Creativity & Innovation
Design Workshop

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SPURSE
THE INNOVATION DESIGN FRAMEWORK

- new model of creativity
- alternative to “problem solving” models of innovation and “design thinking”
- learning framework “scaffolding”
WARNING:  
 creativity does not always matter that much…

this is about when it does
EXERCISE #1

Introduce yourself & give a one sentence definition of creativity
EXERCISE #2

As a group do something creative only with what you have on the table
what happened?
creativity happens in the middle of doing things with things

- it is not a “object” in our heads
- it is not in anything—it is in-between

CREATIVITY: The emergent PROCESS that creates something genuinely new
Then why this “mental model”?
THE CLASSICAL IDEATION PROCESS:

“DIRECT DESIGN”
“Direct Design” The Creation Procedure

0. The SOURCE is always there

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“Direct Design” The Creation Procedure

0. The SOURCE is always there

1. An IDEA emerges from the SOURCE
The IDEA imposes Form on un-formed & passive matter.

1. An IDEA emerges from the SOURCE.

3. The IDEA imposes Form on un-formed & passive matter.

0. The SOURCE is always there.

“Direct Design” The Creation Procedure
3. The IDEA imposes Form on un-formed & passive matter

4. A “Thing” is formed with a Form + Content (or Essence/Surface) structure

"Direct Design" The Creation Procedure

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DIRECT DESIGN (ideas first design—e.g. “the god model”)
HOW “DESIGN THINKING” TRANSFORMS DIRECT DESIGN

EMPATHIZE & CONSULT

IDEATE

MATERIAL SELECTION

PROTOTYPE

MAKE

TEST/EVOLVE

JUDGE

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“If we innovate a new practice, but the systematic patterns of thought that produced the old model are left intact, then those patterns will repeat themselves in the succeeding practice. There is so much talk of systems and so little understanding...”
1. Things:
Measurable, discreet things, linear causal actions repeat, Stable, Knowable
Example: Chess
Process: Moves from one existing possibility to another, linear casual procedures often work

2. Stable Systems:
Relation of parts, coherent repeatable relations, Knowable causal loops, Analytical/reductionist systems thinking
Example: cooking an egg
Process: Repeatably crosses into defined states

3. Complex Adaptive Systems:
Understandable in retrospect, little repetition, Far from equilibrium, Temporary emergent systems appear, Pattern management, Self fused with system. Massively networked
Example: City traffic patterns, Weather events
Process: Dynamic evolving multiple emerging stable states

4. Chaotic Systems:
non repetitive behaviors, no patterns or repetition, continuously varying
Example: Micro-events
Process: Ruptures of difference, non-visible

FOUR BASIC TYPES OF SYSTEMS
BIGGEST ABSOLUTE ROADBLOCKS TO UNDERSTANDING CREATIVITY:

1. “Ideas happen in your head”
2. “The mind is wholly inside the brain”
3. “Things do what we want them to do”
WE NEED A NEW STARTING PLACE

let’s probe these issues further…
what is this?
multiple worlds
(they might look the same, but they are not) — need for an expanded cultural anthropology
What percentage of people die?
Work across multiple frameworks (learn, collect, develop) --while avoiding moral or factual judgements
Are these two things the same?
What can it do? (Possibility)  NOT: What is it? (Identity)
Where did the first settlers in the United Kingdom land?
Change is everything -- make dynamics the heart of thinking

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Describe a Greek Sculpture
Avoid making everything like us... Allow difference to differ radically
How to Begin:

1. Be curious about everything & Tolerate ambiguity (be puzzled)
2. Suspend judgement
3. Don’t assume: don’t get trapped by your assumptions, don’t start thinking your perspective is the right one or the only one
4. Diagnosing and overcoming our assumptions: critically diagnose and catalog assumptions, frameworks, and paradigms
5. Figure out the CONTEXT: what are all the perspectives being used, & what are other perspectives that I could use?
6. Develop new skills:
   • Systems thinking
   • Framework switching
7. Broad abstract focus (beyond solutions + products)
8. And remember it does not need to be good. It is more important to discover something “interesting” than true
3 QUESTIONS:

Where do ideas happen?
Where does the mind end?
the ecology of the mind: embodied, embedded, extended, enactive
What do things do?
The dominant organ of sensory and social orientation in pre-alphabet societies was the ear—"hearing was believing." The phonetic alphabet forced the magic world of the ear to yield to the neutral world of the eye. Man was given an eye for an ear.

Western history was shaped for some three thousand years by the introduction of the phonetic alphabet, a medium that depends solely on the eye for comprehension. The alphabet is a construct of fragmented bits and parts which have no semantic meaning in themselves, and which must be strung together in a line, bead-like, and in a prescribed order. Its use fostered and encouraged the habit of perceiving all environment in visual and spatial terms—particularly in terms of a space and of a time that are uniform, c,o,n,t,i,n,u,o,u,s and c-o-n-n-e-c-t-e-d.

The line, the continuum

— this sentence is a prime example—

became the organizing principle of life. "As we begin, so shall we go." "Rationality" and logic came to depend on the presentation of connected and sequential facts or concepts.

For many people rationality has the connotation of uniformity and connectiveness, "I don't follow you" means "I don't think what you're saying is rational."

Visual space is uniform, continuous, and connected. The rational man in our Western culture is a visual man. The fact that most conscious experience has little "visuality" in it is lost on him.

Rationality and visuality have long been interchangeable terms, but we do not live in a primarily visual world any more.

The fragmenting of activities, our habit of thinking in bits and parts—"specialism"—reflected the step-by-step linear departmentalizing process inherent in the technology of the alphabet.
All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical, and social consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the massage. Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments.

All media are extensions of some human faculty—psychic or physical.
WE SHAPE OUR TOOLS AND AFTERWARDS THEY SHAPE US.
THE INNOVATION DESIGN FRAMEWORK:
An alternative starting point

Phase 1 - Assemble

- Assemble
- Reveal
- Forgo
EXERCISE #3

Now develop what you have made as clothing
PRESENT
CREATIVITY IS BLOCKAGE

PRACTICES EMERGE
DESTINATIONS ARE BUILT
(PACIFIC OCEAN PARK, SANTA MONICA 1958)
LATE 1960’s

SURFING CHANGED

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THE WORLD CHANGED
THE WAVES COULD KILL YOU
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& THE KIDS WANTED TO JOIN IN THE FUN
BUT THESE GUYS ALREADY OWNED THE ONE WAVE...
BLOCKAGE + CO-OPTING + TRANSPOSING

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EXPLORING THE “ADJACENT POSSIBLE”: DROUGHT LEADS TO INFINITE WAVE
THE WAVE STRETCHES THE DEFINITION
WORLDING: THE MOMENT SURFING ENDED
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NETWORKED, COMPLEX, NON-LINEAR
Creativity refuses the known
by experiment with possibilities that push things beyond normal use into exploring invisible adjacencies

& instead follows unintended capacities
Now you get excited:
• from living on land to living in the air
• from surfing to skateboarding
• from computing to cloud computing
• from fire to electricity
• from records for music to records as instruments

This means that you:
Repeat sideways evolution... until you discover a threshold...
(until you experimentally co-make a threshold...)
Our Process:

1. Know a field (research, then divide into parts)
2. Invent serious blockages (refuse to do the known (what your research has revealed)
3. Decide to keep something fixed
4. Move sideways multiple times following unintended capacities
THE INNOVATION DESIGN FRAMEWORK:

Phase 2 - Block & Experiment
Experiments are probes (and *not* prototypes)
Now make clothing for your animal
PRESENT
4. NOTHING IS ITS PURPOSE
What is the problem that flight is solving?
If flight takes millions of years to solve a problem -- how could it actually happen?
so what is the purpose of a wing?
What this means for creativity:

- Nothing evolved for its current purpose -- BETRAYAL
- Nothing has a “purpose” (or essence) -- AGNOSTIC
- Does not solve an existing “problem” -- ANTI-UTILITARIAN
- It produces a new way of being in the world -- WORLD MAKING
- You cannot know in advance where you will end up OR how long it will take
- Need to “fail” into the new (sequentially betray)
- Time is critical. Changing collaborations and identities are also critical
- The Problem does not pre-exist
- Exploring adjacent possibilities
- Following unintended consequences
CREATIVITY NEEDS:

• Places protected from “success” (developing end products)
• That use blockages
• Follow processes that are open to radical transformation (betrayal)
• Probes to iterating beyond what one currently expects/needs/knows
FOLLOWING UNINTENDED CONSEQUENCES

1. Ignore purpose
2. Find unintended uses & possibilities
3. Remake to maximize these

EXERCISE # 5
where is the liquid?
1. The “qualities” of the world are not fixed. Depending who you are and what you are engaged with “Water” is a LIQUID, SOLID or even a SURFACE (OR... )
2. “Capacities” are RELATIONAL & EMERGENT
3. Creation is RELATIONAL + EMERGENT
4. What something “IS” -- is what it can do (in a context)
What this means for creativity:

1. We can only know what is really possible by doing.

2. New unknown and unknowable (in advance) properties emerge. Relevant ideation follows.

3. Working from the middle, changing bodies, environments, habits, tools is the basis of novelty.

4. Therefore ideation separate from experimentation is a dead end (the classical design process is flawed).

5. The goal is not to solve a problem but to make a new possibilities emerge.
not “i think there for I am”
BUT:
we do -- there for I will become...
THE INNOVATION DESIGN FRAMEWORK:

Phase 3 - Worldmaking

The Innovation Design Framework:

- Assemble
- Reveal
- Forgo
- Experiment
- Paradigm Switch
- World Making
- Empathize & Consult
(Pollack’s) Creativity:

The realization something is not a “thing” (an identity), but rather a doorway towards a possible novel world.

A world that can only be made by following actual forces and processes — you must become a follower and not a leader...
The realization that _______ is NOT A THING (solution)
   -- BUT A NOVEL PATHWAY
   -- a doorway to a NEW WORLD

(You must become a FOLLOWER and not a leader...)

1. Creativity does not “solve” anything, it makes a new world
2. CREATIVITY = WORLDMAKING
3. Developmental innovation (direct design / design thinking)
   comes after a novel world emerges
el Bulli calls this magic.......
What does this look like?
"that is our problem, there are thousands of combinations. Now we know which direction at this moment taste does not matter... we are looking for something magical and if it opens a new path"

“A concept is an practice that can open new doors”
A NEW WORLD…
=A NOVEL PARADIGM

HOW TO DO THIS:
1. Treat it so that it produces a CRISIS (ruptures an existing way of working)
   Do not worry if it is true or not (at first)

2. Make it:
   • Generative
   • Unprecedented
   • Open-ended with lots of new problems
   • Join unrelated fields
MAKE A NOVEL PARADIGM

Write out our novel paradigm following this template:
1. Treat it so that it produces a CRISIS (ruptures an existing way of working)
   Do not worry if it is true or not (at first)

2. Make it:
   - Generative
   - Unprecedented
   - Open-ended with lots of new problems
   - Join unrelated fields
Phase 3 - Paradigm Switching & Worldmaking

ASSEMBLE
REVEAL
FORGO
EXPERIMENT
PARADIGM SWITCH
WORLD MAKING
EMPATHIZE & CONSULT
produce problems before solving them

“You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete” Buckminster Fuller

“problems worth having for worlds worth making”
Phase 4 - Ecological Innovation

- ASSEMBLE
- REVEAL
- FORGO
- EXPERIMENT
- PARADIGM SWITCH
- WORLD MAKING
- EMPATHIZE & CONSULT
- IDEATE
- PROTOTYPE
- MAKE
- RESPONSIVE DESIGN
- DIRECT DESIGN
PRODUCE:
Each group should make something that fulfills the requirements of each of the paradigms.
Do this quickly.
rules:

1. Have an operational definition of creativity:
   e.g. “Creativity is never repeating”

& Decide what does not change
   (& keep this open to revision -- very important): e.g. “Restaurant” (does not change) serving “food” (this is what changes)

2. Separate “discovery” from “innovation”:
   divide creativity into two distinct processes:
   (1) Discovery: Pathway & Paradigm discovery & development (finding a new world and all of its possibilities)
   (2) Innovation: making creative new products in a paradigmatically new world)
     (e.g. Lab + Restaurant (each has a different goal))

3. To Discover new Pathways & Paradigms refuse existing logics
   (Develop a major “Blockage” of your “product” e.g. “no dishes”).
   (& then) Look at each part of your process independently for new possibilities (Iterate sideways and select the best, keep good records). e.g. cooking techniques, equipment, ingredients, senses....

4. (There is a second goal here): Turn the most interesting and distinct pathway into a Paradigm for all of your practice.
5. “Innovation” (what we normally call “creativity”) only begins after inventing a new paradigm and many many pathways.

e.g. “dishes” are only made at the restaurant via paradigm + pathways (all of the discreet components are now synthesized (ingredients, tools, techniques, eating methods, serving methods, etc.) + feedback
THE INNOVATION DESIGN FRAMEWORK

THE INNOVATION DESIGN PROCESS

ASSEMBLE

REVEAL

FORGO

EXPERIMENT

PARADIGM SWITCH

WORLD MAKING

EMPATHIZE & CONSULT

IDEATE

PROTOTYPE

MAKE

RESPONSIVE DESIGN

DIRECT DESIGN
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“You cannot make a transistor by trying to make a better vacuum tube”