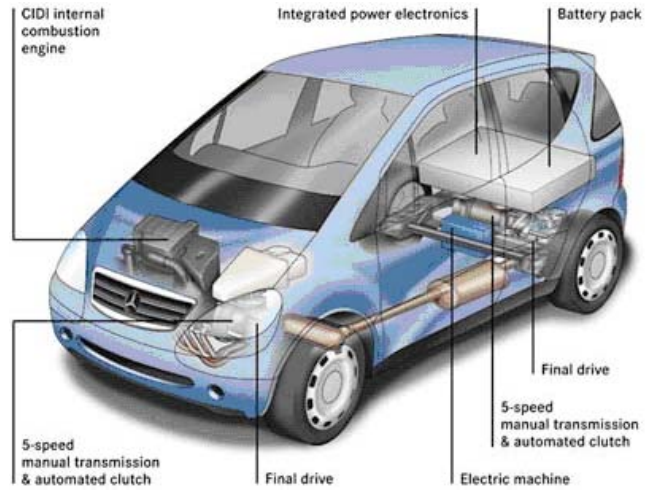




# DirectedCreativity: Creative Thinking for the Serious Minded™

**Paul Plsek**

*Paul E. Plsek & Associates, Inc.; Atlanta, GA  
paulplsek@DirectedCreativity.com*



**priceline.com**  
Name Your Own Price™



**CARmax**  
The way car buying should be.®

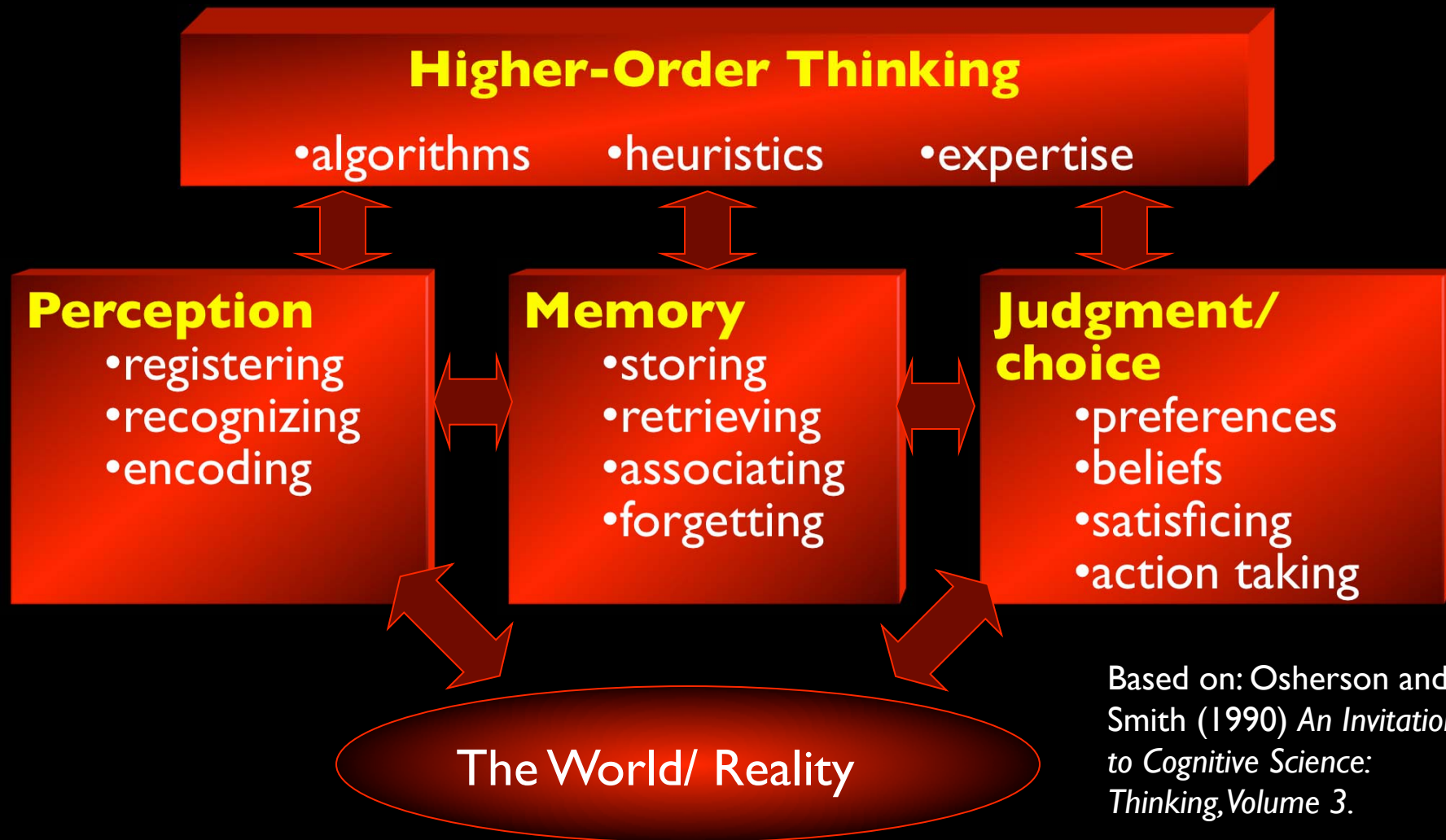


# Where *do* ideas come from?

*Let's look in  
here...*



# Mechanics of the Mind



Based on: Osherson and Smith (1990) *An Invitation to Cognitive Science: Thinking, Volume 3.*

# Perception

- Mental processes involving registering, recognizing, and encoding
- Research shows...

**We miss most of what really goes on, while sometimes seeing things that aren't there!**

# The story of Velcro™



George de Mestral observed cockleburs sticking to his trouser leg when walking in the woods. This had annoyed millions of people before him but he was curious and explored them further. This curiosity led to the invention of Velcro™

***Curiosity may have killed the cat,  
but where human beings are concerned,  
the only thing a healthy curiosity can kill  
is ignorance***

Harry Lorayn





*“Chance favors  
the prepared  
mind”*

*Louis Pasteur*

# Pause and Notice



*Buying groceries you notice that new cashiers suddenly appear when lines get long, and you like that!...*

***Creative provocation:*** *How might we get new staff to magically appear at the hospital when we get backlogged; how does the grocery store do it?*

*You need to raise awareness of health and prevention issues...*

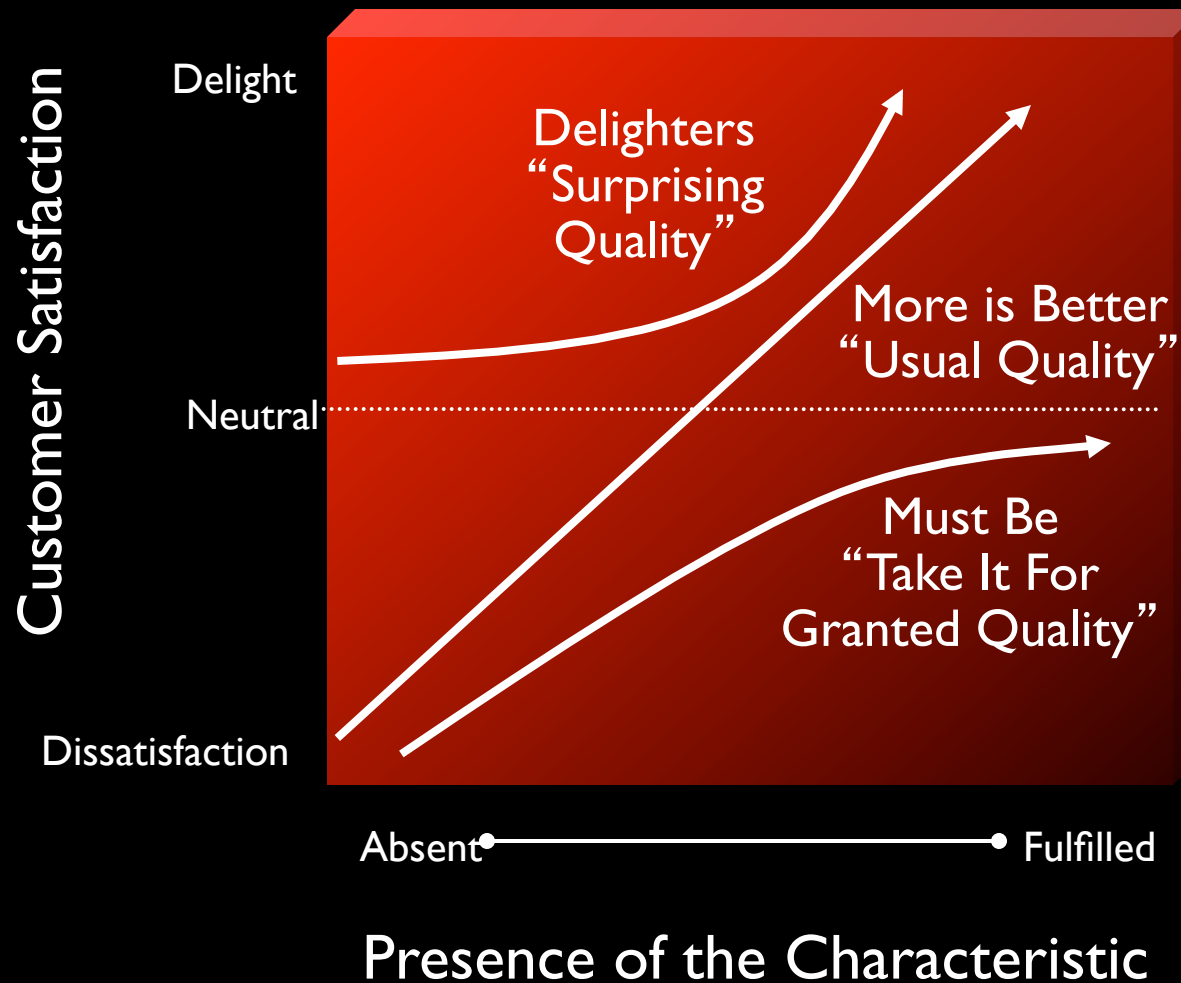
***Creative provocation:*** *What role do television programs, movies, and celebrities play in starting trends and raising social issues?*



# Practical Advice for Creativity

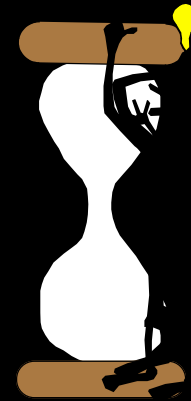
- Make it a habit to purposefully pause and notice things around you; what works and why; spot trends and new technologies
- To perceive freshly when you are stuck, try: pause and notice, talk to others to understand better, truly observe the current reality, really listen carefully to customers, draw a picture so that you have to focus on details, make a slow motion mental movie, explain it to someone else and listen to yourself, etc.

# Three Kinds Of Quality

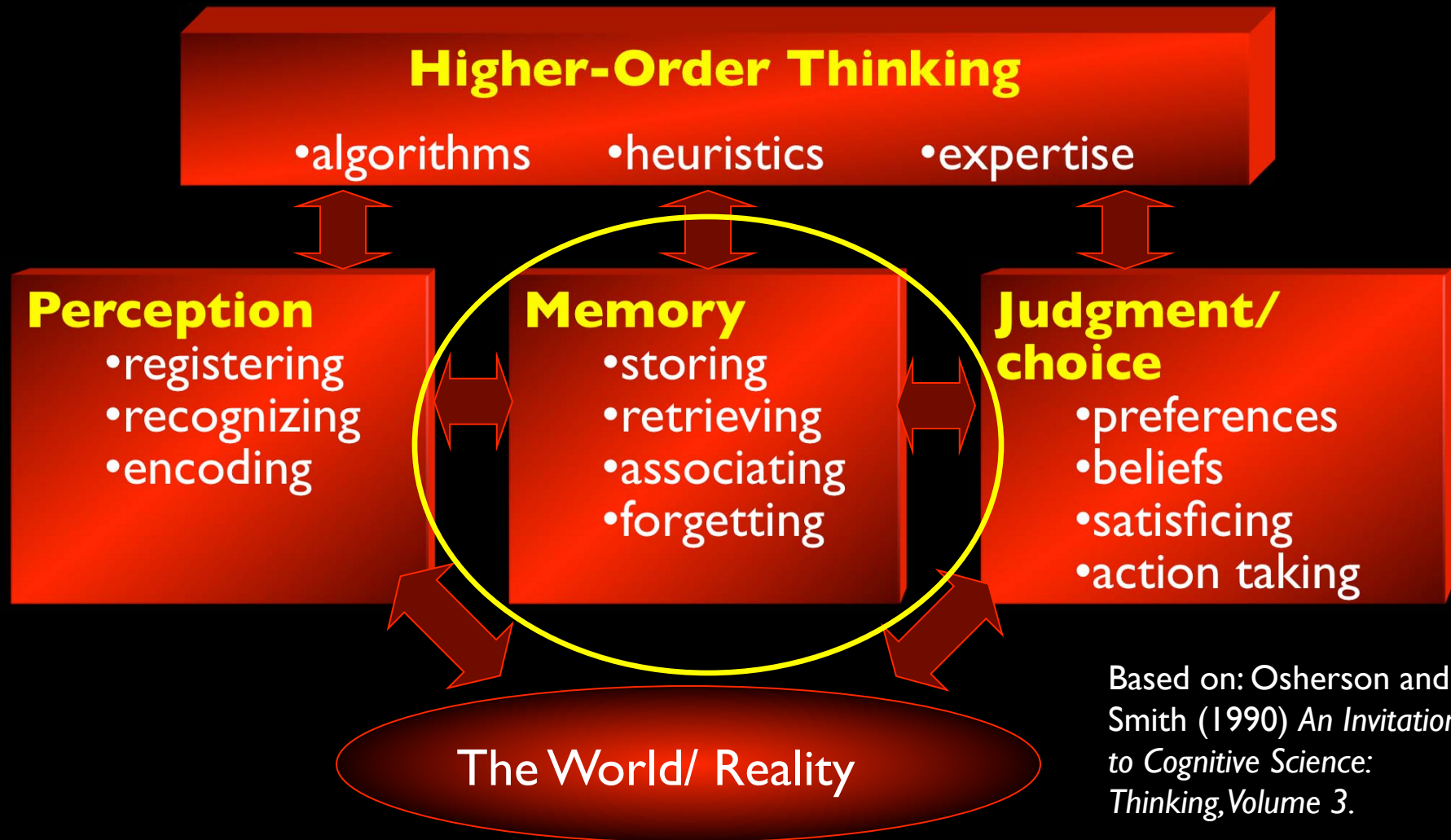


# Concept Extraction and Refocus from Customer Needs Analysis

- **Example: Patients want reduced waiting time in ER**
  - Creative pause: why is that important to them?
  - Concept extraction: anxiety is the driver
  - Attention refocus: how can we reduce anxiety?



# Mechanics of the Mind

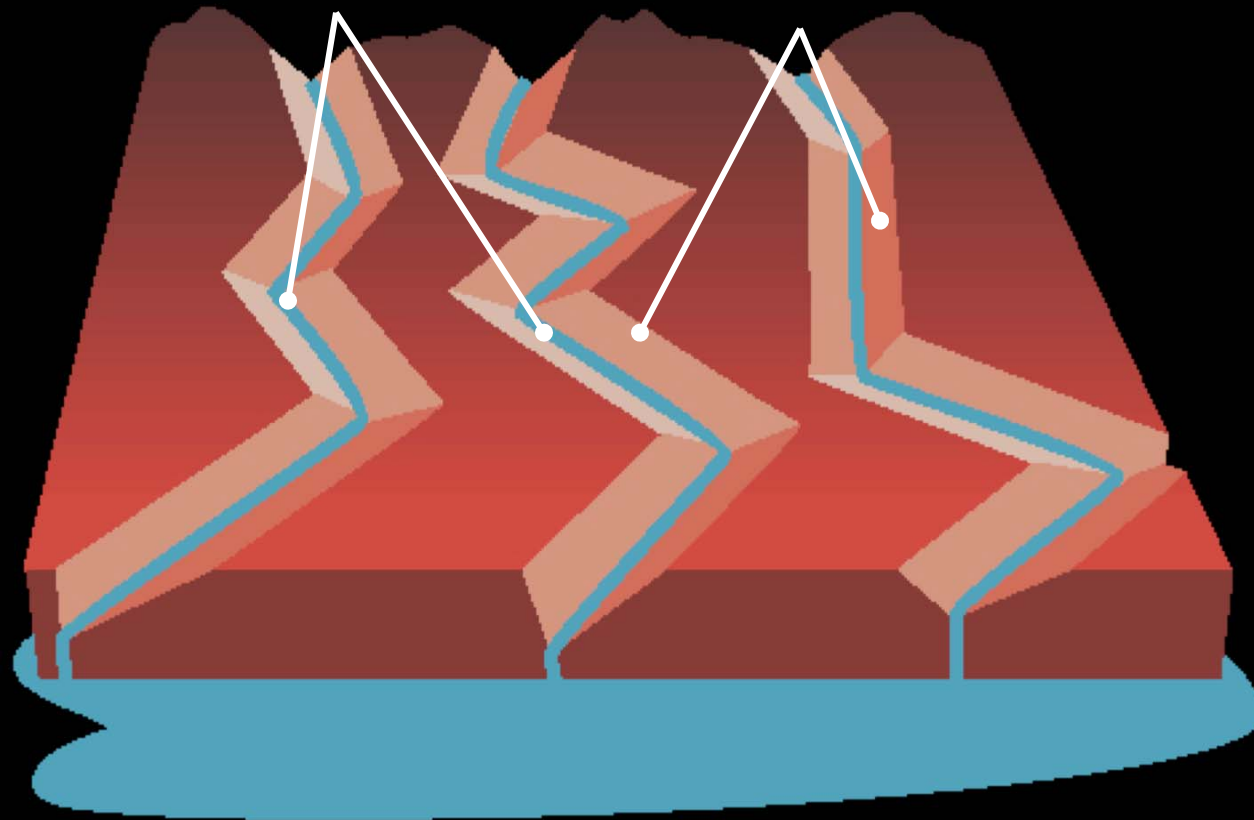


Based on: Osherson and Smith (1990) *An Invitation to Cognitive Science: Thinking, Volume 3.*

# Edward deBono's Mental Valleys Model for Thinking

Streams of thinking

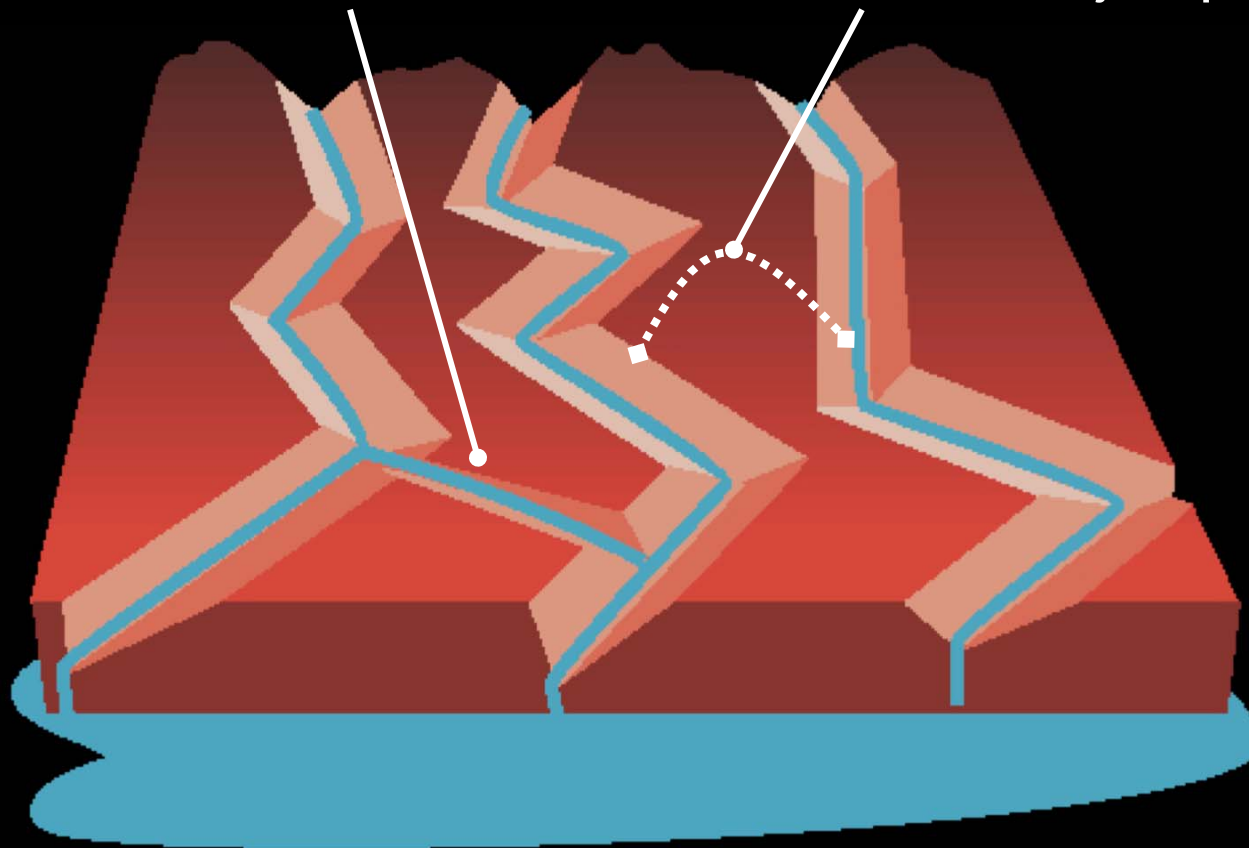
Valleys



“Creative thinking involves breaking out of established patterns (valleys) in order to look at things in a different way.” de Bono

Purposeful channel

Random jump





# Creativity Defined

The connecting and rearranging of knowledge — in the minds of people who will allow themselves to think flexibly — to generate new, often surprising ideas that others judge to be useful.





**Creativity involves connecting streams of thinking that are not usually connected...**

Both reasoned connections and random connections will result in creative ideas.

Laughter may be the natural physiological reaction to this new connection in mind!



IDEA: GIVE SCHOOLCHILDREN A 'FRIDGE AUDIT CHECKLIST' OF BOTH HEALTHY AND UNHEALTHY FOODS AND GET THEM TO EXAMINE THEIR OWN FRIDGE WITH THEIR PARENTS.  
EDUCATIONAL TOOL FOR BOTH PARENTS + CHILDREN!

# *Creative addition...*



# *Creative addition...*



# *Creative addition...*



+



# *Creative addition...*



+





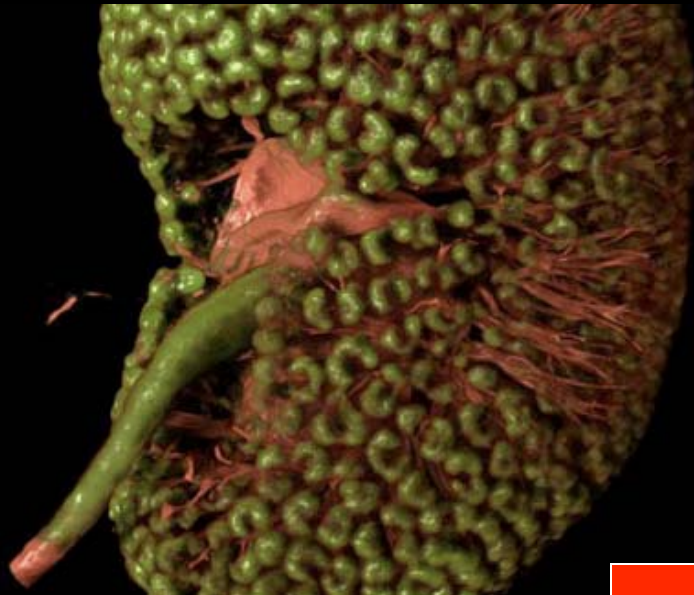
# *Creative addition...*



+



# *Creative addition...*



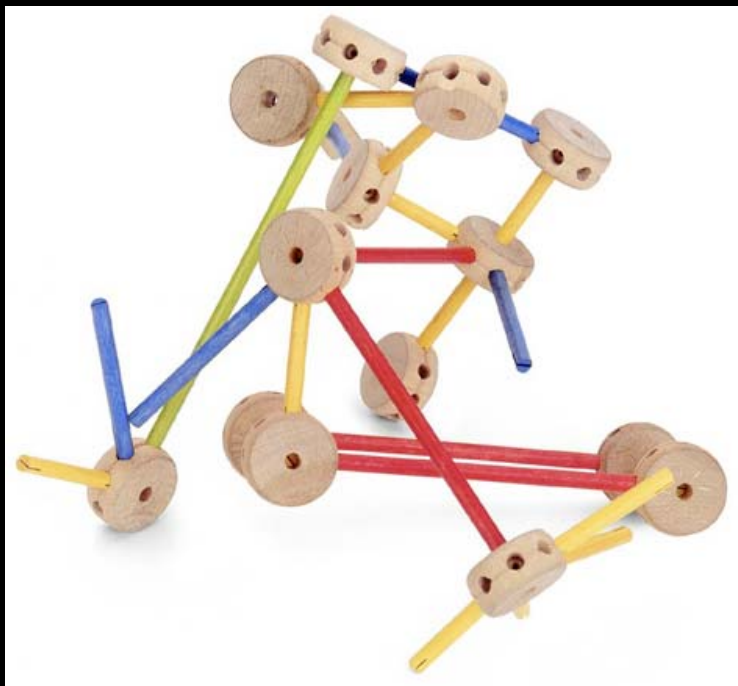
Luke Massella



Read more:

[http://channel.nationalgeographic.com/  
series/explorer/4828/luke#ixzz1JEZibmB](http://channel.nationalgeographic.com/series/explorer/4828/luke#ixzz1JEZibmB)

## *Creative addition...*



What technologies and methods are out there that might help us build a creative way to better meet the needs of *(and even, surprise!)* patients, families and people in our community?

# Practical Advice for Creativity

- Use perception to create store of concepts in memory.
- Try to come up with novel associations among what you already know.
- Be attentive to surprising combinations.
- Recognize that your streams of thought are not inherently correct or incorrect, simply what you think now based primarily on your past.

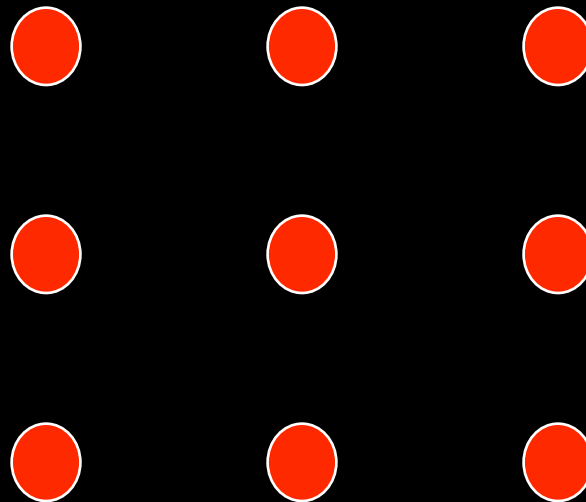


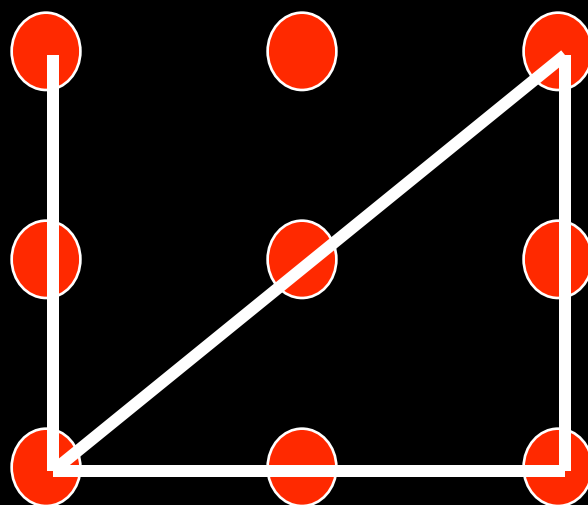
Why don't creative ideas come more naturally?

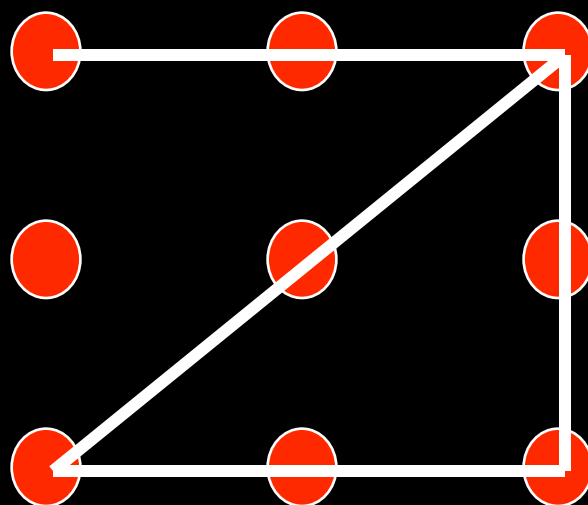
Because our mind is not optimized for creative thought...

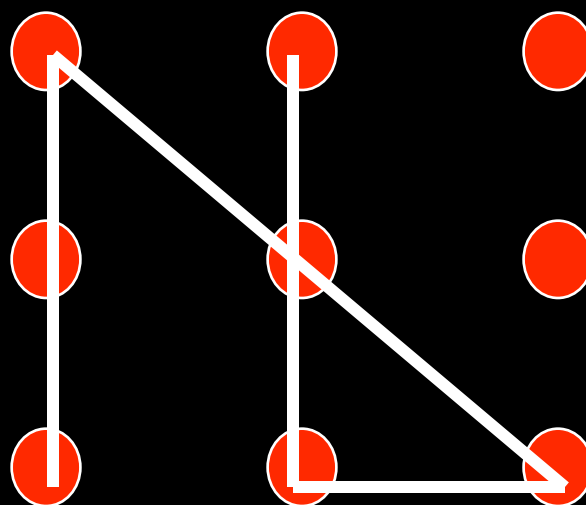
But, we **can** do something about that!

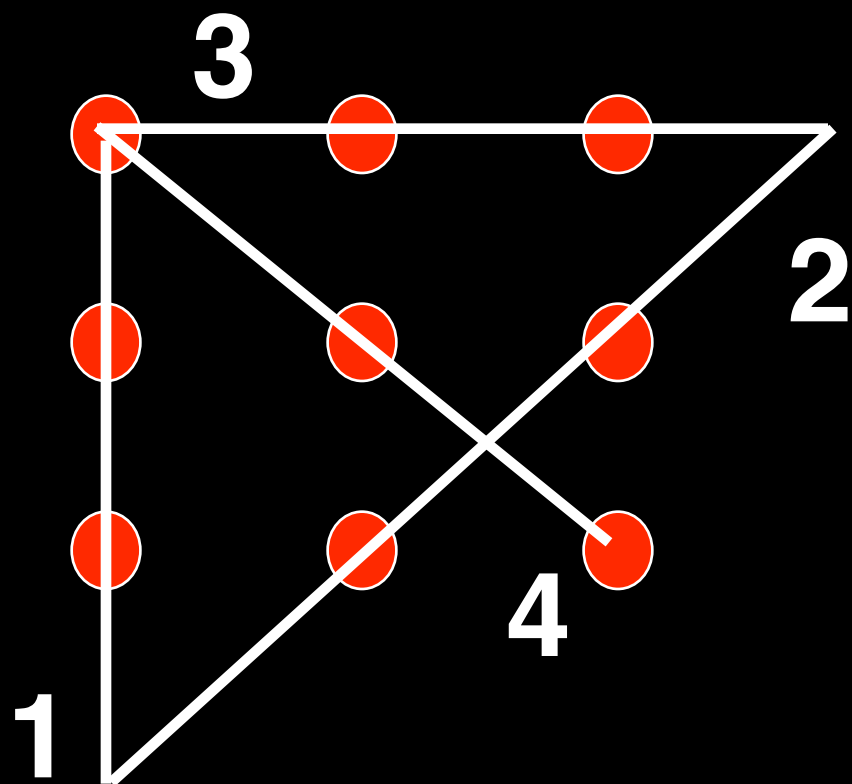
Connect all nine dots, with just 4 straight lines, without lifting your pencil once you start.



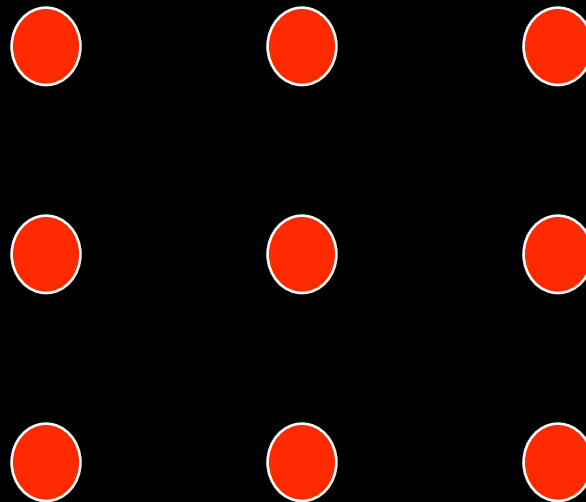


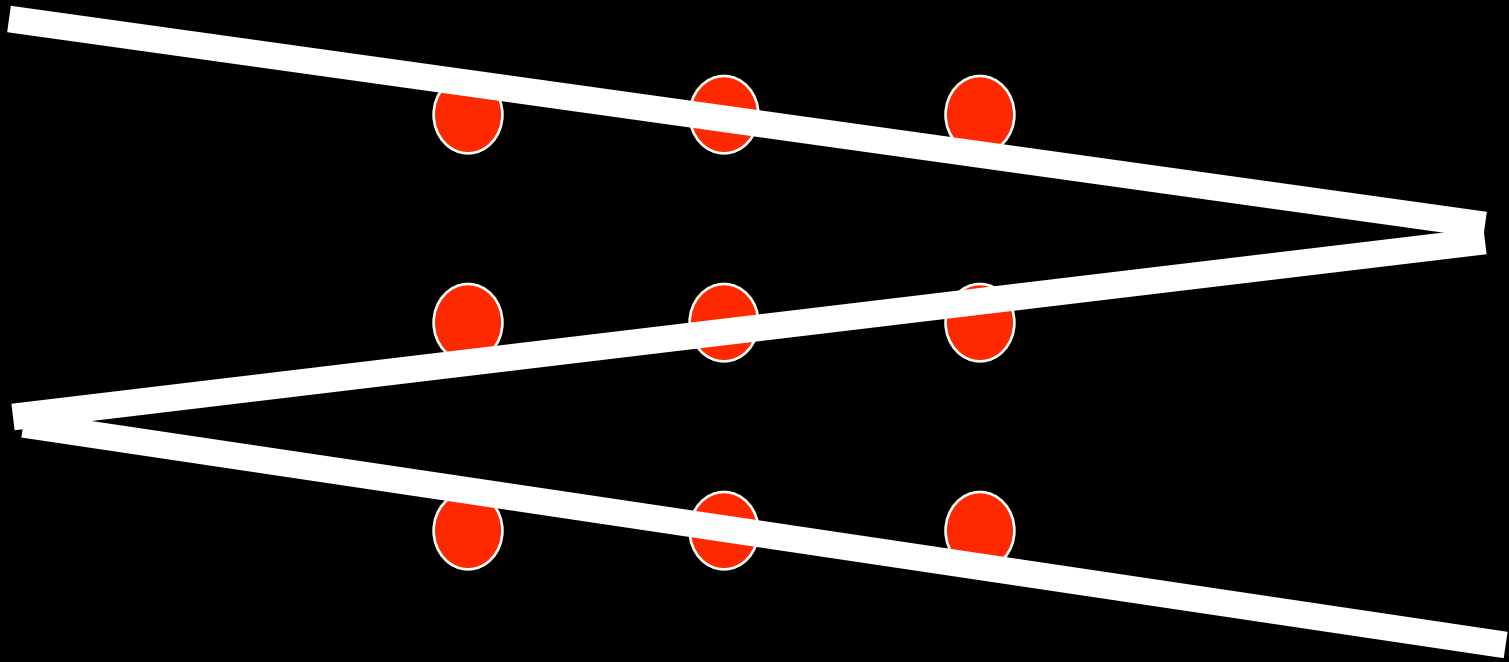




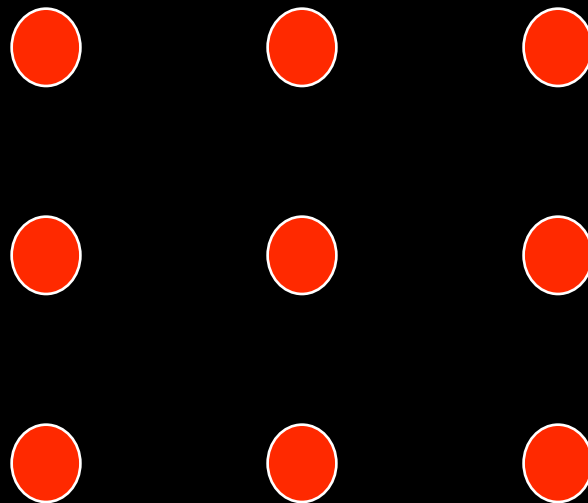


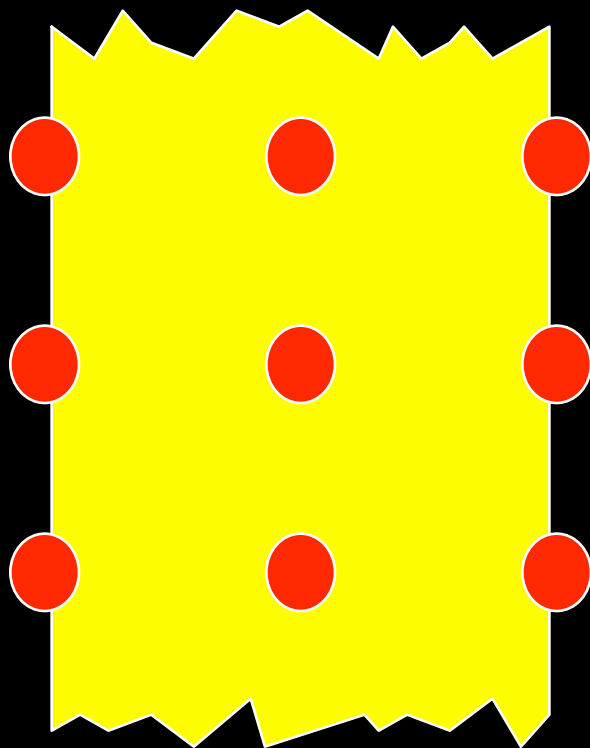
Connect all nine dots, with just ~~4~~ 3 straight lines, without lifting your pencil once you start.



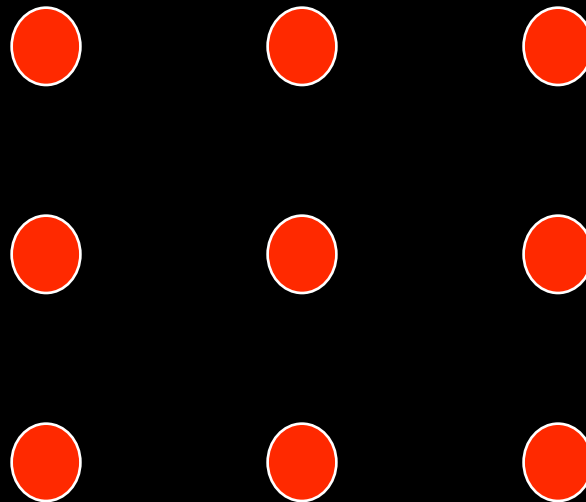


Connect all nine dots, with just ~~4~~ 1  
straight lines, ~~without lifting your pencil~~  
~~once you start.~~





Connect all nine dots, with just 4 straight lines, without lifting your pencil once you start.

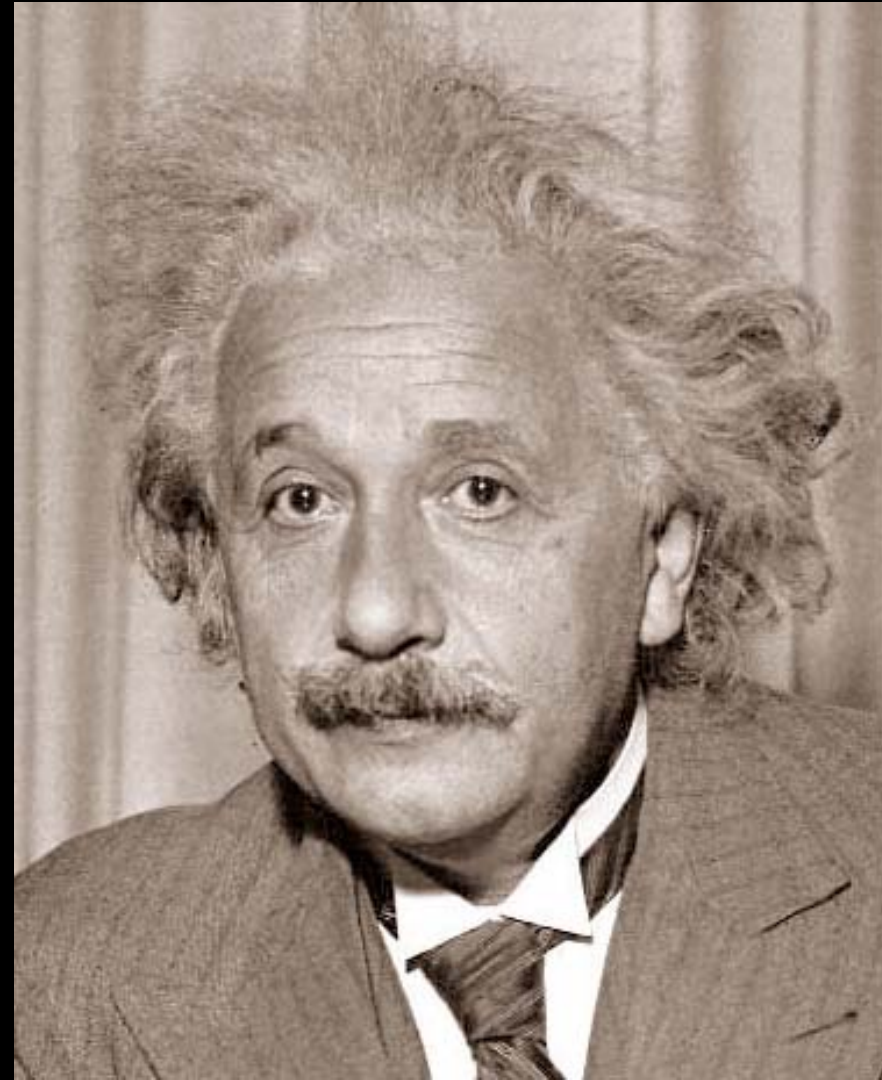


# Rules, Boxes, and Mental Models

- Our mental models become natural way of seeing and explaining things
- Difficult to see (“like water to a fish”)
- Hard to imagine any other way
- Filters our perception of reality and keeps us in our mental valleys
- Innovation = Breaking the ‘rules’

*Problems  
cannot be solved  
at the level of  
thinking that  
produced  
them*

Albert  
Einstein





# *What can we....?*

**S** substitute

**C** combine, mix, or integrate

**A** alter

**M** modify, increase / reduce in scale, change the shape or attributes

**P** put to another use

**E** eliminate by removing elements, simplifying, reducing to “core” elements

**R** reverse, turn inside out or upside down

*Source: Alex Osborn “Applied Imagination” 1950s*

# Challenge the 4Ws...

	<i>Current thinking...</i>	<i>Alternatives...</i>
<b>Who?</b>		
<b>Does What? (or How?)</b>		
<b>When?</b>		
<b>Where?</b>		



# Be purposefully disruptive...

Tertiary  
hospital

General  
hospital

Outpatient  
clinic

Office

Home

## What health care disruption can look like

*(Source: Christensen CM and Anthony SD.  
Cheaper, faster, easier: disruptive innovation in  
the service sector. Strategy & Innovation.  
January-February 2004. (Harvard Business  
School reprint number S0401A)*

**Disruption**

Patient

Nurse

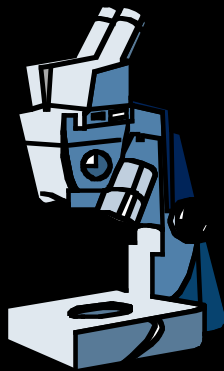
Family MD

Specialist

# “Breaking the Rules” Endless Possibilities

- Instead of (or, in addition to) focusing on dealing with illness when it occurs, let's think about providing an early warning or preventing the event.
- I know you say that Foley catheters are “tried and tested” method that has been around for decades, but the fact that it has been around for decades suggests that it might well be “out of date”.
- What if... instead of patients working their way up the salary curve in the ER, the first person they saw when they entered was a doctor?

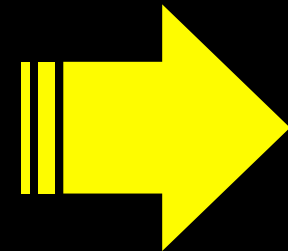
# Three Deliberate Mental Processes in Creative Thinking



Attention

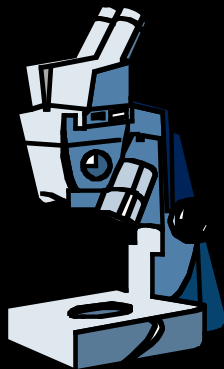


Escape



Movement

# Mental Processes for Creative Thinking



## Attention

*to what?*

- elements in the current reality
- features, attributes, patterns & paradigms
- anything you don't normally pay attention to

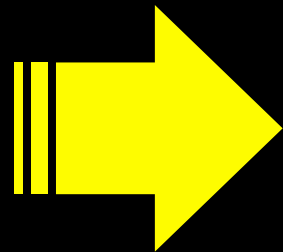
# Mental Processes for Creative Thinking



Escape  
*from what?*

- current mental patterns
- early judgment
- barriers & rules

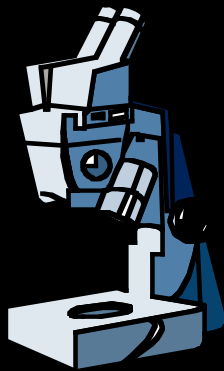
# Mental Processes for Creative Thinking



## Movement *in what sense?*

- in time or place
- to another point of view
- free association
- building on ideas

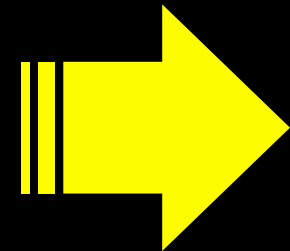
# Three Deliberate Mental Processes in Creative Thinking



Attention

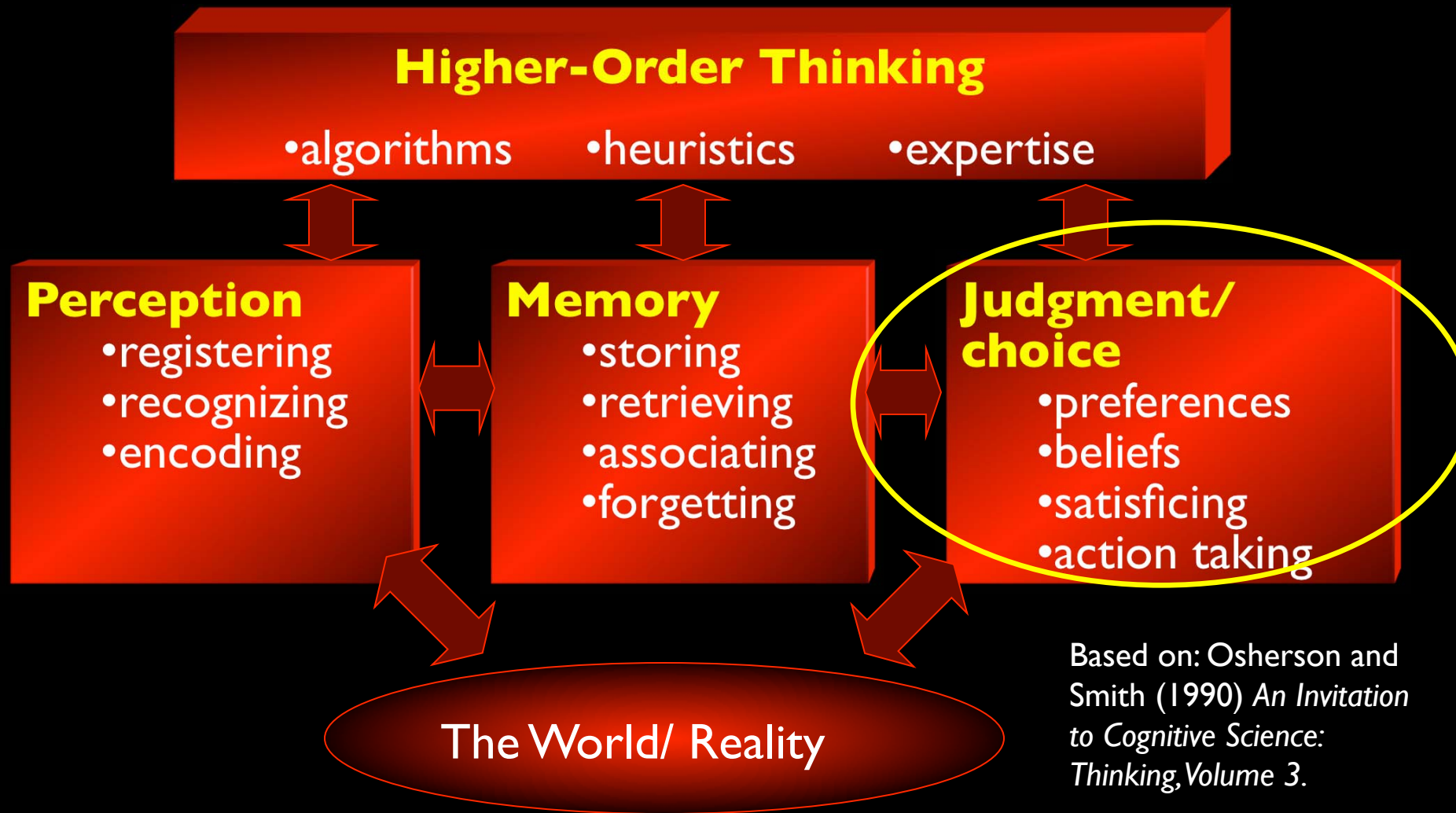


Escape



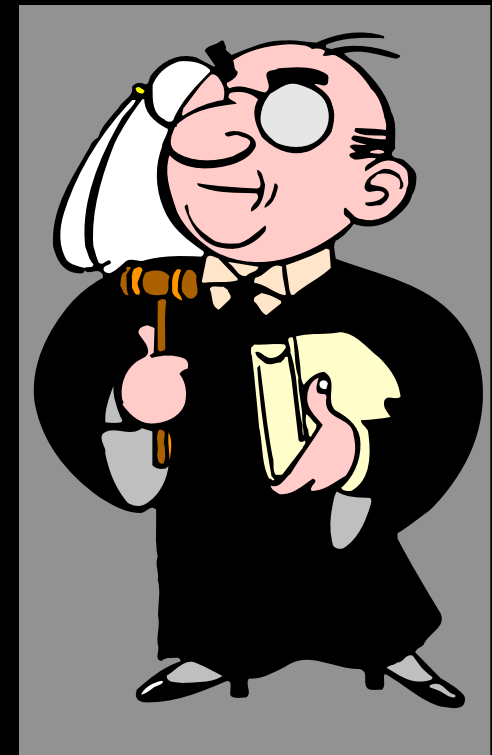
Movement

# Mechanics of the Mind



# Judgment

- Link between memory and action
  - Risk taking and risk aversion are mental choices
- We are better critics than creators
- Judgment is essential to “useful creativity”
- The judgments to avoid are:
  - premature judgments
  - those based on “what is” (established patterns) rather than “what could be”





*"This really is an innovative approach, but I'm afraid we can't consider it. It's never been done before."*



*Be of strong heart, innovation is nearly always opposed initially...*

“That it will ever come into general use, notwithstanding its value, is extremely doubtful because its beneficial application requires much time and gives a good bit of trouble; both to the patient and practitioner. Its hue and character are foreign and opposed to all our habits and associations.”

*A physician writing to the editor of The Times of London, in 1834*



*Be of strong heart, innovation is  
The stethoscope!  
nearly always opposed initially...*

“That it will ever come into general use, not withstanding its value, is extremely doubtful because its beneficial application requires much time and gives a good bit of trouble; both to the patient and practitioner. Its hue and character are foreign and opposed to all our habits and associations.”

*A physician writing to the editor  
of The Times of London, in 1834*

“To put one’s ideas into  
action is the most difficult  
thing in the world.”

Goethe



# DirectedCreativity: Creative Thinking for the Serious Minded™

**Paul Plsek**

*Paul E. Plsek & Associates, Inc.; Atlanta, GA  
paulplsek@DirectedCreativity.com*