

The Q&A method to Regenerative Architecture

an experimental design approach with case
illustrations



Sylvicultura Oeconomica, or the economic news and instructions for the natural growing of wild trees,



Hans Carl von Carlowitz

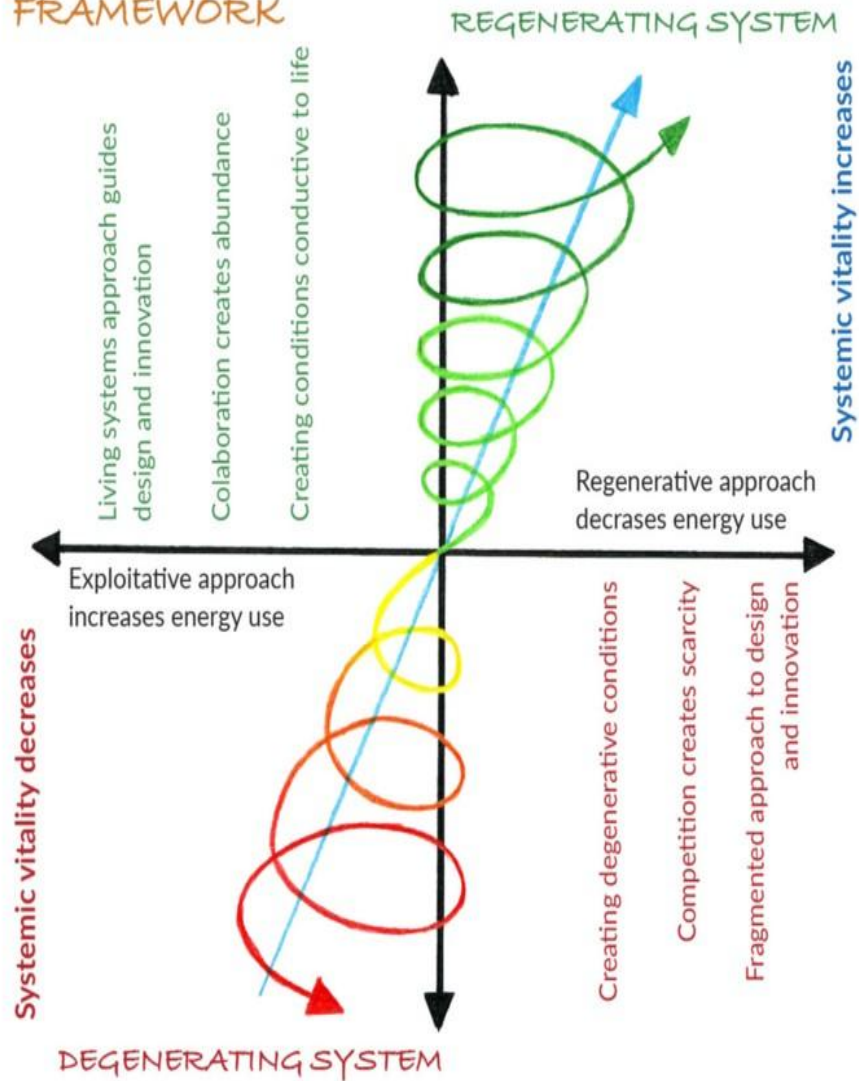
Father of Sustainable Yield Forestry.



To be the best utility for the heating, building, brewing, mining and smelting activities requires the careful management of sustainable forestry resources.“



THE REGENERATIVE DESIGN FRAMEWORK



Regenerative

Appropriate participation and design as nature.

Reconciliatory

Reintegrating humans as integral parts of nature.

Restorative

Humans doing things to nature.

Sustainable

Neutral point of not doing any more damage.

Green

Relative improvements.

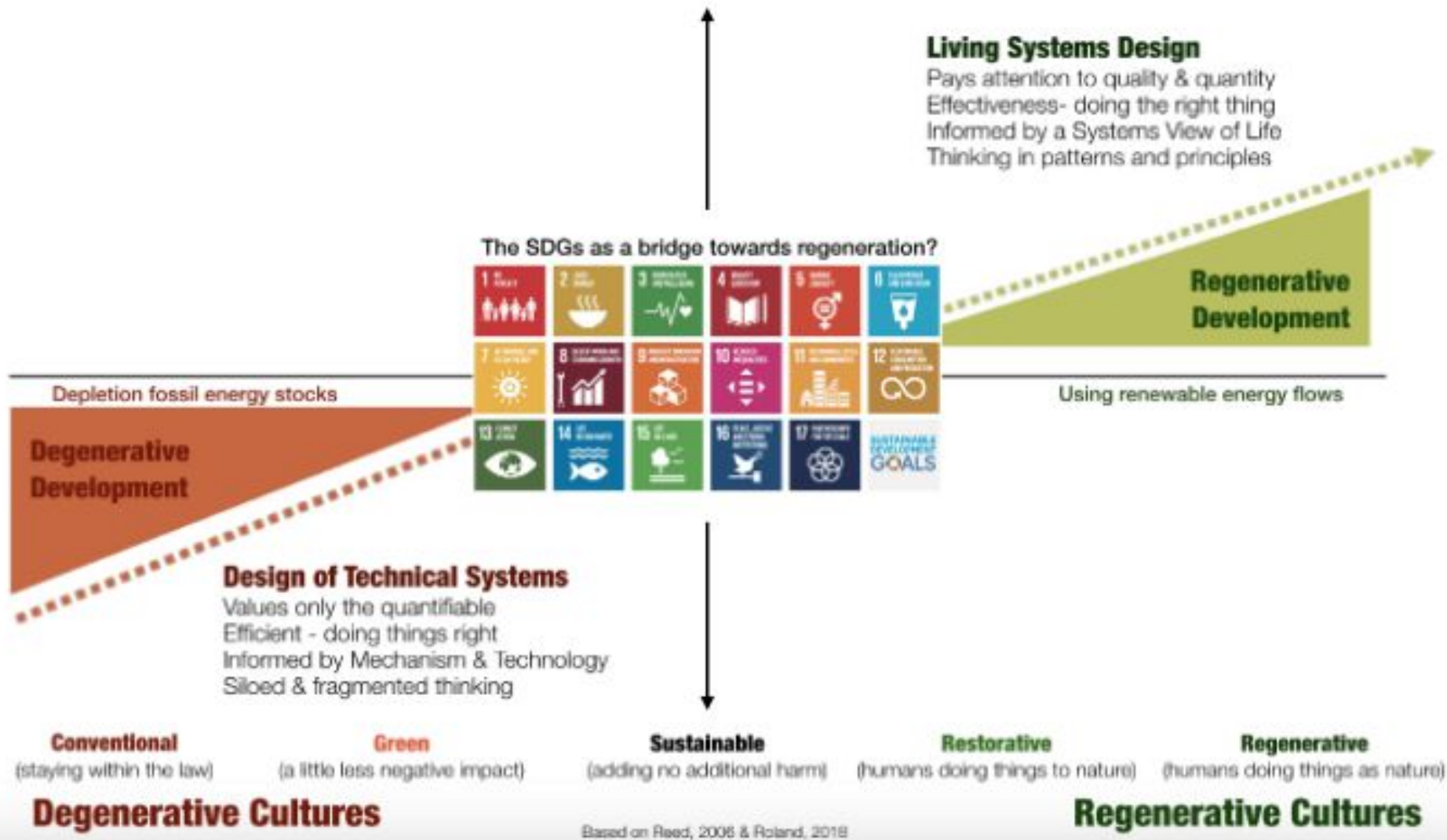
Conventional practice

Compliance to avoid legal actions.

Source: Designing Regenerative Cultures, 2016 - www.danielchristianwahl.com; Graphics: www.flaviagargiulo.com



Beyond Sustainability: Designing Regenerative Cultures



Credit **Daniel Christian Wahl** author of the book- "Designing Regenerative Cultures"

Reference---

<https://medium.com/age-of-awareness/how-do-you-distinguish-between-regenerative-and-sustainable-design-45>



Beyond Sustainability: Designing Regenerative Cultures

Living Systems Design

Pays attention to quality & quantity
Effectiveness- doing the right thing
Informed by a Systems View of Life
Thinking in patterns and principles

The SDGs as a bridge towards regeneration?



**Regenerative
Development**

Depletion fossil energy stocks

Using renewable energy flows

**Degenerative
Development**

Design of Technical Systems

Values only the quantifiable
Efficient - doing things right
Informed by Mechanism & Technology
Siloed & fragmented thinking

Conventional
(staying within the law)

Green
(a little less negative impact)

Sustainable
(adding no additional harm)

Restorative
(humans doing things to nature)

Regenerative
(humans doing things as nature)

Degenerative Cultures

Regenerative Cultures

Based on Reed, 2006 & Roland, 2018



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Regenerative Cultures



Left brain
Centered
approaches

Right brain
Centered
approaches



Quantitative

Qualitative



Analysis

Synthesis



Language of Numbers

Language of Patterns





Why build this ?

Architecture Project
Project Programme
Programme Unit
Unit Layout
Layout Interiors
Interior Fixtures
Fixture Services
Services Sourcing



When to start?

researching

designing

whetting

revising

construction documents

contractor selection

actual construction



How to build.....?

Collaboration

Trust

Interdependence

Teamwork

Feedback Loops

Multiple Iterations

Innovation & Experimentation

Divinity



Who does the ?

terms of reference

harvesting

designing

detailing

financing

using

feedback

evaluation

replication

promotion



Where to build this.....?

Building
Water-catchment
Landscape
Forest
Food Farm
Community Space
Energy farm
Resource Recovery Area



What materials for.....?

Foundations

Walls

Floor Slabs

Roofs

Interiors

Finishes

Landscape Elements



Move from
industrial sourcing
to
regenerative agricultural sourcing?



Site-harvested Palmyra Leaves



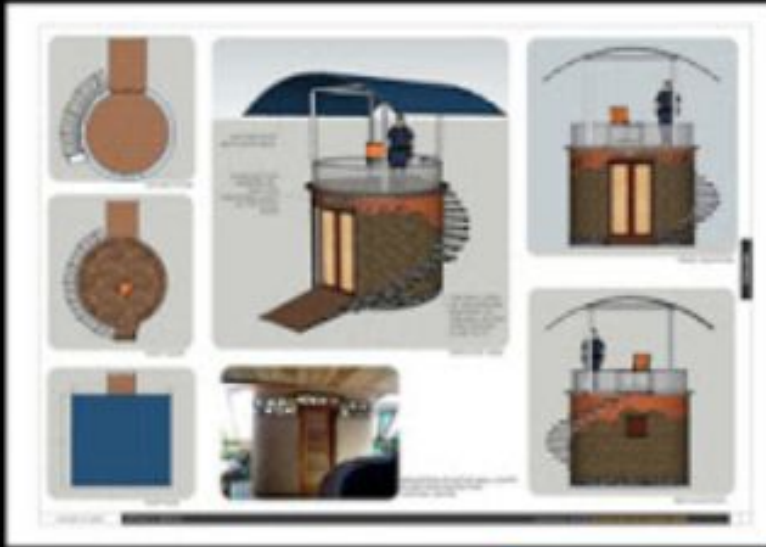
Palmyra Leaf Stem Collected & Stacked



Roofs Made With Palmyra Leaf Stem



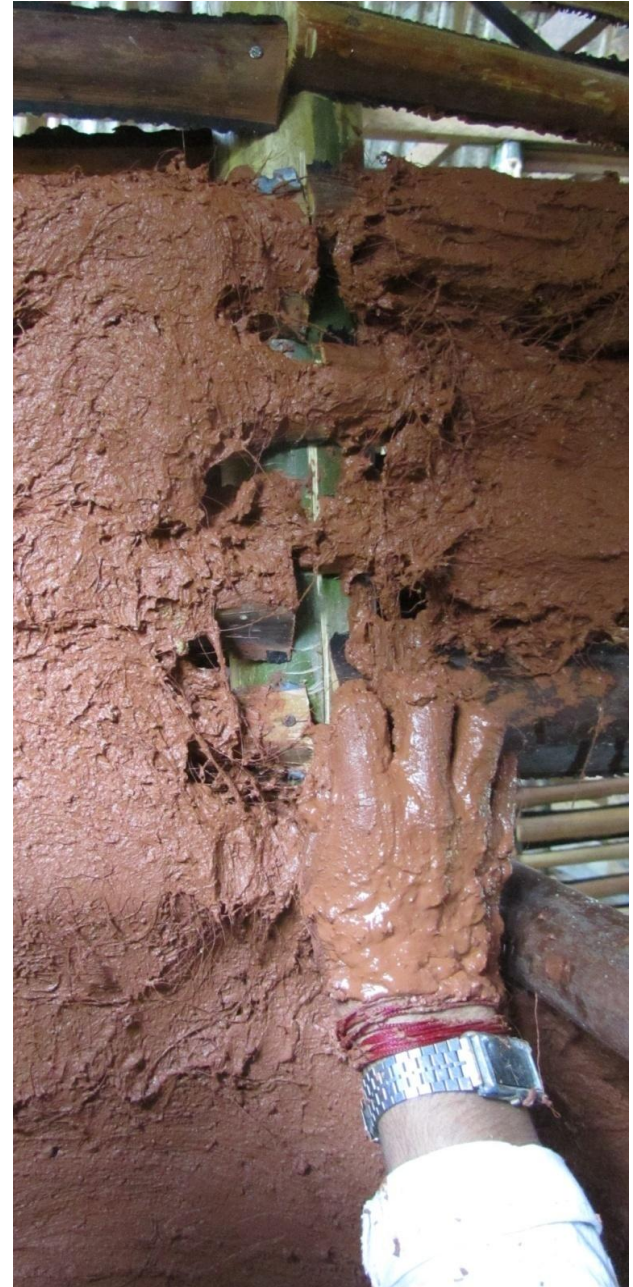
Roof & Wall Made With Palmyra Leaf Stem



Walls made with Palmyra leaf stem as lost shuttering



Walls made with Palmyra leaf stem as lost shuttering



Walls made with Palmyra leaf stem as lost shuttering



Walls made with Construction & Demolition Wastes



Styrofoam Concrete to reduce self weight and steel use



Compressed waste woods use in Gluelam and CLT



Repurposed petrol hoses in buildings



Broken glass and mirror cutting waste as bathroom tiles



A site office cum dormitory on wheels with bamboo ladders



Building with Cob



stages



adding straws



filling premix



flipping



pulling out chunks



3 prototype houses made with Cob and C&D wastes



Reprogramming our Mind!

