

# New Directions in Sustainable Design: Ethology Draws!

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# Why the need for a new direction in Sustainability?



- The 'newness' of sustainable design is an illusion. Most ideas are from 20-50 years ago already well developed, it is time to move on.
- Interest in Sustainable Design is shaped by economic interests that primarily benefit a small sector of society.
- Many core public understandings of Sustainable design are false and the result of media manipulation.

# Ethology



Ethology is the study of animal behaviour

Advantages in sustainable design:

- Draws attention to core issues
- Includes evolutionary drivers and habitual behaviours
- Sets aside taken-for-granted culture issues
- Surfaces subjective emotional considerations
- Surfaces political manipulation

# Illusion of Newness



- Sustainable design is much the same as it was 50 years ago.
- Design innovations typically have a 13-17 year development stage. Many sustainable design innovations have taken twice this or more.
- Concepts of Sustainable Design have had a similar delayed lag.

# Romantic Illusions



Green design and sustainable design has been driven by:

- Romantic illusions attached to emotionally redirected 'caring' instincts.
- False information
- Economic greed
- Manipulation of emotion



# Sustainability Tests



- Which is more environmentally efficient place to live? Perth CBD or an organic farm?
- Which provides the best water – tap, distilled water, filter, bottle water, rain tank?
- When did Robyn Williams first discuss in the Science Show the long delay in implementing wind, wave and solar power?
- When did car makers start to focus on sustainability?

# An early sustainability dream of Australian UK immigrants

- In the UK throughout the 20<sup>th</sup> century , poorer people in industrial cities dreamt of a new sustainable design for a house:
  - Single storey (no stairs for old age)
  - A generous garden for growing things
  - Brick and tile for longevity and low maintenance
  - Good separation of work from living
  - Clear separation from neighbors
  - Access to a centre with good shops.....



## The Australian suburbs

# Sustainable design pays the rich from the taxes of the poor



- In the 1970s, wealthy landowners in the UK found their rural land was economically unviable.
- Lobbying resulted in large payments from the public purse and tax avoidance programs made to landowners for planting trees.
- This was justified by a media-based promotion that paved the way for the current illusion that trees reduce carbon emissions.



# Ethology as a New Direction in Sustainable Design



- Analyse humans as animals.
- Use Tinbergen's questions:
  - How does the behaviour affect the animal's chances of survival and reproduction? Why does the animal respond that way instead of some other way?
  - What are the stimuli that elicit the response, and how has it been modified by recent learning?
  - How does the behaviour change with age, and what early experiences are necessary for the behaviour to be displayed?
  - How does the behaviour compare with similar behaviour in related species, and how might it have begun through the process of phylogeny?
- Use this information as the basis for sustainable design methods and designs



Thank You!

**QUESTIONS?**