



What If Papa Changed His Glasses?

The Uncertainty Contingency

VERITAS

In2:InThinking Network 2014 Forum

Ariane David, PhD

The VERITAS Group

California State University, Northridge

ADavid@TheVeritasGroup.com

www.theveritasgroup.com



What If Papa Changed His Glasses?

The Uncertainty Contingency

VERITAS

No need to remember everything or take amazing notes:
this PowerPoint presentation is posted at

www.theveritasgroup.com



Non-Positional Thinking:

Thinking that transforms everything.

Today I'll show you how:

- we don't really know what we think we know.



Non-Positional Thinking:

Thinking that transforms everything.

Today I'll show you :

- That we don't really know what we think we know
- How we can learn to “see” what we've never been able to see before



Non-Positional Thinking:

Thinking that transforms everything.

We'll look at:

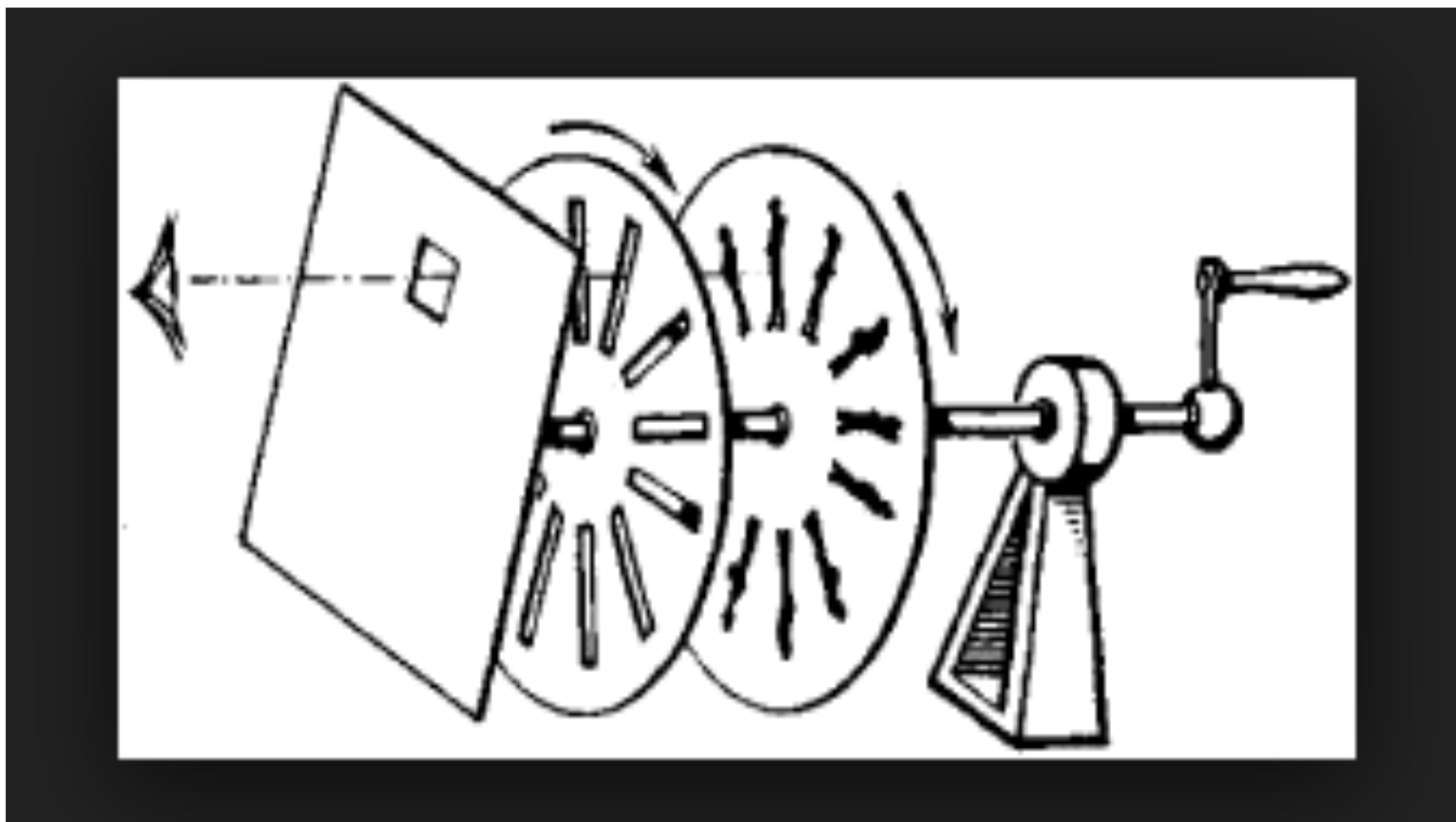
- How we think vs. *how we think we think*
- The tyrant brain
- What it means in real life
- Non-positional thinking
- Problem solving
- Real problems: breakout



The Brain: A Quick Tour

Max Wertheimer's Stroboscope:

More than the sum of the parts.

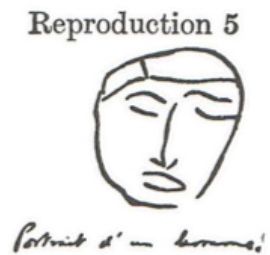
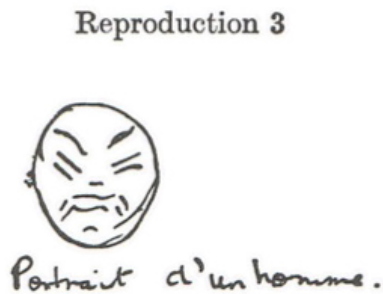
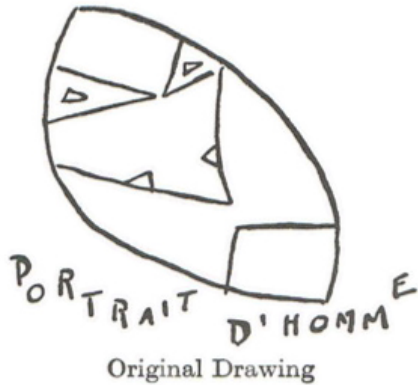




Bartlett - Making Memory, Meaning, & Schemas

- The War of the Ghosts
- “Asian” mask *
- Schemas

Bartlett - Making Memory, Meaning, & Schemas



¹ Cf. Philippe, *Rev. Phil.* XLIV, 524.



Bartlett - Making Memory, Meaning, & Schemas

- The War of the Ghosts
- “Asian” mask *
- Schemas: precursors to mental models



Loftus – Eyewitness Testimony

What we store in memory is affected by

- Pre-existing memories
- Post-event information:
 - Language
 - Other information

What we remember might **never** have happened.

Damasio – The Neurobiology of Thinking

Perception

- Millions of bits of information assail our senses every minute; we can perceive only a tiny number of sensory impressions.
- We focus only on what is immediately **relevant** and what arouses us **emotionally**.
- Perception is shaped by past experiences: memories and beliefs.
- Our actions are based on what we **believe** is so, not on what actually is so.

Damasio – The Neurobiology of Thinking

Emotions

- Emotions: bodily reaction to what's happening
- Every sensory impression is paired with an emotional tag
- The pair form what we call a memory
- The purpose of emotional tags is rapid response
- The myth of rational decision-making

Damasio – The Neurobiology of Thinking

Memory

- Memory is not a video; memories are NOT stored complete anywhere in the brain.
- What we think of as memory is the result the simultaneous firing of neurons: “a trick of timing”.
- Neurons carry no content, only the pattern code by which neurons will fire, and when.

Think the image on your TV.

...thus

- What we remember is **subjective** and **creative**
- What we remember **changes every time we recall it**: we can never be certain about what we remember.
- Confidence in our memories has **nothing** to do with accuracy: memories can be completely fabricated and seem absolutely real.



Organizing Patterns: Order Out of Chaos

- All experiences are made to fit into existing organizing patterns
- Organizing patterns are what allow us to know anything
- Organizing patterns are self-reinforcing
- The totality of all our organizing patterns creates our constructed universe – our entire reality

We don't know who discovered water, but we know it wasn't the fish.

– Marshall McLuhan



...as a result

*You can never be certain that what you remember
actually happened the way you remember it;
in fact, you can be certain that it didn't!*

Uncertainty is the first contingency of non-positional
thinking.



So What?



So What?

We each live in a universe of our own construction. Its organizing patterns, logic and thinking short-cuts are perfect for physical survival, but absent the beasts they can be a real barrier to clear thinking.



Examples of Simple Organizing Patterns





View from Apollo 17





700 First Street
Marble Falls, TX 78654
830-798-9909

<http://www.rivercitygrilletx.com>

Mon - Thurs 11 am - 10 pm

Fri - Sat 11 am - 11 pm

Sun 11 am - 9 pm

Hill Country Wine & Supper Club

Join us in the Colorado Room for a fun lesson in food tasting that includes a three-course meal and three wine pairings. Each month we will feature a new winery.



October Hill Country Wine & Supper Club Menu

Warm Artichoke & Crap Dip
with Toasted Baguettes

Filet of Sole Fish en Papillote
with Au Gratin Potatoes

Raspberry & Chocolate Cream Cheese
Stuffed Cupcakes



700 First Street
Marble Falls, TX 78654
830-798-9909

<http://www.rivercitygrilletx.com>

Mon - Thurs 11 am - 10 pm
Fri - Sat 11 am - 11 pm
Sun 11 am - 9 pm

Hill Country Wine & Supper Club

Join us in the Colorado Room for a fun lesson in food tasting that includes a three-course meal and three wine pairings. Each month we will feature a new winery.



October Hill Country Wine & Supper Club Menu

Warm Artichoke & Crap Dip
with Toasted Baguettes

Filet of Sole Fish en Papillote
with Au Gratin Potatoes

Raspberry & Chocolate Cream Cheese
Stuffed Cupcakes



You say WHAT? Stuck in Organizing Patterns

“Who the hell wants to hear actors talk?”

– *HM Warner, Warner Bros, 1927*

“I think there is a world market for about five computers“

– *Thomas Watson, CEO, IBM 1958*

...and the winner

“Sensible and responsible women do not want to vote.”

– *Grover Cleveland, US President 1905*



The Tyrant Brain:

Thinking Errors of Organizing Patterns

- Tyranny of Knowledge
- Tyranny of Emotions
- Tyranny of logic *



Logic: The Rules of Thinking

- What is logic?
- What determines if something is logical?
- Can logic be wrong?

Discussion



Logic/Reasonableness

- Logic is nothing more than the rules **you've** made up for navigating within your constructed universe!
- These rules are based on how easily and powerfully one thought gets connected to another: thoughts that connect easily are seen to be logical.
- There are as many different systems of logic as there are beings on the earth. (The jury's out on extra-terrestrials)
- Logic is subjective like taste. Nothing is ever “illogical”; things are just “differently-logical”

Why does this matter?



Thinking Errors Reinforce Themselves

- No external evidence needed!
- Conclusions are taken as proof.
- This proof reinforces the position.



The Answer: Non-Positional Thinking

- It is based on the knowledge that **we cannot trust what we think we know**
- It rises above the “position” to view all positions equally

Non-positional thinking does this through...

- **Critical inquiry:**
 - Uses **direct observables** (behaviors, results) not assumptions or hearsay as the baseline from which to analyze any situation
 - Questions the very thinking that underlies how we see the problem incl. beliefs, assumptions, values, norms, and reasoning; our own and others’.
 - Examines the language used to speak about it
 - Looks for disconfirming information



Contingencies of Non-Positional Thinking

Uncertainty

Curiosity

Courage

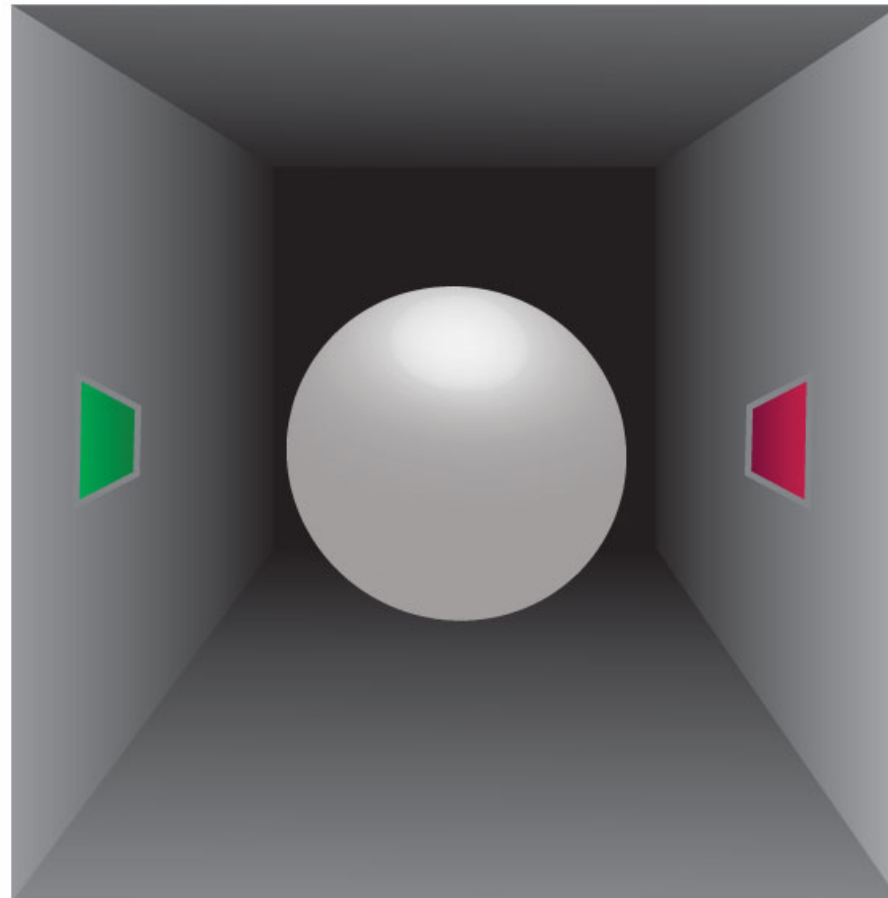
Commitment

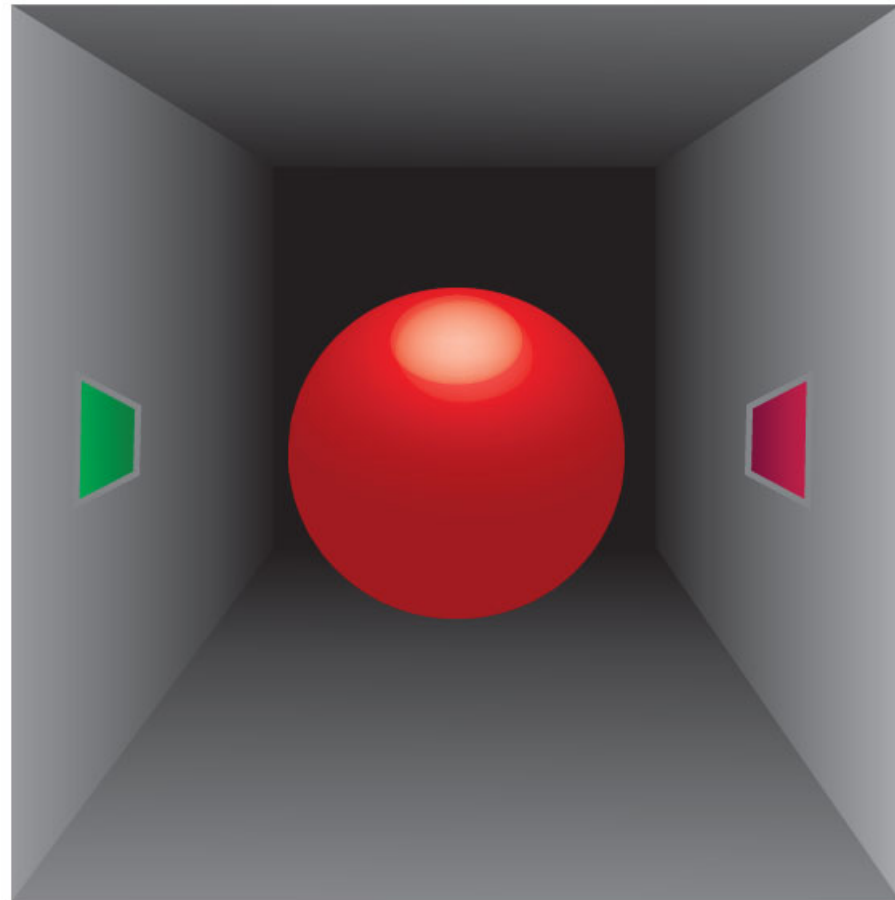


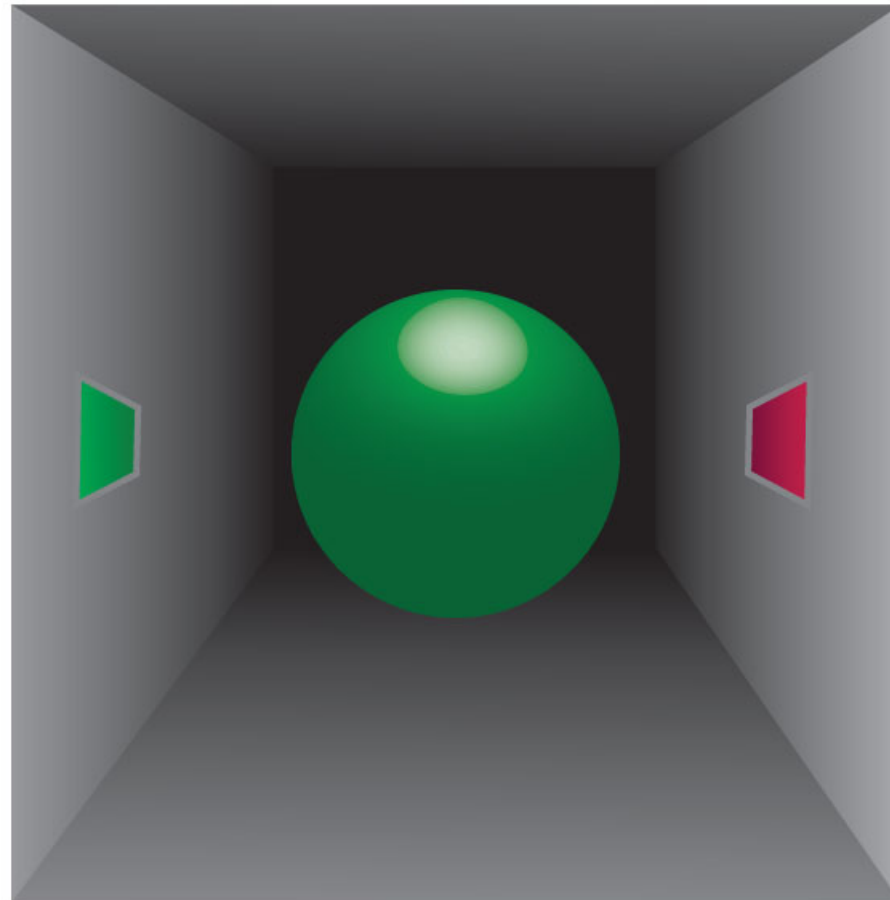
Uncertainty Contingency

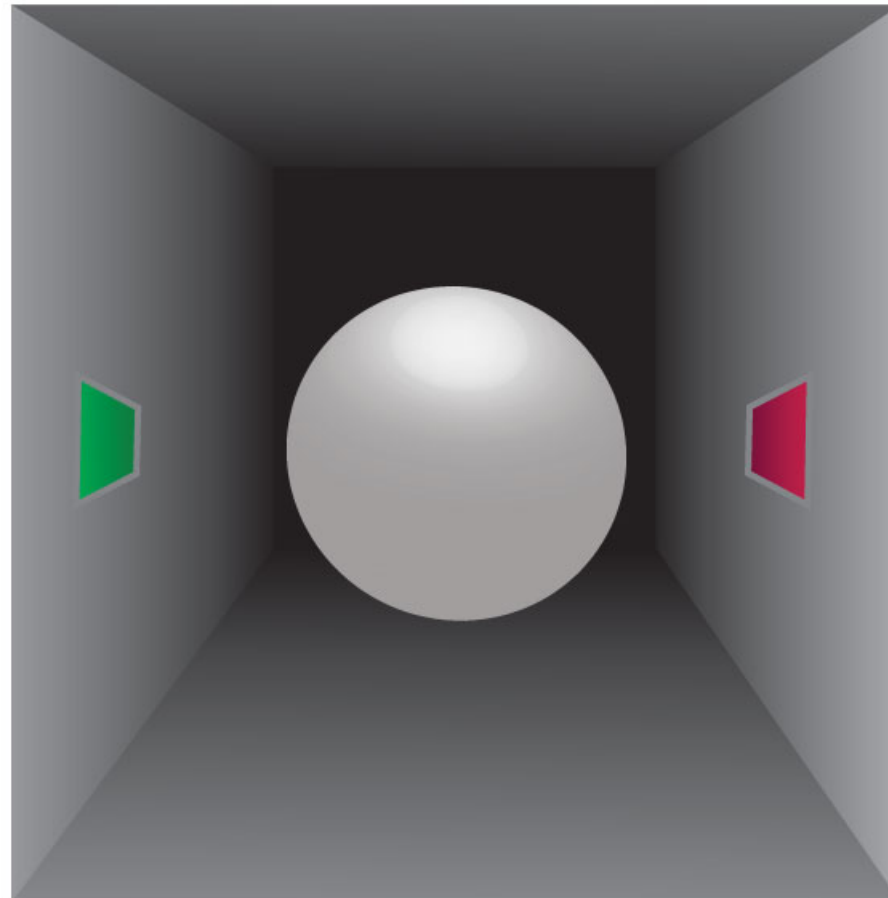
- All we know about the world is contained within our own constructed universes. Uncertainty means realizing we our knowledge about the world is massively unreliable.
- Our constructed universes are not the world, just a good-enough representation of it that allows us to survive(ish).
- Certainty that our constructed universe **is the world** leads to almost all of the **world's problems**.

All non-positional thinking is based on this uncertainty contingency











The **uncertainty contingency** makes us realize that we don't know what color the ball actually is no matter how obvious it seems.

The **curiosity contingency** makes us want to find a way of looking in the other windows.



Curiosity Contingency

Curiosity means that (in the light of our uncertainty) we are **eager** and **determined** to discover what we don't know, the knowing of which could change everything.



Courage Contingency

Courage means having the determination not only to see beyond our organizing patterns, but to have the heart to acknowledge and act on those discoveries even in the face of our own fear.

This includes being willing to change our dearly held position.



Commitment Contingency

Commitment is the overarching principle. In this case it means being **determined** to become a non-positional thinker, i.e., to moving beyond our own point of view, assumptions, judgments, and conclusions even if it is terribly uncomfortable.



Non-Positional Problem Solving

The Austin bridge-bat bind: overcoming classical problem solving.





Mass fear in the air as bats invade Austin

Austin, Tex. (UPI)—A downtown Austin area has been taken over at night by hundreds of thousands of bats—some carrying deadly rabies—that attack and threaten residents.

At least three men and a woman have been bitten by the Mexican free-tailed bats in the last three weeks and all of them have been advised to take the painful rabies shots, health officials said.

The bats have formed huge colonies underneath the Congress Avenue Bridge, which stretches across the Town Lake, where the Colorado River runs through the heart of the

minor because there is little pain and not much of a wound. But any breaking of the skin by a rabid animal can be dangerous."

ONE OF THE MEN was bitten when a bat flew into his hotel room. Another man suffered a cut on his forehead when he was hit by a bat as he walked on a downtown street.

Dr. Phil Zbylot of the Austin-Travis County Health Department said research shows at least 2% to 3% of the bats have rabies.

In addition to roosting under the bridge, the bats have been gathering



Bridge-Bats Bind:

Classic Problem Solving Methodology

- Identify the issue or problem.*
- Gather information about the problem. *
- Identify possible solutions/decisions.
- Determine the pros and cons of each solution.
- Choose a solution.
- Do it.
- Review the outcomes.



Bat Problem and “Facts” (According to the Newspapers)

Problem

- Dangerous bats taking over Austin

“Facts”

- Austin “taken over”, “invaded” by hundreds of thousands of bats where they “dominate the area”
- Some carry “deadly rabies”
- The bats “attack and threaten” residents
- Three people bitten, most not breaking the skin
- All bite cases involved people trying to handle or interfere with bats, or of bats that got trapped



A Different Approach:

Non-positional Thinking

- Beneath every *apparent* problem lies the *actual* problem. Solving the *apparent* problem only leads to more (and usually worse) problems.
- The actual problem usually involves people and how they *think* about the problem.

...SO

- We need a new way of thinking about thinking and problem solving that takes into account our understanding of the constructed universe.

There is no problem that doesn't have a solution if we are willing to change the way we think about it.

Constantin David (Papa)



A Different Approach:

Finding the Actual Problem

First

- What is my/the goal?
 - Is the goal to get rid of the “problem” or to get rid of the bats?
 - ... serve the customer or to serve the organization?

- What is my position?
 - What will I lose if I am wrong? (note: we ALWAYS have something to lose.)
 - Is there anything that could persuade me I’m wrong?



Non-positional Problem Solving:

Finding the Actual Problem

Next

- What is the problem or issue exactly
 - What do I/we believe the problem to be? What assumptions and conclusions have I made?
 - What language is being used? **Neutral** or **positional**? How is it biasing our understanding of the problem?
 - What are the facts (**observables, behaviors, results**)? (we take our *reaction* to the observables *to be the problem!*)



Non-positional Problem Solving:

Finding the Actual Problem

Then

- What could be alternative explanations for the **facts**?
- What information or evidence is there?
- What information do I need
- What **disconfirming evidence** is there for my position?



Bat “Facts” According to the Newspapers

- Austin “taken over” by hundreds of thousands of bats where they “dominate the area”
- Some carry “deadly rabies”
- Rabies is deadly
- The bats “attack and threaten” residents
- Three people have been bitten, most not breaking the skin
- All bite cases involved people trying to handle or interfere with bats, or of bats that got trapped



Additional Bat Information

- 500,000 bats eat 10,000 pounds of bugs **every day**
- Bats are no more prone to rabies than squirrels, chipmunks, raccoons or other wild animals
- No cases of rabid bats were reported in the area
- Bats are shy and avoid people when possible
- Several cases of bat bites, most not breaking the skin
- All bite cases involved people trying to handle or interfere with bats, or of bats that got trapped

This information was readily available to anyone at the time of crisis.



What is the REAL Problem?

- **What is the goal?** (is the goal to get rid of the “problem” or to get rid of the bats?)
- **What is the problem/issue exactly**
 - What do we believe the problem to be?
 - What are our initial beliefs, assumptions and conclusions?
 - What language is being used? **Neutral** or **positional**?
 - What are the facts (**observables, behaviors, results**)? ...not our reaction
- **What could be alternative explanations for the facts?**
- **What information or evidence is there?**
- **What information do I need?**
- **What **disconfirming evidence** is there for my position?**
- **What is my position about it?**
 - What will I lose if I am wrong? (note: we ALWAYS have something to lose.)
 - If there were evidence that my assumptions/beliefs were not accurate, would I be willing to change my position?



Non-Positional Solutions

- What are possible solutions?
- Which one best fulfills the real goal?
- What is the reasoning process I used in order to reach this conclusion?
- What effects will this decision have on the larger system now and in the long run?

Austin Bats Create an Industry





Creating a Learning Organization



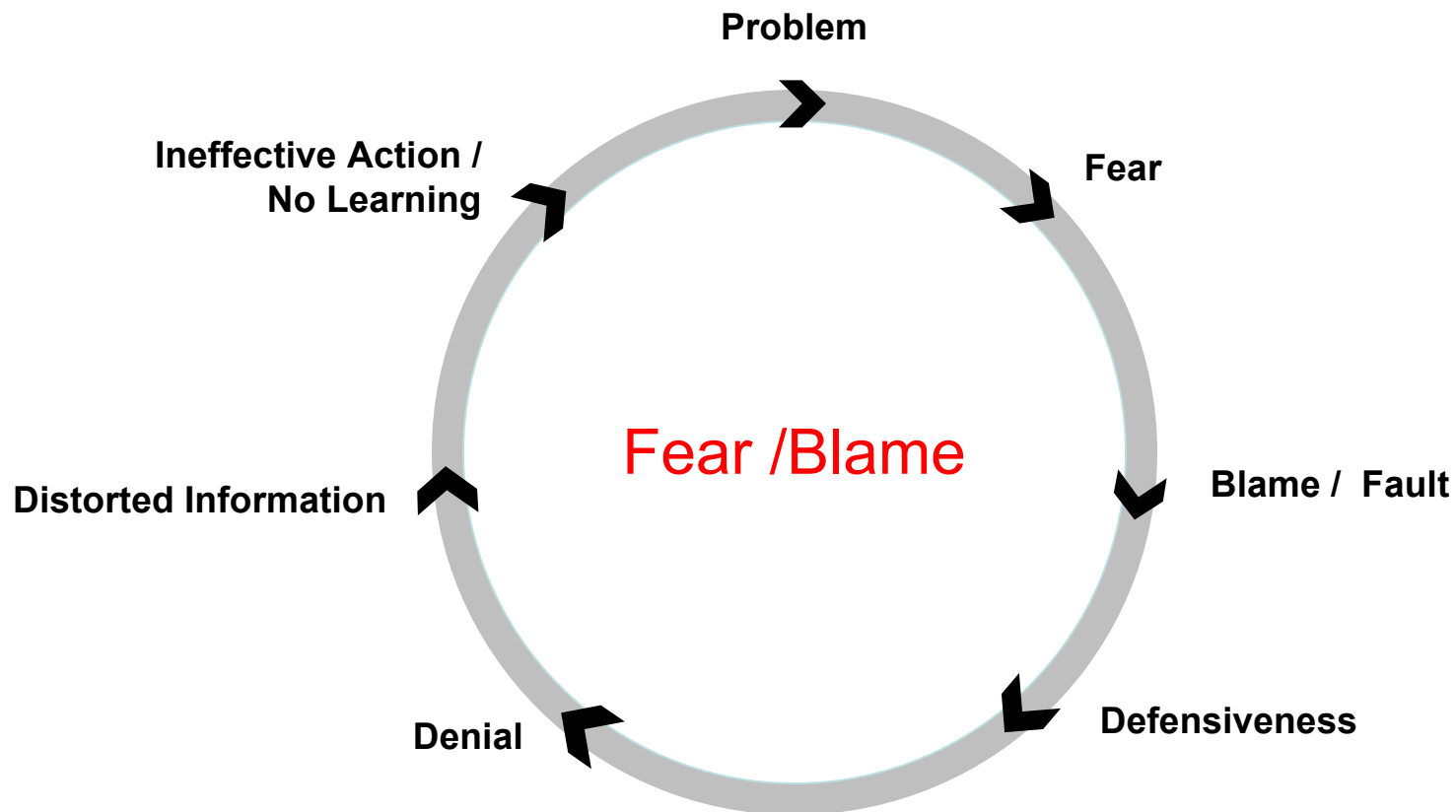
Two Kinds of Learning

- Adaptive learning
 - Based in fear
 - Uses blame to succeed
 - Purpose is survival
 - Defensive

- Generative learning
 - Based in curiosity and openness
 - Uses accountability to succeed
 - Purpose is growth and self-expression
 - Creative

Non-Learning Organization:

Positional Problem Solving



No learning can take place in the space of blame.

Learning Organization:

Positional Problem Solving



Mistakes are the price we pay for learning.



Workplace Issue Breakout



What is the REAL Problem?

- **What is the goal?** (is the goal to get rid of the “problem” or to get rid of the bats?)
- **What is the problem/issue exactly**
 - What do we believe the problem to be?
 - What are our initial beliefs, assumptions and conclusions?
 - What language is being used? **Neutral** or **positional**?
 - What are the facts (**observables, behaviors, results**)? ...not our reaction
- **What could be alternative explanations for the facts?**
- **What information or evidence is there?**
- **What information do I need?**
- **What **disconfirming evidence** is there for my position?**
- **What is my position about it?**
 - What will I lose if I am wrong? (note: we ALWAYS have something to lose.)
 - If there were evidence that my assumptions/beliefs were not accurate, would I be willing to change my position?

Am I coming from uncertainty and curiosity?



Non-Positional Thinking:

Thinking that transforms everything.

- A great many people think they are thinking when they are merely rearranging their prejudices

– *William James*

- It is much easier to believe than to think

– *James Harvey Robinson*



The Uncertainty Proposition

“Question everything at least once in your life...”
(not “something” but “everything”!)

“Doubt is the organ of wisdom.”

Rene Descartes



Parting Thought...

It ain't what you don't know that gets you into trouble,
it's what you know for sure that just ain't so.

– *Mark Twain*



What If Papa Changed His Glasses?

The Uncertainty Contingency

VERITAS

Questions/Comments/Feedback

Ariane David, PhD
The Veritas Group

Additional Information

ADavid@TheVeritasGroup.com

www.theveritasgroup.com