2014

Self-organizing a strange attractor
Nelson, Harold

Suggested citation:

what is systemic design?

a shared inquiry

Harold G. Nelson
October / 17 / 2014
There are these two young fish swimming along and they happen to meet an older fish swimming the other way, who nods at them and says "Morning, boys. How's the water?" And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes "What the hell is water?"

David Foster Wallace

No one really understands water. It's embarrassing to admit it, but the stuff that covers two-thirds of our planet is still a mystery.

Philip Ball
so what the hell is systemic design?

- rising tide of interest in ‘design’, ‘systems’
- new designers
- new forms of design
- anthropocene age
what is inquiry?
mind set
apperception
schemas
mental models
world views
habits of thought
points of view
viewpoints
standpoints
intension
stances

lenses: multiple perspectives
overview effect
Overview effect video

https://www.youtube.com/watch?v=CHMIfOecrlo

trailer
http://vimeo.com/55073825

trailer plenetary
http://vimeo.com/60234866
like water, design is ubiquitous yet a mystery

enigma
a person or thing that is mysterious, puzzling, or difficult to understand
"Blind monks examining an elephant", an ukiyo-e print by Hanabusa Itchō (1652–1724)
how can we see the whole?

systemic design

wiseGEEK
designs of inquiry
means for describing, explaining, predicting

1. scientific inquiry
2. spiritual inquiry
3. metaphysical inquiry
4. design inquiry
5. systemic design inquiry
6. individual inquiry
7. collective inquiry
8. collaborative inquiry
9. shared inquiry
• 
• 
•
the usual first step — end the inquiry

define ‘it’

• one fit sizes all
• one size fits all

define |diˈfɪn|
verb [ with obj. ]
1 state or describe exactly the nature, scope, or meaning of•
give the meaning of (a word or phrase), esp. in a dictionary.
DERIVATIVES
definer noun
ORIGIN late Middle English (also in the sense ‘bring to an
end’): from Old French definer, from a variant of Latin definire,
from de- (expressing completion) + finire ‘finish’ (from finis
‘end’).
systemic design

field, domain...

specialization

breadth

defining

i.e. ‘getting to the point’

depth
scientific inquiry
the norm

• collecting evidence
• collecting data
• categorizing
• theorizing
induction: data to categories

• categories
• taxonomies

deductive inquiry

analytic inquiry
categories of inquiry

- science
- systems science
- systemics
- design
- art

epistemology
another first step

systemic design inquiry

**collaborative inquiry**

**points-of-view**
diversification

breadth

• data - measurements
• information - relationships
• knowledge - connections, links
• wisdom - emergence:
  patterns, compositions, transmutations

knowledge integration

connecting the dots

specialization
collaborative inquiry

seeing the divisions
- disciplinary
- interdisciplinary
- multidisciplinary

challenge:
- relationship of parts
- synthesis of parts

seeing the whole
- multiple perspectives

challenge:
- integration of perspectives
- recognition of emergence

shared inquiry

assembly

synthesis
observing the whole - view points

photo by max braun; photostream, flicker, 2009
Strange attractor
shared inquiry - self organizing behavior
protocols give rise to complex self organizing behavior

protocols: rules of relationship
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>conversation</td>
<td>turning together in the same place</td>
</tr>
<tr>
<td>dialogue</td>
<td>letting things be seen through language</td>
</tr>
<tr>
<td>graphologue</td>
<td>letting things be seen through images</td>
</tr>
</tbody>
</table>

shared inquiry
invitation to a
shared “appreciative inquiry”

“Valuing the symposium’s designs of inquiry—espoused and enacted.”

“Valuing the symposium’s successes at revealing the nature of systemic design.”
• scholarship
• praxis

• scholarship & practice

- knowledge
- expertise

- systemic design

frames-of-reference
domains of design scholarship

- scholarship of discovery
- scholarship of integration
- scholarship of application
- scholarship of teaching

Ernest Boyer

- inquiry for action
- systemics logic
- service & agency
- capacitation

H. Nelson
protocols of scholarship

examples of protocols
1. scholarship of inquiry for action

i.e. design inquiry
2. scholarship of systemics

the logics of design
emergent qualities
3. scholarship of agency & service
When you help, you see life as weak; when you fix, you see life as broken. When you serve, you see life as a whole.

Remen, Rachel Naomi
In The Service of Life. Noetic Science Review.
4. scholarship of capacitation
Capacitate: to render fit or make qualified; to enable.
RSD3 Symposium

evidence of supporting and advancing

• understanding of systemic design?
• collaborative systemic design inquiry?
• shared systemic design inquiry?
ongoing inquiry