

Jessie Lydia Henshaw

: Pattern Recognition for Natural System Designs & Transformations
: “Big Data” Read as a proxy for whole system behaviors & resilience
HDS Natural Systems Design Science 1977 to present

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Summary

I'm a research scientist consulting people on recognizing patterns of complexly organized natural systems and transformations, in research fields and their environments, for educational, response design, business, economics, governance, social, and world issues. I teach it as a core competency for professional work, and have a lot to offer. My best roles might be with small informal groups or professional teams addressing complex or hard to define problems, like unexpected culture or environmental change or approaching challenges. The rule is: It's learning to recognize the systems that lets them work for you.

After switching from Physics to Architecture in the 70's I did field study on naturally evolving systems and developed a general pattern language for them. In the 80's I continued to add important new findings and began a 25 year career as a New York architect. In '08 when accumulating disruptive change in global systems became so prominent, and my research was also maturing, my focus turned to finding a language others could use for it. After work at the UN I found C. Alexander's pattern language spreading to new fields, as a powerful general new language of design, using it as a common language for making ancient principles of holistic design explicit.

History

EXPERIENCE

2015 Guiding Patterns of Naturally Occurring Design:

Elements - The introductory research paper, on a science for recognizing “whole systems” as individual artifacts of life to refer to, work with and study, using “pattern language” to describe and learn from their designs. Presented to PURPLSOC in Krems, Austria July 5.

Mining Living Quality – A Demonstration paper for programmers and others in policy or design fields, addressing the integration of human designs with nature, ‘mining’ natural “pattern repositories” to learn from. Presented to PLoP in Pittsburgh PA, Oct 25.

2013-15 UN NGO Representative & Civil Society Stakeholder

UNEP-FI/WRI Working Group - Defining financial industry guidance on measuring and responding to CO2 risks and climate change

Institute for Planetary Synthesis and MG Commons Cluster – Representative at UN negotiation of Post2015 Development goals, science advisor,

Civil Society Stakeholder – Reports to UN Expert Advisory Group on Big Data and to the OWG on economic and environmental systems assessment methods.

1983 to 2008 New York Architect – Problem solver and project architect for design firms; SIBL Public Library / Gwathme Siegel, Grand Central renovation / Byer Blinder Belle; reconstruction of St. Agnes Cathedral / Tom Thornton, NY Botanic Gardens Entrance, Niagara Gorge Tower and Jackson MI federal court house / Hugh Hardy

1977 on Independent Basic Research on Natural Systems, - Starting with original field research on the nature of micro-climates in homes, w/ support from the Solar Energy Research Inst, finding the universal pattern of dynamic stages for evolving natural systems, as individual whole systems. Wrote a new kind of general system theory, 1979, entry on “Complex Systems” for the Encyclopedia of the Earth. See Publications list

1975 to 1979 Small contractor, community organizer, Denver – Varied renovations, organized tree plantings, the design for expanding the Denver ‘People’s Fair’

1971 to 1974 School of Fine Arts and Architecture, U. of Pa. – Professional degree in architecture, concentrations in design, structures, micro climates and landscape, emersion in design philosophy of Louis Kahn

1964 to 1968 St Lawrence Univ. – BS in Physics and math, languages and fine arts. Initial original research on why all experiments somewhat misbehave.

SKILLS

- Research, Consulting, Design,
- Natural Systems Science, Pattern Recognition, Analysis, Writing

References

- John Fullerton – The Capital Institute, former director of Chase.
- Helmut Leitner - Pattern Language author and teacher, Software designer
- Aleks Jakulin, Computer systems scientist, developer, taught at Columbia Univ.
- Jenny Quillien – Pattern Language author and teacher, Anthropologist

Awards

- Best energy research paper of the year – 2010 from ASME
- Graduation prize in Architectural Technology – U. of Pa. School of Architecture

Links

- Journal: Reading Nature’s Signals www.synapse9.com/signals
- Publication List www.synapse9.com/jlhpub.htm
- Research CV www.synapse9.com/jlhCV.pdf
- Architecture Resume www.synapse9.com/archt.htm

Memberships

- AAAS, AIA Ret., CIVICUS, UN Women, Hillside Group, ORC Experts