

BUSINESS CASE OF BIOMIMICRY

As a design tool, biomimicry offers the means to achieving resilience, adaptability, and a thriving design product.

Nature as **MENTOR**

Project Phase: Project Scoping, Programming, Design Brief

Benefits

- Broadens solution space
- Most directly delivers the desired service
- Changes mindsets
- Design for life
- Identifies limits and opportunities within a context

Tools

- Discover and Abstract
- Biologize the Verbs

Outcome: Clearly identified set of desired services given the client needs and project context

Nature as **MODEL**

Project Phase: Ideation, Creation, Design Production

Benefits

- Quantity of ideas
- Novel and innovative ideas
- Conducive to thriving life conditions
- Multi-functional
- Well attuned
- Proven success in the natural world
- Optimized
- Context specific

Tools

- Context Analysis
- Vision of Verbs

Outcome: Design solution that optimizes the service delivery method

Nature as **MEASURE**

Project Phase: Design and Operational Evaluation

Benefits

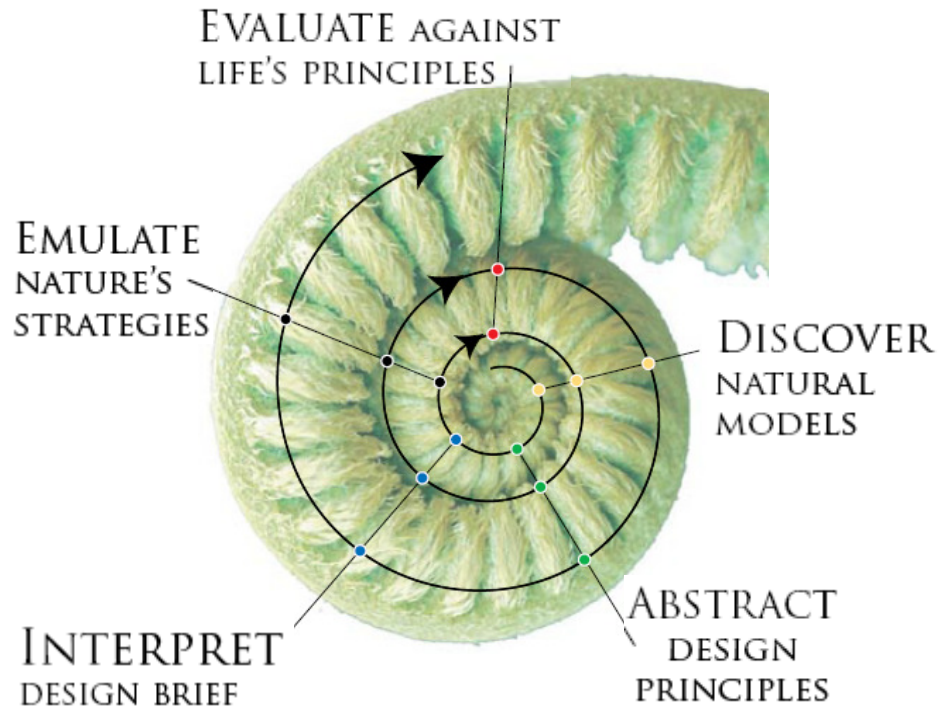
- Life is the benchmark – LBC, LEED, TNS are all implicit
- Identifies limits and opportunities
- Maintain optimal performance
- Respond to changing conditions and unanticipated consequences

Tools

- Life's Principles

Outcome: Solution evolution and responsiveness

Biology to Design



RESOURCES

Online

Ask Nature, www.AskNature.org
Encyclopedia of Life, www.eol.org

Organizations

Center for Biologically Inspired Design
www.cbid.gatech.edu
Biomimicry Institute, www.biomimicryinstitute.org

Books

The Way Nature Works, Macmillan Publishing Co.
Zoomorphic: New Animal Architecture, Hugh Aldersey
Nature and Architecture, Paolo Portoghesi
The Organic Approach to Architecture, Deborah Gans
Animal Architects: Building and the Evolution of Intelligence, James L. Gould
In Search of Natural Architecture, David Pearson
Bio-Architecture, First Ed., Javier Senosiain
Versatility and Vicissitude: Performance in Morpho-Ecological Design, Michael Hensel