Creative Thinking & Problem Solving

From *Launching the Imagination* by Mary Stewart

VC111

“Creativity is inherently unpredictable”

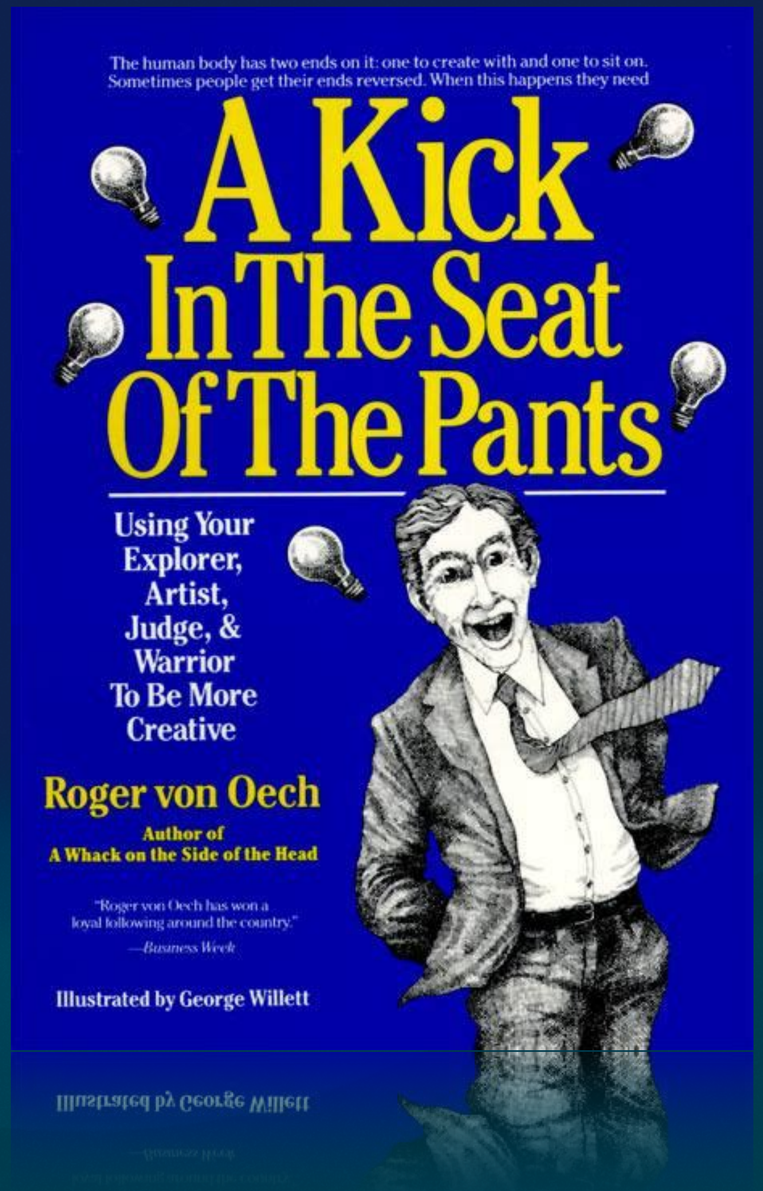
Mary Stewart, p. 116

On Creativity Interviews


ON
CREATIVITY


ON
CREATIVITY


ON
CREATIVITY



In *A Kick in the Seat of the Pants*, Roger Von Oech identifies four distinct roles in the creative process.

The Explorer

First, the explorer learns as much as possible about the problem. Research is crucial. Ignorance of a topic may result in a superficial solution, while finalizing the first solution envisioned often results in a cliché.





When you're searching for new information, be an Explorer.

The Artist

Second, the artist experiments with a wide variety of solutions, using all sorts of combinations, proportions, and materials. By creating 10 answers to each question, the artist can select the best solution rather than accepting the only solution.





When you're turning your resources into new ideas, be an Artist.

The Judge

Third, the judge assesses the work in progress and determines what revisions are required. Innovative ideas are never fully developed when first presented; most need extensive revision and expansion. Rather than discard an underdeveloped idea, the judge identifies its potential and determines ways to increase its strength.





When you're evaluating the merits of an idea, be a Judge.

The Warrior

Finally, the warrior implements the idea. When the project is large and complex, implementation can be a challenge. When obstacles appear, the warrior assesses the situation, determines the best course of action, and then completes the project.

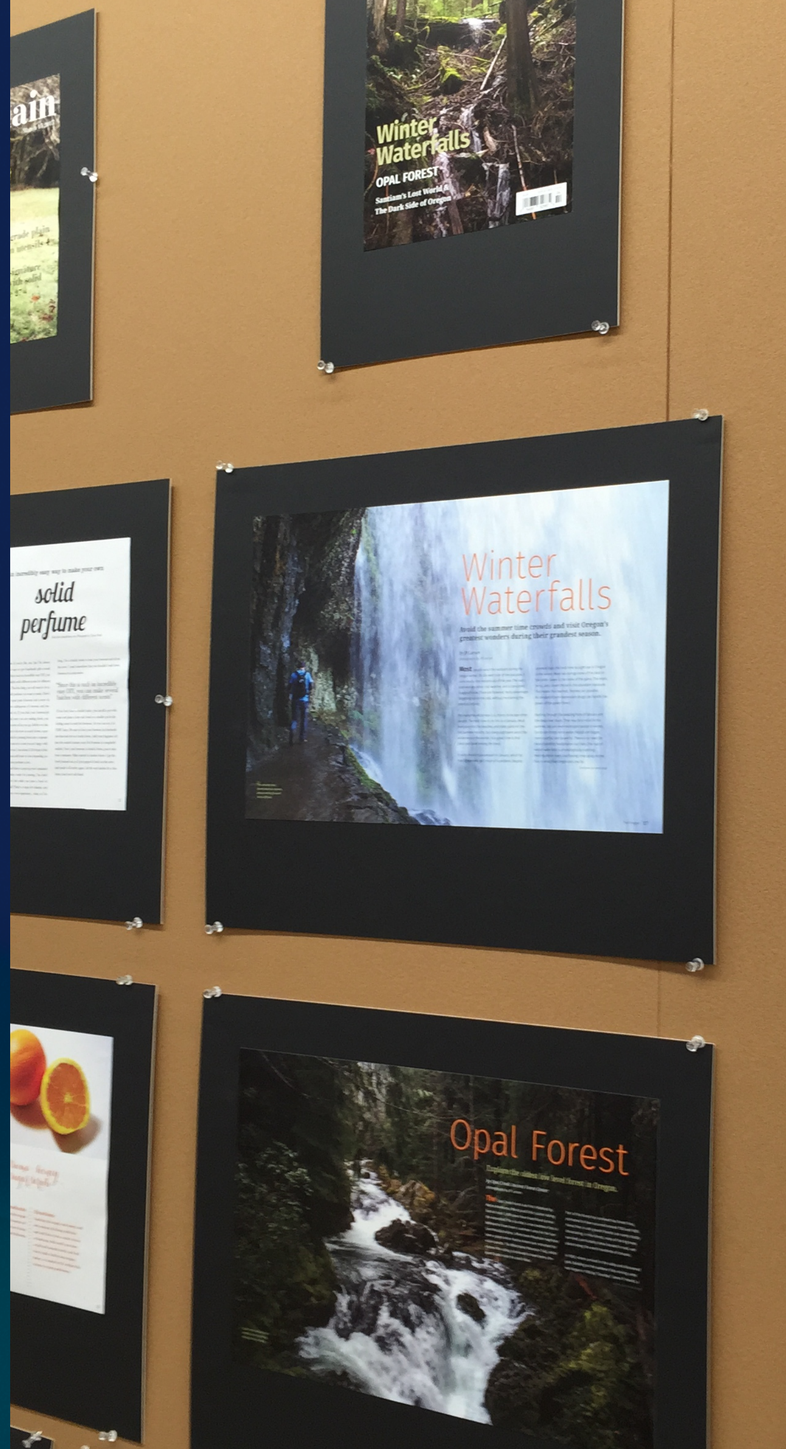




When you're carrying your idea into action, be a Warrior.

Seven Characteristics of Creative People*

* Not a checklist!



Seven Characteristics of Creative Thinking

Receptivity

- Creative people are open to new ideas and welcome new experiences.

Curiosity

- A good designer brings an insatiable curiosity to each project.

Wide Range of Interests

- With a broad knowledge base, a creative person can make a wider range of connections.

Attentiveness

- Realizing that every experience is potentially valuable, creative people pay attention to seemingly minor details.

Connection Seeking

- Seeing the similarity among seemingly disparate parts has often sparked a creative breakthrough.

Conviction

- Convinced of the value of their ideas, they tenaciously pursue an independent path.

Complexity

- To be fully effective, a creative person needs to combine the rational with the intuitive.

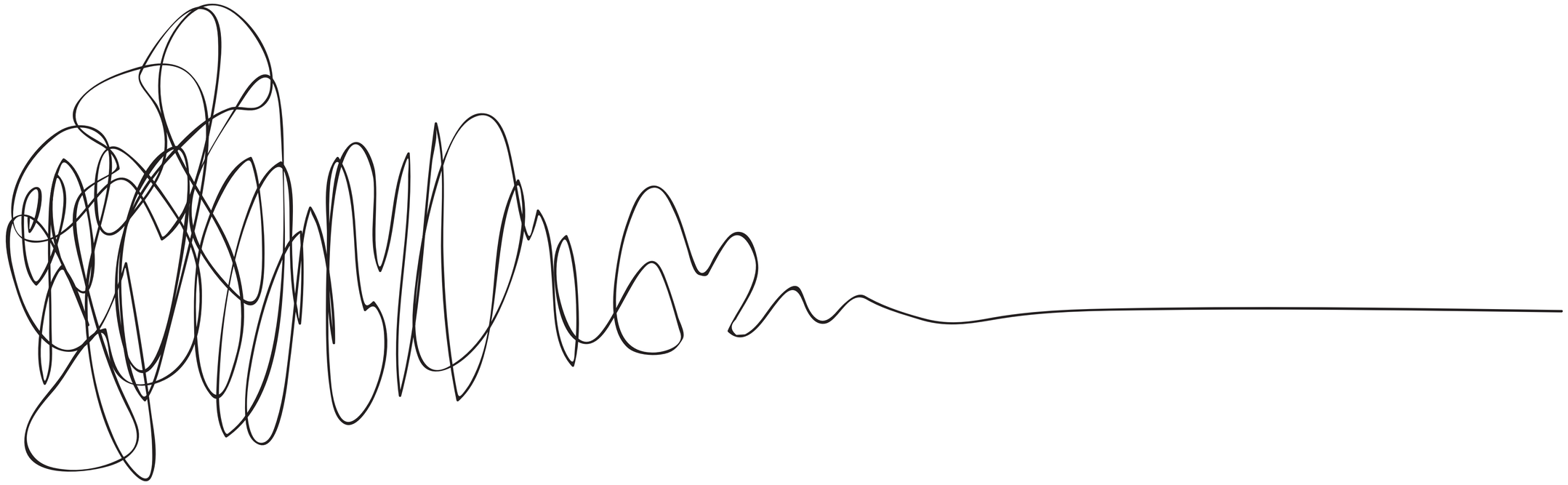
Quick Activity Break

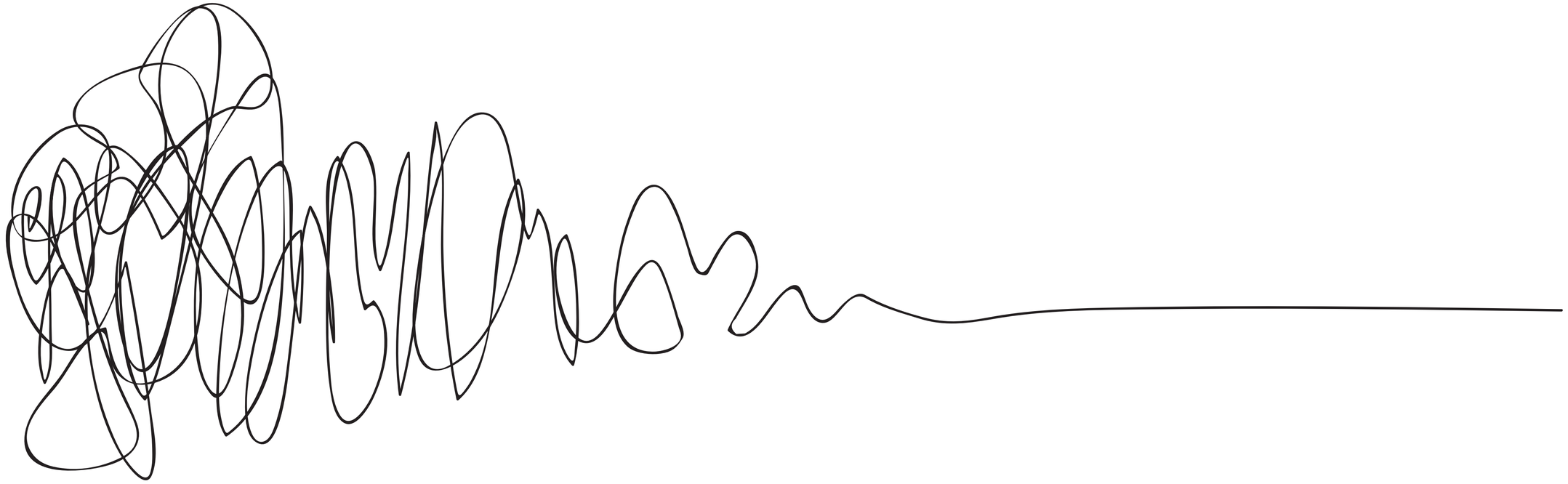
The Silly Cow Exercise

- **Task:**
  - In your table groups, **sketch out three different business ideas using a cow.**
  - You can use any characteristic of a cow for your business (produces milk; eats all day; makes a mooing sound).
  - You'll have just 3 minutes to create three ideas.
- **Go!**



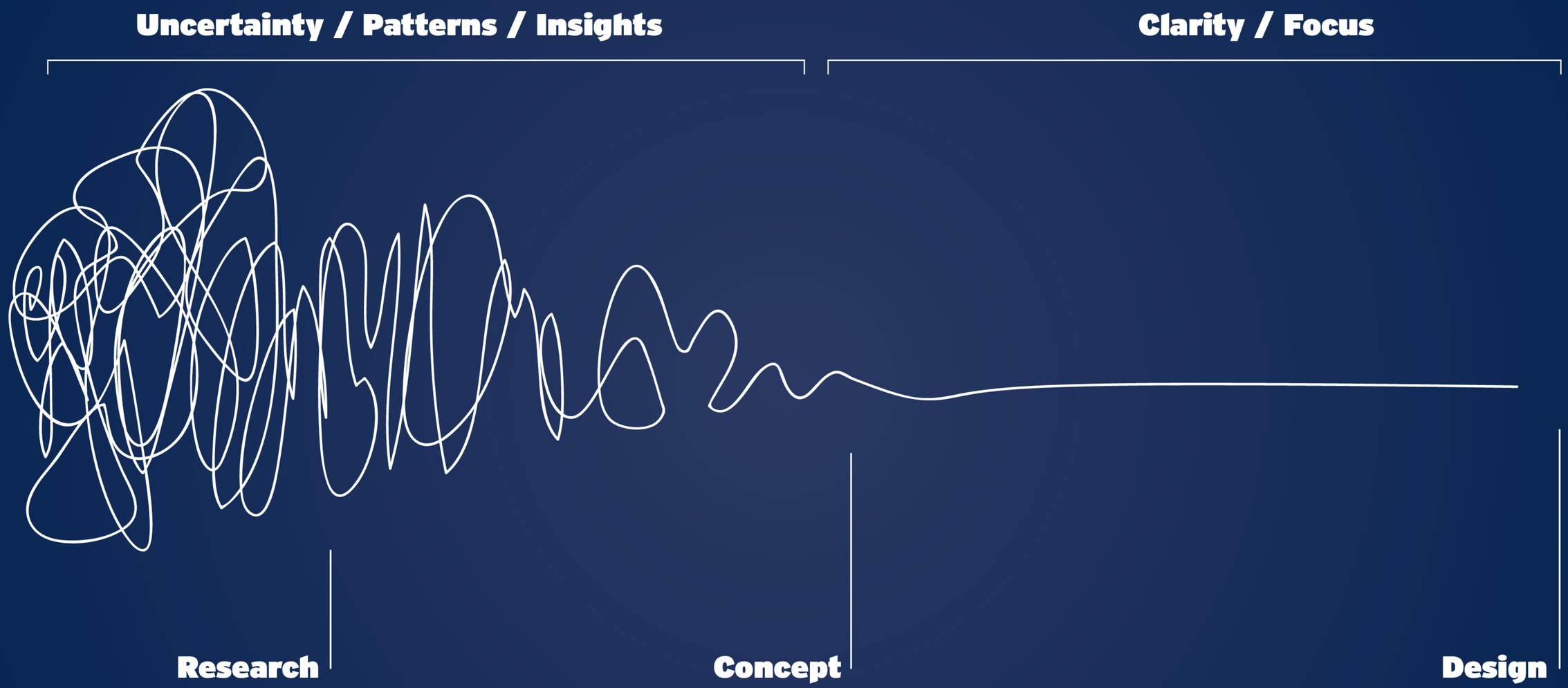
Design Process





The Process of Design Squiggle

CREDIT: The Process of Design Squiggle by Damien Newman, thedesignsquiggle.com



CREDIT: The Process of Design Squiggle by Damien Newman, thedesignsquiggle.com


Research
Concept

Design Research

Why Design Research?

- Graphic and multimedia design work has a purpose—research helps define that purpose and gives us a set of criteria on which to judge the effectiveness of a design.
- For a creative, the problem-solving process begins when a client requests help or the designer identifies a specific need.
(Stewart, p.130)



Questions to Ask

DESIGN RESEARCH

- What is needed?
- What is the message?
- Who is the target audience?
- What are the specs of the project?
- What is the budget?
- Is there a deadline?
- Are there any existing graphic resources?

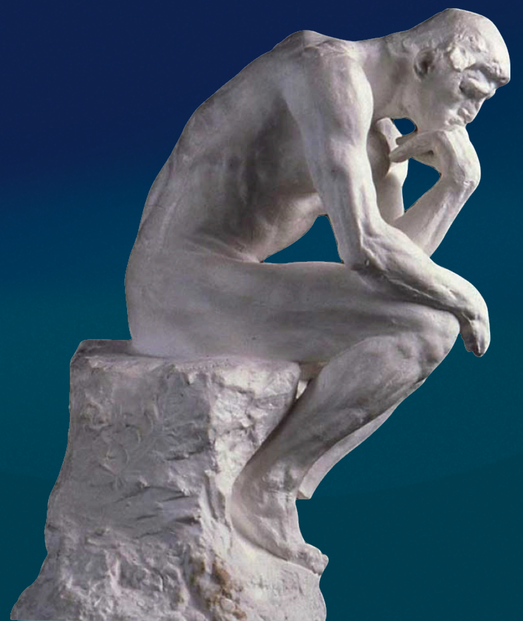
Methods

DESIGN RESEARCH

- Interviews
- Questionnaires
- Thumbnails
- Model making



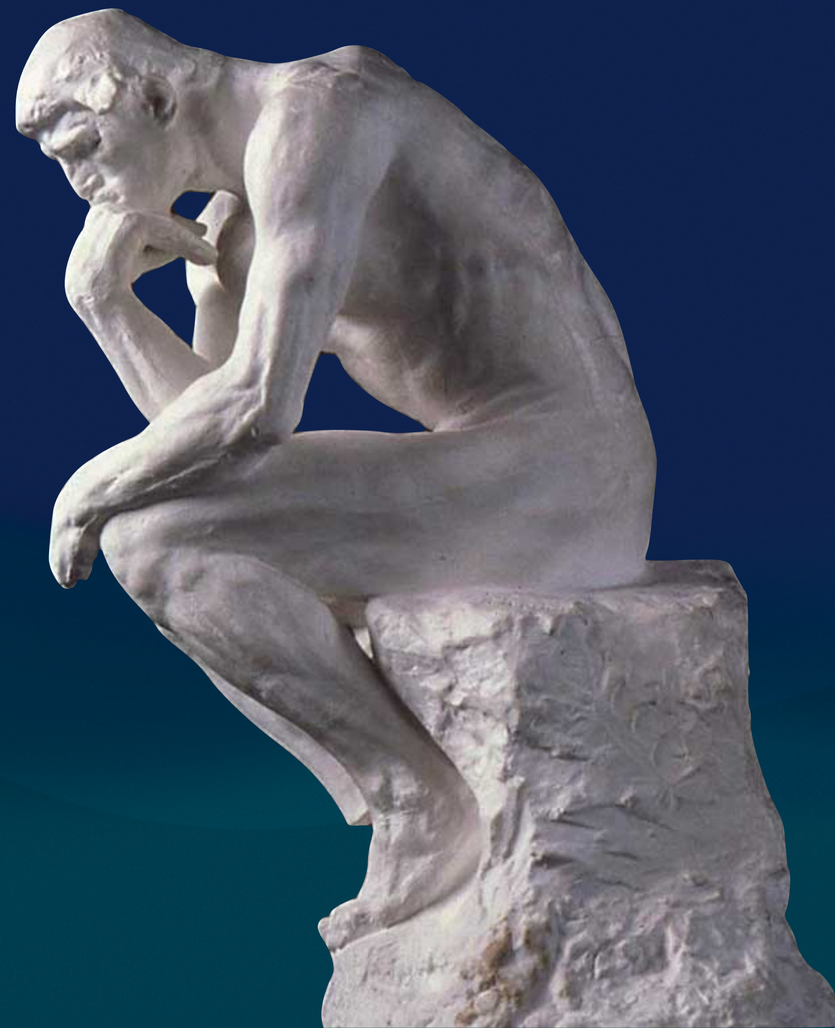
Convergent & Divergent Thinking





Convergent Thinking

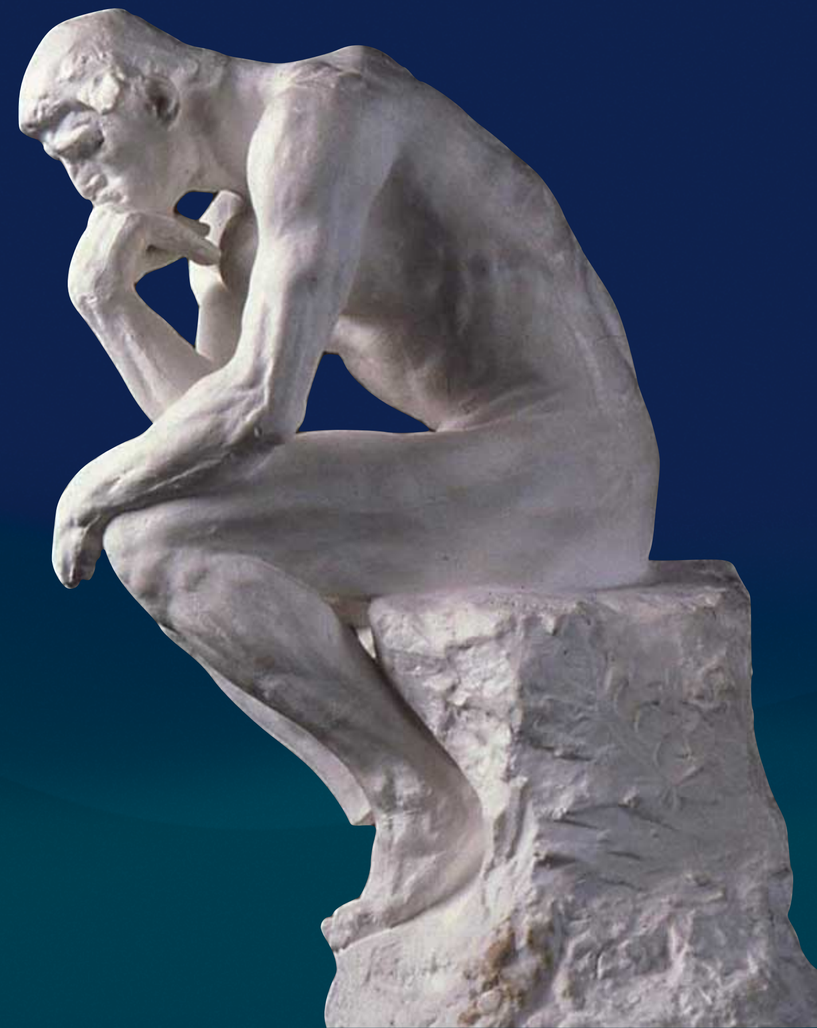
- Involves the pursuit of a predetermined goal, usually in a linear progression and using a highly focused problem-solving technique.
- The end determines the means.



Convergent Thinking

Advantages

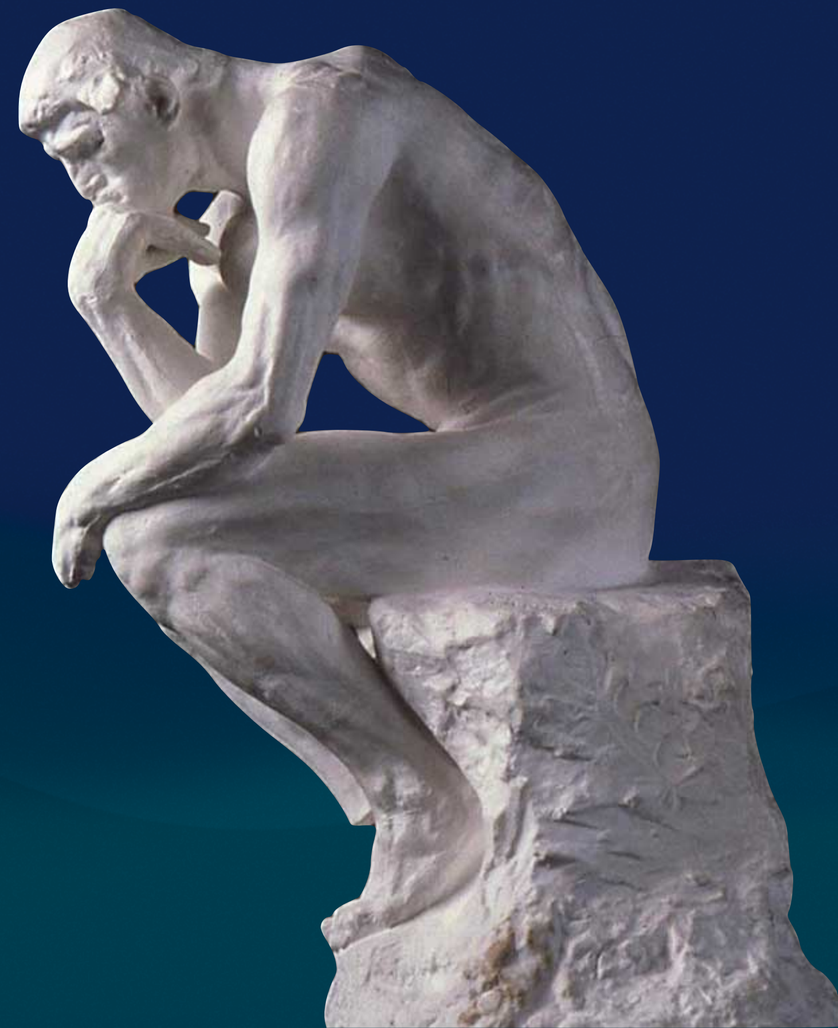
- Clarity
- Control
- Focus
- Efficient
- Similar to Scientific Method



Convergent Thinking

Most Effective When

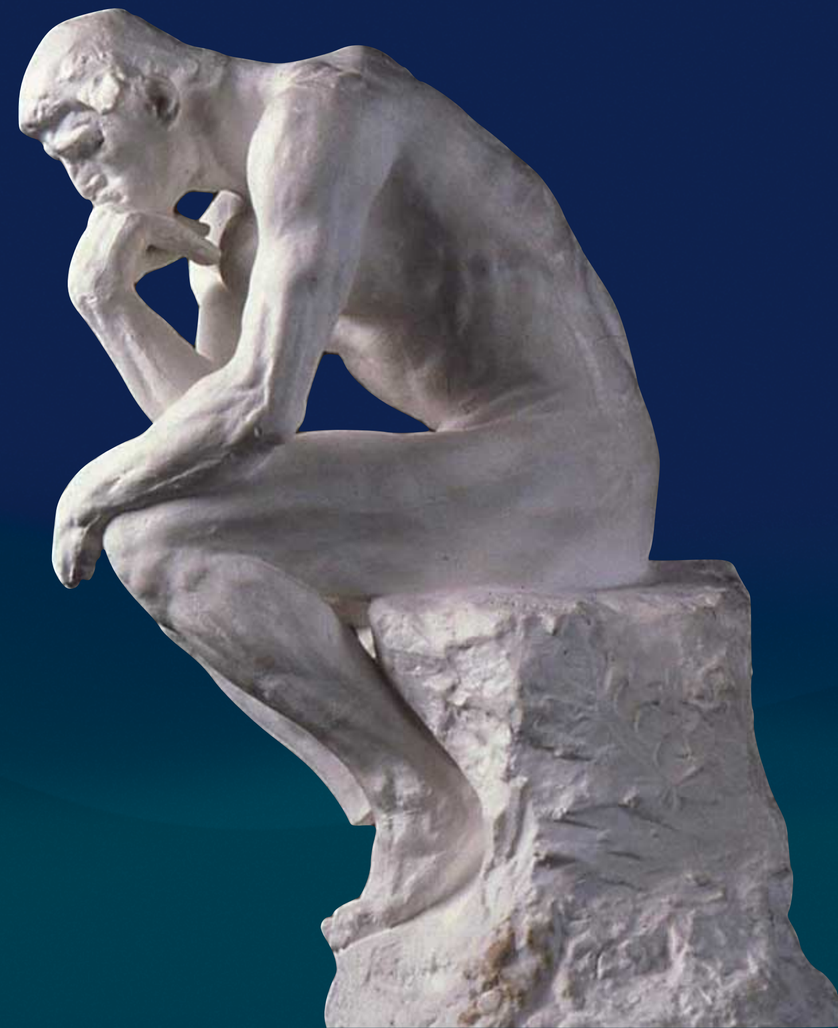
- The problem can be defined
- The problem can be solved rationally
- The problem must be solved sequentially
- Firm deadlines must be met



Convergent Thinking

Process

1. Define the problem
2. Do research
3. Determine your objective
4. Devise a strategy
5. Execute the strategy
6. Evaluate the results



Divergent Thinking

- In Divergent Thinking, many different ideas are generated in a short period of time and very early in the process.
- The means determines the end.



Divergent Thinking

Advantages

- More inventive
- Problem defined much more broadly
- Generates new ideas
- Is spontaneous and free-flowing
- Moves beyond preconceptions



Divergent Thinking

Most Effective When

- The problem definition is elusive or evolving
- A rational solution is not required
- A sequential work method is unnecessary
- Deadlines are flexible



Divergent Thinking

Process

1. Receive or create the “problem”
2. Begin work immediately
3. Clarify/refine your objective
4. Clarify/refine a strategy
5. Execute the strategy
6. Evaluate the results



Creative Thinking & Personal 100’s

***Which style of thinking* — Convergent or Divergent**
— will work best for me to begin this project?

Creative Thinking & Personal 100's

Questions to ask yourself as you decide on the direction of your project

- Does it solve the problem?
- Is the solution conceptually inventive?
- Is the planned solution visual compelling?
- Can this solution be completed by the due date?



LAB EXERCISE 02 ::
Convergent & Divergent Thinking