

SYSTEMS THINKING & SPECULATIVE LANDSCAPE URBANISM

KEY QUESTIONS or COMMENTS RAISED in the DEBATE

ABOUT SUSTAINABLE LANDSCAPES / SYSTEMS / PATTERNS

- Do sustainable landscapes form patterns that when understood can be applied to other landscapes to make them more sustainable?
- Can sustainable landscapes / patterns be generated by fine tuning inputs?
- How can we make sustainable plans that involve nature heavily without understanding how things are connected and how they work?... Problem in Aalto's curriculum for LA students? Where can we get/find the hours to learn about this?

ABOUT SPONTANEOUS EMERGENCE, SYSTEMS ASSESSMENT & RESILIENCE:

- In an environment where we derive rules for everything, where is the space for organic emergence located? Can some "pockets" be undersigned and other controlled? How we decide on the outcome?
- One design decision affects the next... How to get over the (computational) complexity (of scale) and decide when to start execution?, in other words, how to define limits of scope in a computational-parametric environment?
- Inception or Russian Dolls? Is the idea of systems understood differently depending on the scale? Which kind of tools do we have to connect coherently different scales?
- Which assessment methods do we have to develop computational systems speculation?
- If resilience exists within sustainability, how can progress in technology and in computation serve resilience? That sounds as an oxymoron
- CONTEXTUAL ADAPTATION (form as a result of forces)?. Could this be related to resilience theory?

ABOUT PATTERNS Are patterns the output that we can perceive from complex system processes?. What is the possible scale of our influence on these processes to produce new patterns

- Patterns is mostly perceived as a 2D system. Can we actually integrate all sense and dimensions (time, 3D, sound, taste, smell)?
- Are patterns a form of human language or interpretation based on how we perceive things or are patterns based on universal rules?

ABOUT PARAMETRIC DESIGN

- During the process of design can the change of parameters change the resulting design?
- What about the design when built? How can scripting be used in order to make designs adapt to changing parameters?

ABOUT COMPUTATIONAL METHODS:

- Is computational design a tool to approach a previous vision (optimization of the design process)?
- Is it possible to design a genuine response to system thinking (System driven/based designs)?
- Is computation the key to socio-ecologically sustainable development?
- Computer-aided design might really be more than a tool (like a pencil), it is a tool to understand what you could not see otherwise... e.g. the "Zoom-out" aerial photo was a new format that allowed us to see characters and connections in the landscape that we could not see from the ground

ABOUT NEW WAYS OF DESIGNING/PLANNING?

- Are patterns or digital tools enough to turn the "ecological consciousness" into a practice that has a relevant impact?. If not, why not use them or what else do we need?

Landscape and the Sustainable Development Oxymoron?

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OPTIMAL SUSTAINABLE

LANDSCAPES

- How?
- Example.

Any landscape that can respond to human need in any situation

Any cultural linkage with enough history and non-tangible knowledge

IRRIGATED FARMLAND + FARMING KNOWLEDGE + CLIMATE ALLOWING PLANTS TO GROW

→ Villages around Mekong
→ Swiss valley

by context

to have previous generation thinking to be aware of way to build the country and sustainability will be more practical in design than how the land to grow

(if human are there) reproducible spaces

CULTURAL? LANDSCAPES

people ↔ site

production-consumption feedback

Limit Isolation connection

HUMANS DON'T EXCEED THE CARRYING CAPACITY OF THE LANDSCAPE/NATURE

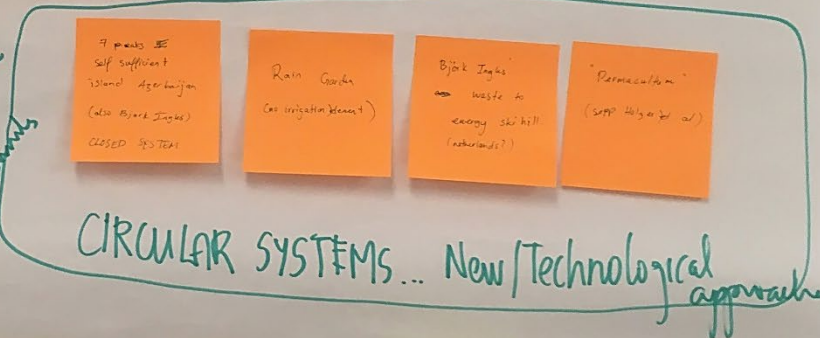
FROM THE CONCEPT OF CARRYING CAPACITY OF THE LANDSCAPE/NATURE

AN EVOLVING ECOSYSTEM where speciality and mutual relationships can be equalled

DECENTRALIZED SYSTEMS which evolve through the dialogue between individuals and operators

Layers elements

soil water



SYMBOLISM
VISION
PARADOXISM
ANT-ECOLOGICAL

ATTRIBUTES

of a SUSTAINABLE SYSTEM & PATTERN

DIVERSITY?
DECENTRALIZATION?

"POSITIVE" relationships between the elements?

Elements within I would have a give & take relationship

MORAL & ETHICAL

People are happy

ETHICAL OWNED LAND AND NON-OWNED
ADAPTIVE OWNED RESOURCES

Adaptive to change

REGENERATE

Ability to deal flexible recycle lost component

MATERIAL

Human-made
Organic resources like

CLOSED SYSTEM

return resources to a usable state → (see for half or one system)

SITE SPECIFIC CLOSED SYSTEMS

is resistance the same as resilience?
what

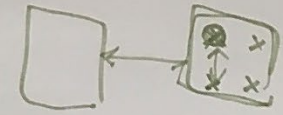
resilience

RESILIENT TO EXPECTED CONTEXTUAL CHANGE

able to fight or change climate change

OPTIMIZES the RELATIONSHIPS OF THE ELEMENTS IN TERMS OF

ECOLOGICAL & SOCIAL-ECOLOGICAL BENEFITS (economy is not too)



Are interactions positive sustainable