power of place-stories

- The strength of belonging
- The need to know one's own place
- What does the environment do to our stories?
- What do our stories do to the environment?
- The way we narrate our environment reflects and affects our relationship with it.



A good place to be



OI.3 Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.

Claiming place through play

I have to get down on the Slide. I've got lots of games. Cubby with traps. I make the traps or other things. Café. Cubby. Door at bottom.



There are lots of secret spaces underneath there is a door and a gate to a hiding place. Lara 6 years

Embodiment of place

- Movement
- Drama
- Play
- When we perform the other than human world, what do we know about it and how do we interact with it as a result?

OI.5 World views are formed by experiences at personal, local, national and global levels, and are linked to individual and community actions for sustainability.



Collective Experience



Dynamic Movement



Inspiration for movement



Shish Whisper

Shish whisper the prancer
The grass seed top dancer
Curls and swirls and flows
Gentle blower breeze
High in the trees
In forms the birds all know
Rush roar is loud
As it brings in the clouds
It comes and then it goes....



Visible speech through movement



Eurythmy as speech and movement

Eurythmy as a reflection of tone and music



Content for drama and play



We need to allow children to develop their biophilia, their love for the Earth, before we ask them to save it (White 2004) .



OI.4 World views that recognise the dependence of living things on healthy ecosystems, and value diversity and social justice are essential for achieving sustainability.

The magic of elemental inter-play



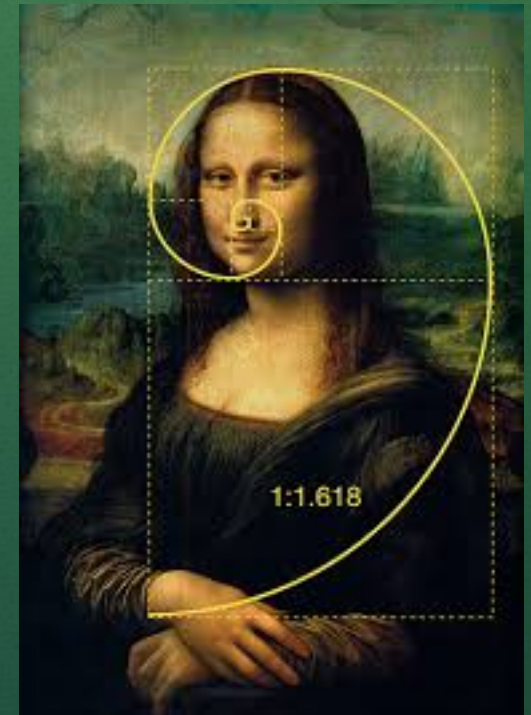
Form and proportion

Mathematics and nature:

- The Fibonacci series
- The Golden Mean
- Projective Geometry



Image 1 reference 2



Images 2 and 3 reference 3

Ol.3 Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.



OI.4 World views that recognise the dependence of living things on healthy ecosystems, and value diversity and social justice are essential for achieving sustainability.



2 Dimensional Sculpture



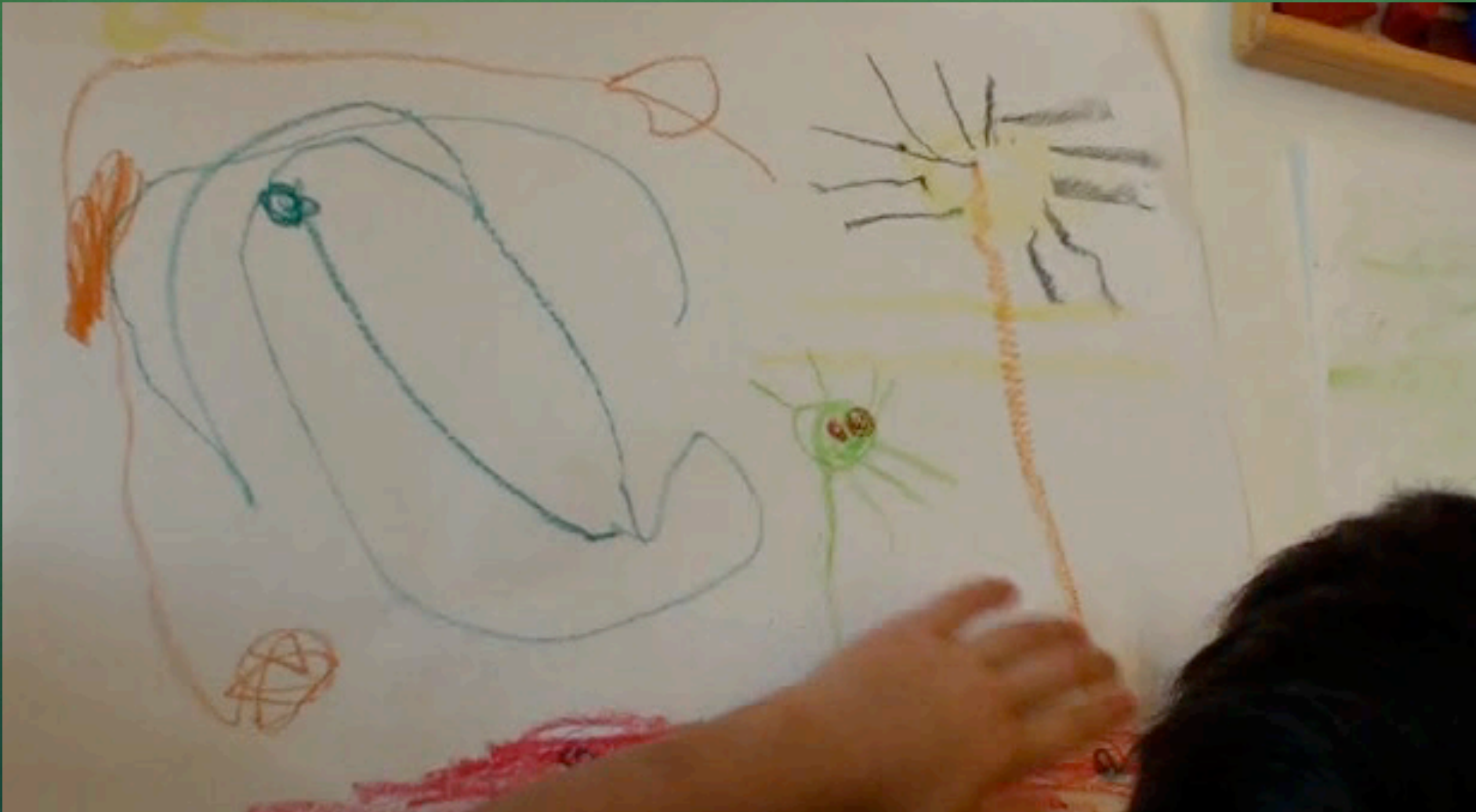
Skylark the Scavenger



Genesis Drawing



A guide for building on

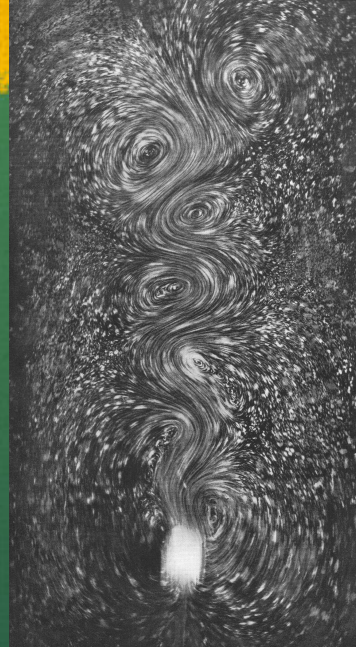


It's a House



The nature of water

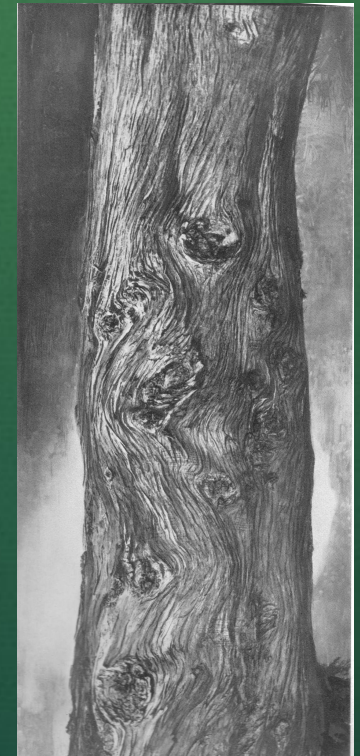
- Pattern recognition
- Flow
- Changing states



Water is the
driving force of
all nature.
Leonardo da
Vinci. Ref 5

Images ref 4

- The water planet
- The water body



OI.2 All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.

Childspace Kindergarten New Zealand



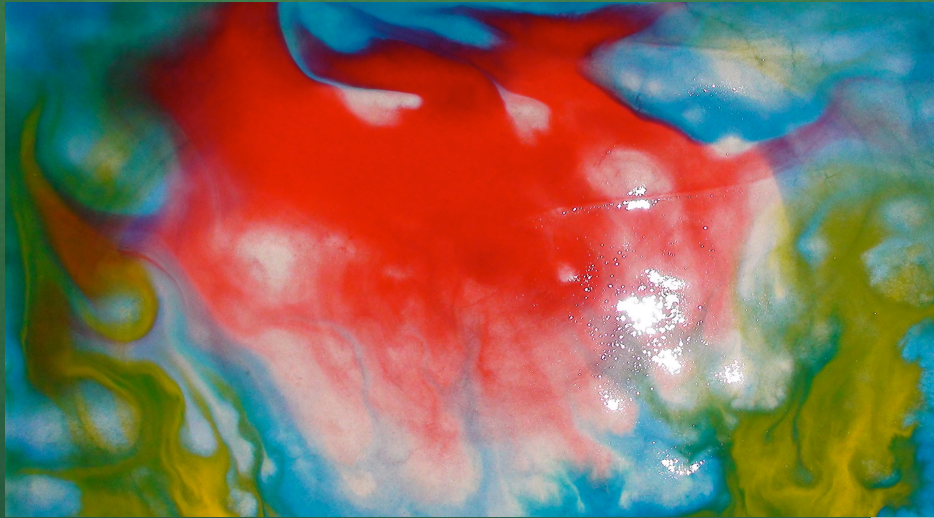
Nature as Inspiration for Art



Colour



Colour

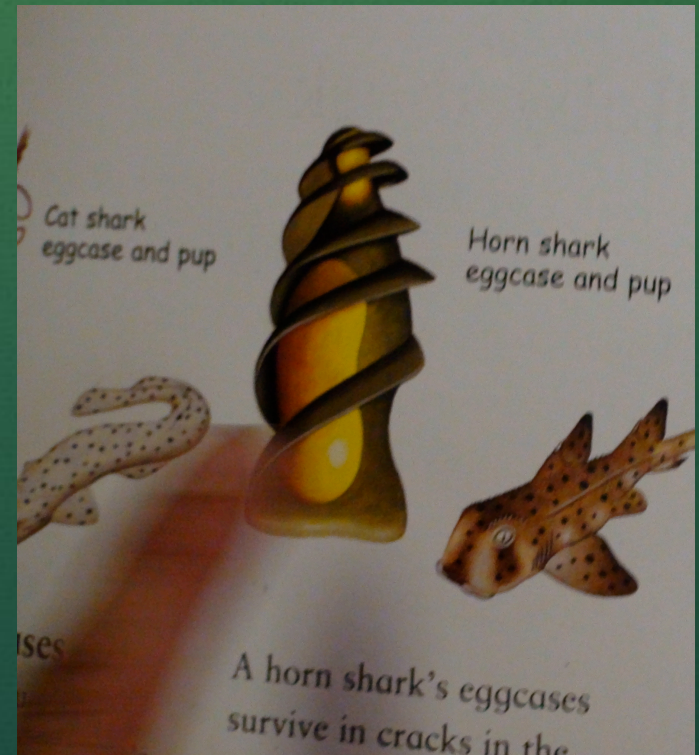


Colour and form can
generate a sense of awe
and wonder

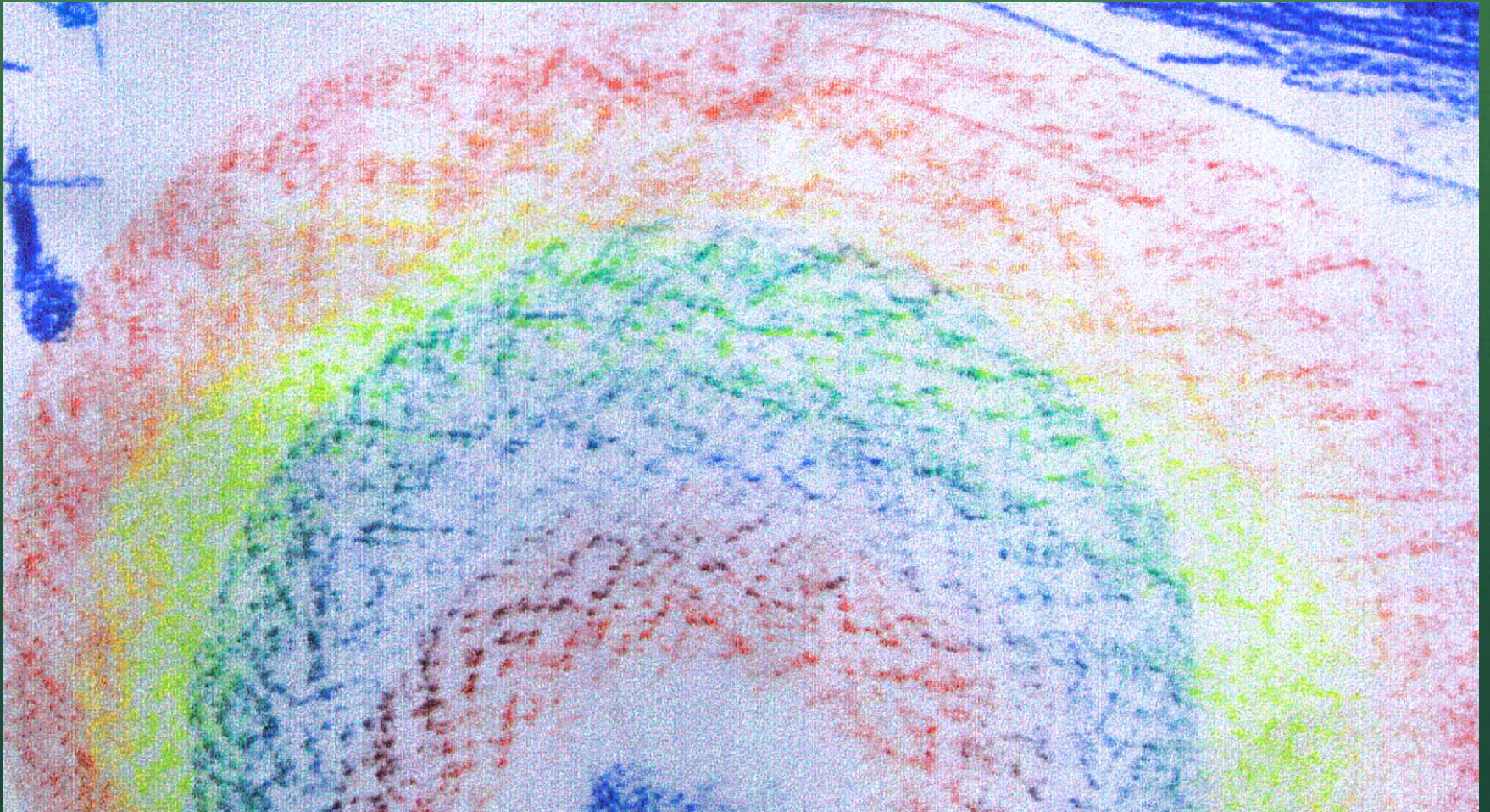
Understanding rainbows
goes to the heart of the
relationship between light
and water.



A Shark's Purse



Rainbow with Three Colours



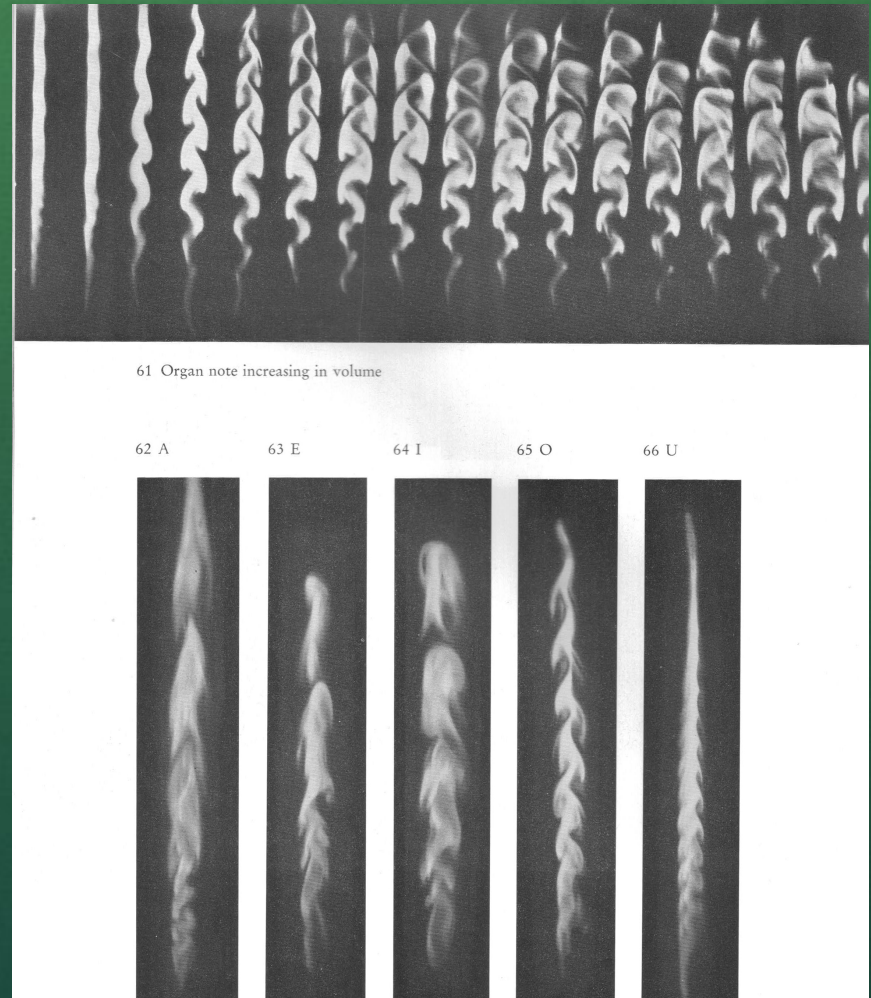
The colour wheel



Colour assists in understanding temperature, concepts of opposite attraction, complementarity and adjacent relationships.

Music and sound

- Spoken vowels in a gas stream
- Affects of sounds on city dwelling birds
(reference 7)
- Affects of sound on animal migration
(Reference 8)
- Music in the program

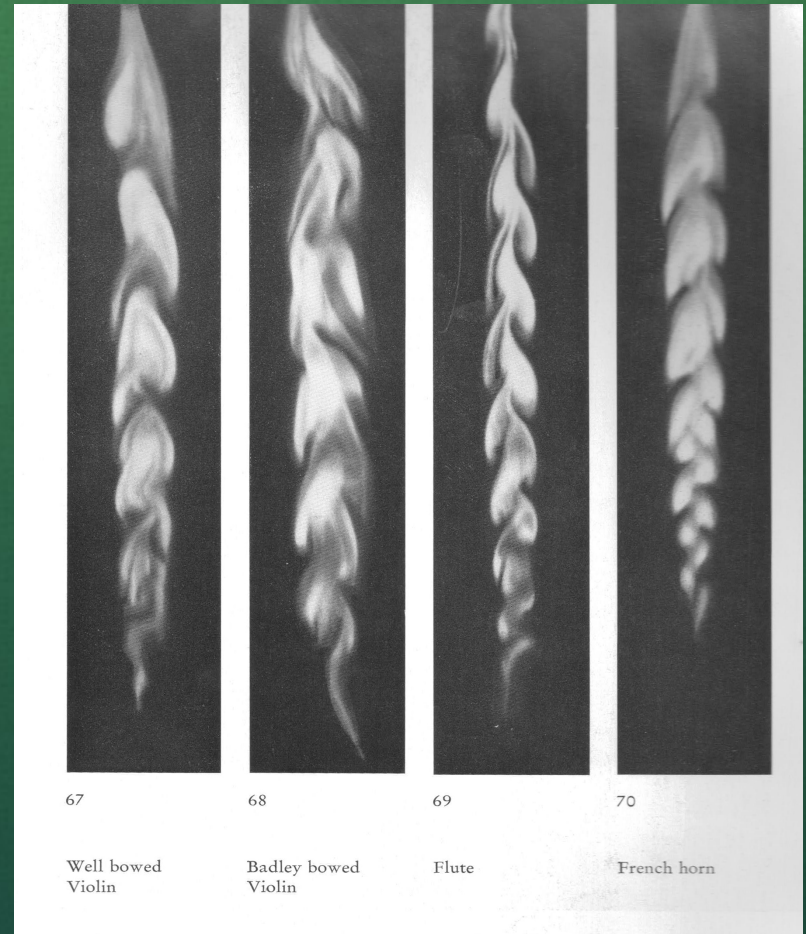


Earth's breath

What impact do our sounds have on the dynamics of air movement?

What reciprocal interactions occur in the air between the human and non human worlds?

- Through speech
- Through movement
- Through music



The nonhuman world as inspiration for music



Atacama's Breath

Camanchaca Whispers roll in from the sea

Hugging the range and the coastal plain

Camanchaca Whispers in the mountain's lee

They promise but give little rain

Tillandsia gather on the desert plain

To water their green cacti leaves

They catch the Camachaca and turn it to rain

Lest it be caught by the breeze

The Camanchaca whispers to all in the land

Catch me if you think you can

But only a little do I share with man

My whispers are not for the sand

Camachaca, Camanchaca, ephemeral and free

Whispering, rolling or still

Camanchaca, Camanchaca airborne sea

Your secrets if you will

Your secrets if you will.

Goodbye verse

Soon the sun will pass on by

And the moonlit night will be my guide

Through colours of dusk and evening hue

All I have learned and all I have done

Each step I have spoken

Each song I have sung

Within me now rests like a sleeping seed

Waiting for a time to grow and be

To bear its fruit for the world to see (Lorien Novalis Class 1. 2015)

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