

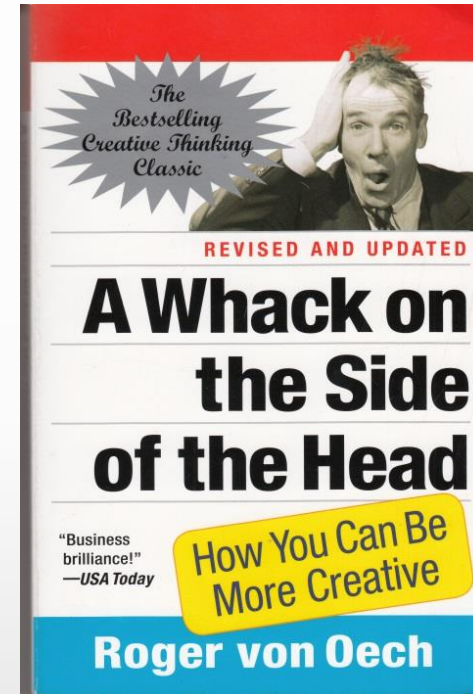
# Changing Perspective

**“When there is no sun, we can see the evening stars.”  
- Heraclitus**

- **Provocation**

# Mental Locks

1. The Right Answer
2. That's Not Logical
3. Follow the Rules
- 4. Be Practical**
5. Play is Frivolous
6. That's Not My Area
7. Don't Be Foolish
8. Avoid Ambiguity
9. To Err Is Wrong
10. I'm Not Creative

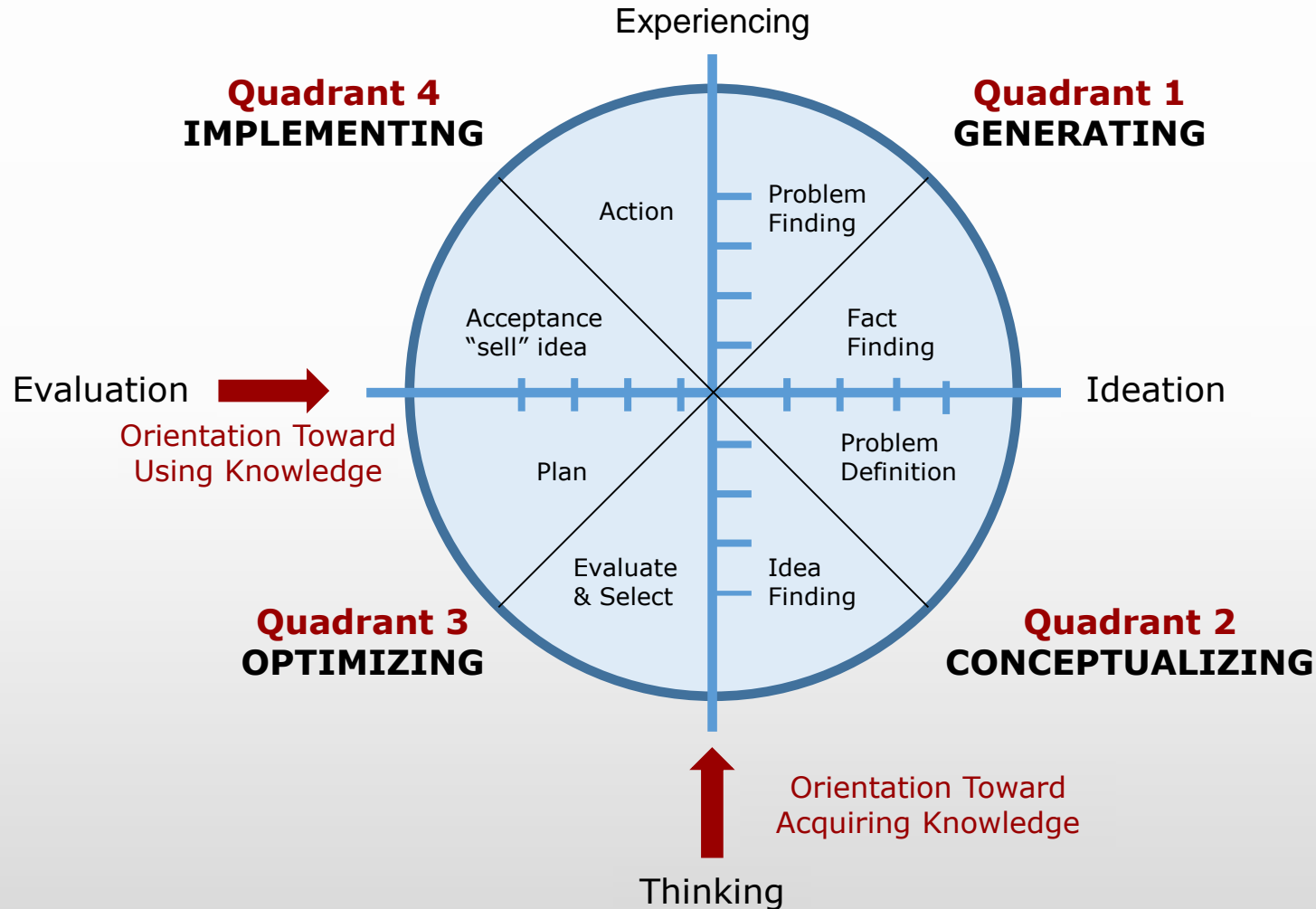


<http://www.creativethink.com/>

# “Be Practical”

- Ask “What If?”
- Imagine How Others Would Do It.
- Using provocation as a stepping stone.

# Problem Solving Style



# De Bono's Provocation Technique

E. de Bono, "Lateral Thinking: Creativity Step by Step," Harper Perennial, 1970

E. de Bono, "Serious Creativity," Harper Collins Business, 1996

E. de Bono, "Think! Before It's Too Late," Vermillion, 2009

Materials taken for the work of Jonathan Weaver  
from the University of Detroit Mercy

- What is Provocation
- Generating Provocations
- Movement from a Provocation to a New Idea
- Possible Results from the Provocation Technique
- Summary of Definitions and Template/Example

# What is Provocation

- Provocation entices us to make a statement that may not make sense, might contradict known experiences, or may seem totally illogical-then use that statement as a stepping stone to a new idea (a process de Bono calls movement)
- The Provocative Operation is often referred to as a “PO”
- PO can also symbolize Possible, hypothesis, suppose, and Poetry
- Provocation encourages you to unsettle your mind thereby increasing the chances that you will generate a new idea.

# Example PO: Planes should fly upside down

- Initially sounds absurd-wings would give negative lift
- Movement leads to the idea of retractable winglets that, when deployed, generate negative lift (positive lift when upside down)
- This leads to the idea that these winglets would be normally deployed, but could be quickly retracted if a plane experienced a sudden loss of lift

We will look at ways to generate POs, then ways to simulate movement

# Provocation Cheat Sheet

## METHODS FOR GENERATING POs

- Escape: Pick something we take for granted and drop that
- Reversal: Take a normal relationship and reverse it
- Distortion: Make a change to the normal sequence or change a relationship
- Exaggeration: Exaggerate any one aspect (or dimension) of an initial statement making it somewhat unreasonable
- Wishful thinking: Make a statement in the form wouldn't it be nice if “...”



# Generating Provocation

Original Problem Statement:						
Method of generating PO	Resulting PO	Method of Generating Movement				
PO Just Arose		Extract a Principle	Focus on the Difference	Moment to Moment	Positive Aspects	Circumstances
Escape						
Reversal						
Distortion						
Exaggeration						
Wishful Thinking						

# ESCAPE

- Easiest of the ways to generate a PO
- Pick something we take for granted and drop that (escape from it)
- Examples:
  - Watchdogs bark → PO: Watchdogs that do not bark  
→ Movement: watchdog trained to press button triggering alarm and alerting authorities
  - Restaurants have seats → PO: Restaurants with no seats →  
Movement: restaurant that charges for food and time spent

# REVERSAL

- Take a normal relationship and reverse it
- Examples:
  - I have orange juice for breakfast → PO: the orange juice has me for breakfast → Movement: I swim in orange juice → scented shower water
  - The phone rings when I get a call → PO: The phone rings constantly until I get a call → Movement: indicator on phone showing it is live

# DISTORTION

Make a change to the normal sequence or change a relationship

## Examples

- You pick up the phone before dialing → PO: you speak before you dial → Movement: voice activated dialing (exists) or record a complaint or order than have it replayed without having to say it
- PO: you die before you die → Movement: living benefits for life insurance policies
- PO: students examine each other
- PO: children decide who their parent marry

# EXAGGERATION

- Exaggerate any one aspect (or dimension) of an initial statement making it somewhat unreasonable
- Avoid exaggerating to zero (or it becomes an escape)
- Examples:
  - PO: Telephone calls can only last two minutes → Movement: compression capability so that you talk at normal speed but utilize less equivalent line time
  - PO: Police have six eyes
  - PO: telephones are too heavy to lift

# Wishful Thinking

- Make a statement in the form wouldn't it be nice if “...”
- Should be more than just a desire
- Examples:
  - PO: All telephone calls are friendly → Movement: green light on phone lights up when someone on friends list calls
  - PO: You got paid for waiting to see the doctor (who is behind schedule”
  - PO: The pencil writes by itself

# Try It

- Take 5 minutes to try to write at least two POs for each of the two techniques we covered:
  - ESCAPE: Pick something we take for granted and drop that (escape from it)
  - WISHFUL THINKING: Make a statement in the form wouldn't it be nice if “...”

# Final Thoughts on Creating POs

- The more provocative the better
- Provocations should not be solutions, ideas, or concepts, and should avoid being made so your idea will “fit in”

Once we have a PO, it's time to look for movement!



# Five Techniques to Get Movement (Generating Ideas from a PO)






- Extract a Principle
- Focus on the Difference
- Moment to Moment
- Positive Aspects
- Circumstances

# Provocation Cheat Sheet

## METHODS FOR GENERATING MOVEMENT

- Extract a principle: Extract a principle, concept, feature, or aspect of the PO, then ignore the rest of the PO and work only with what you've extracted to generate ideas
- Focus on the Difference: Compare the provocation with the existing situation, identify the key differences, and pursue them
- Moment to Moment: Visualize the PO being put into effect *moment to moment*
- Positive Aspects: Look directly for any benefits or positive aspects
- Circumstances: Identify the circumstances under which the PO would have a direct value

# Generating Movement

Original Problem Statement:						
Method of generating PO	Resulting PO	Method of Generating Movement				
PO Just Arose		Extract a Principle	Focus on the Difference	Moment to Moment	Positive Aspects	Circumstances
Escape						
Reversal						
Distortion						
Exaggeration						
Wishful Thinking						

# Extract a Principle

- Seek to extract a principle, concept, feature, or aspect of the PO, then ignore the rest of the PO and work only with what you've extracted to generate ideas
- Examples
  - An ad agency was seeking a new medium → PO: bring back the town crier → Extract:
    - The town crier can change the message based on audience
    - The town crier can go where the people are
    - The town crier can answer questions
    - The town crier is always up to date
    - You cannot switch town crier off → Movement: pay phones are free but calls are interspersed with ads

# Focus on the Difference

Compare the provocation with the existing situation, identify the key differences, and pursue them

## Examples

- PO: Postage stamps should be long and thin →  
Difference: Length to width aspect ratio → Movements:  
Length of stamp meters its value

# Moment to Moment

Visualize the PO being put into effect moment to moment and seek to develop interesting new ideas

Examples:

- PO: a car should have square wheels → Moment to Moment: the axle rises and falls as the corners rotate around → Movement: active suspension adjusts its height to give a good ride knowing when the corners are coming → active suspension knows when bump is coming and adjusts accordingly
- PO: Plane lands upside down → Moment to Moment: pilot can see runway well while landing → Movement: Concorde drops nose during landing for better visibility

# Positive Aspects

- Look directly for any benefits or positive aspects of the PO, take those benefits/aspects and try to move forward
- More of a yellow hat too than a green hat tool
- Examples:
  - PO: A car should have its engine on its roof → Positive Aspects: ease of access for maintenance, shorter car, better airflow for cooling, less risk of engine damage in a collision, equal weight distribution → Movement: a short, mid-engine car with the occupants seated above the engine.

# Circumstances































- Identify the circumstances under which the PO would have a direct value
- Examples:
  - PO: A car should have its engine on its roof → Circumstances: in a flood the engine could still operate → Movement: elevated intake to prevent water ingestion
  - PO: Drinking glasses should have rounded bottoms → Circumstances: Bars would sell more drinks, or no furniture rings since glass must be placed on special coasters







# Try It

- Take 15 minutes to try to generate ideas from your earlier list of Pos. Consider these two methods:
  - **EXTRACT A PRINCIPLE:** Seek to extract a principle, concept, feature, or aspect of the PO, then ignore the rest of the PO and work only with what you've extracted to generate ideas
  - **POSITIVE ASPECTS:** Look directly for any benefits or positive aspects of the PO, take those benefits/aspects and try to move forward

# Time to Generate New Ideas

Original Problem Statement:						
Method of generating PO	Resulting PO	Method of Generating Movement				
		Extract a Principle	Focus on the Difference	Moment to Moment	Positive Aspects	Circumstances
PO Just Arose						
Escape						
Reversal						
Distortion						
Exaggeration						
Wishful Thinking						

# IDEA Chart

Original Problem Statement: ***** IDEA CHART *****						
Method of generating PO	Resulting PO	IDEAS AS A RESULT OF THE MOVEMENT				
PO Just Arose		Extract a Principle	Focus on the Difference	Moment to Moment	Positive Aspects	Circumstances
Escape						
Reversal						
Distortion						
Exaggeration						
Wishful Thinking	