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Picking Cotton

HMAS Sydney





Allport & Portman 1942





What's Up? The Psychology of Thinking

- Selective Perception (data gathering)
- Subjective Memory (data "storage" and "retrieval")
- ...all held together by the Constructed Universe



Selective Perception Filters the Information

- Purpose is to let in only immediately relevant information
- We perceive what we focus on: inattentional blindness
- What we perceive is subject to physical conditions
- What arouses us emotionally captures our attention
- It is subject to our beliefs, assumptions, logic, etc.



It's Subjective Memory, Not a Video

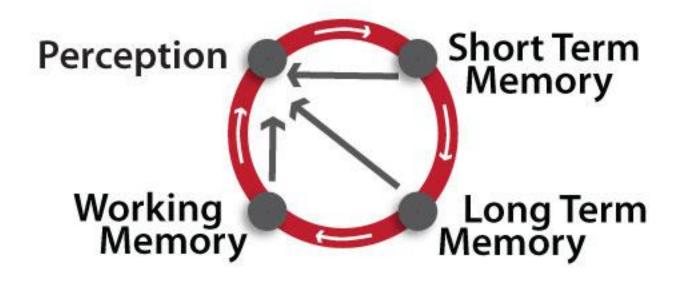
- What we remember is subjective
- What we remember is fluid and constantly changing
- Many factors compromise eye-witness memory; confidence and sincerity do not equal accuracy
- Memories can be completely fabricated
- The War of the Ghosts



What's Up? The Neurobiology of Thinking

- Antonio Damasio: emotion, reason and the human brain: the neurophysiology of:
 - Perception
 - Memory: Short-term > long-term > working
 - Recollection
 - Perception
 - Decision-making, planning and the role of emotion
 - Perception







What is the Constructed Universe?

...the cognitive framework in which all thought takes place.

...the constructed universe IS the mind.



What Makes up the Constructed Universe?

- Made up of all our beliefs about the world
- Starts when we're born (maybe before)
- New information is made to fit
- Changeable in early childhood, mostly fixed after that
- We are not aware of its presence
- Order is maintained through schemas

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



Schemas: Organizing Principles of the CU

- Organize all of our beliefs, memories, thoughts, perceptions into loose clusters of related things
- Connections among these things can be tenuous and "illogical"
- Help us make sense out of experiences (real or imagined)



Why Schemas?



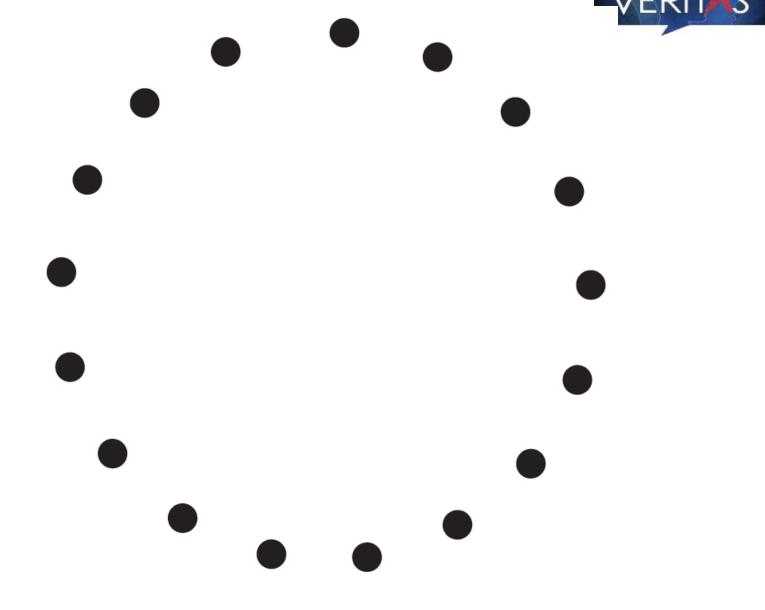
Why Schemas?

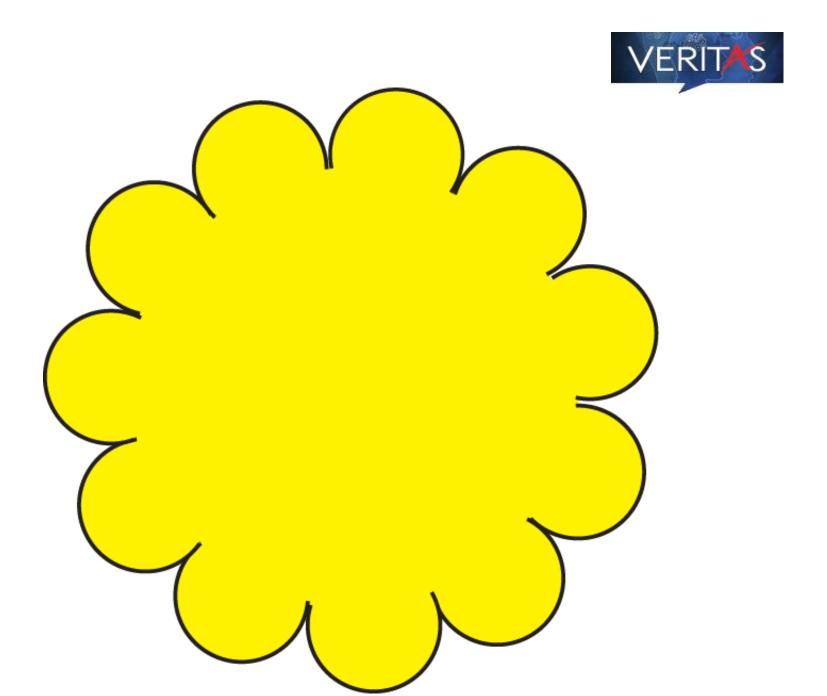
Survival!



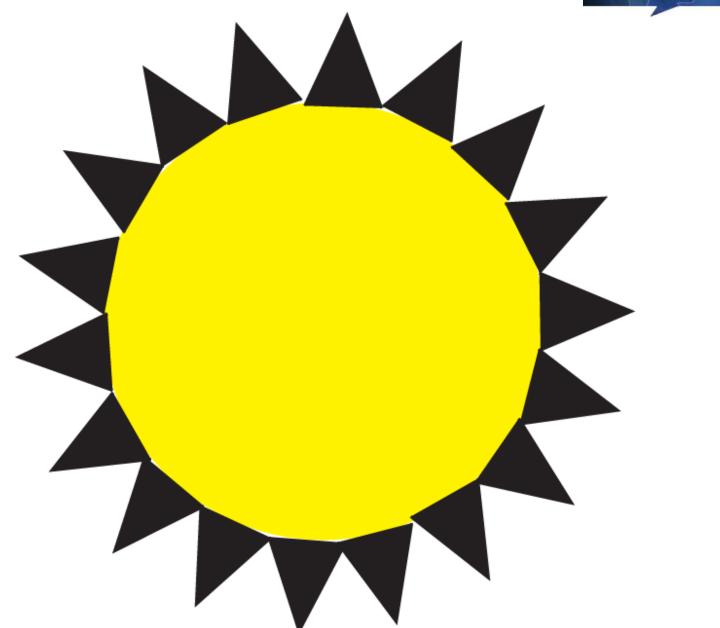
Example of a simple schema...



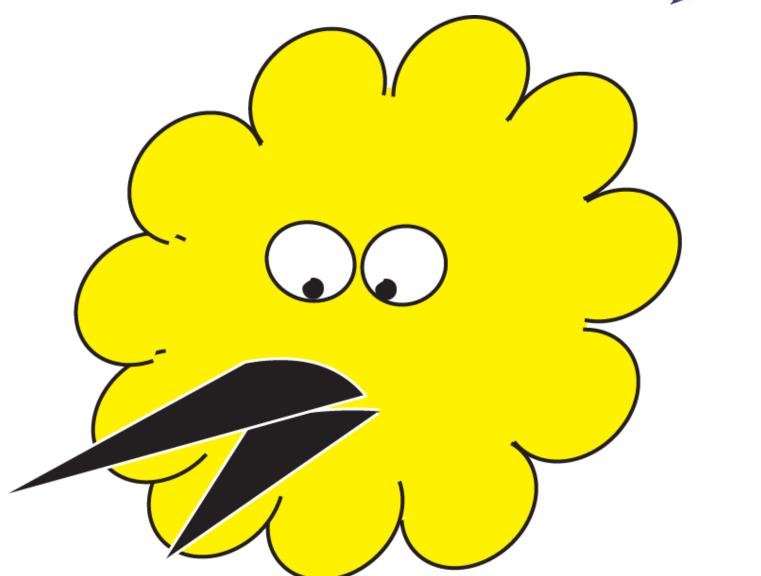














Schemas Can Lead to Thinking Errors

"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

"There is no reason anyone would want a computer in their home."

-Ken Olson, Chairman/ Founder of Digital Equipment Corp., 1977

"Sensible and responsible women do not want to vote."

-Grover Cleveland, US President 1905



Positional Thinking

Thinking Errors Caused by Schema Failure:

- Maginot Line thinking
- Zero-sum thinking
- Monkey Jar thinking
- Lost Key thinking
- Short-cut errors



Thinking Errors: Maginot Line Thinking

Doing what worked in the past only because it worked in the past, without examining how appropriate that strategy is in light new information, developments and technology.



Maginot Line Thinking

- Examples
 - Maginot line
 - Switzerland's Watch Industry
 - Miracle on Manchester
 - Guy Popovich and the San Antonio Spurs



Thinking Errors: Zero Sum Thinking

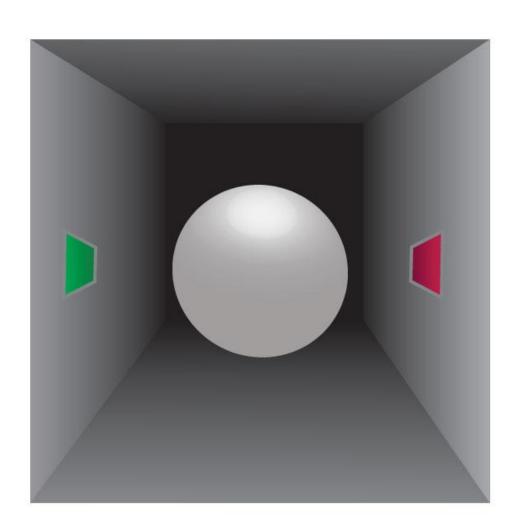
Believing that there is a limited amount of "solution".



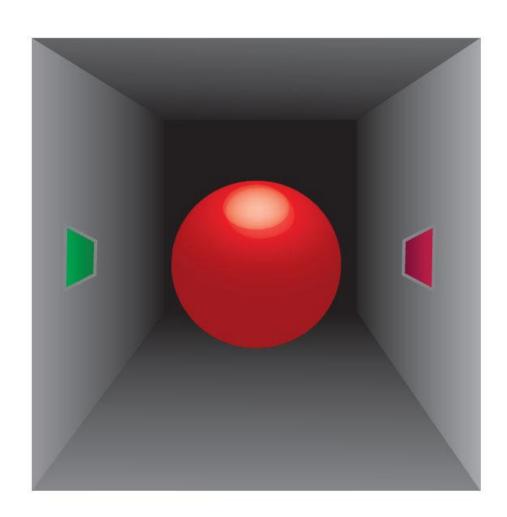
Zero Sum Thinking

- Examples
 - Fixed position thinking
 - Either/or thinking

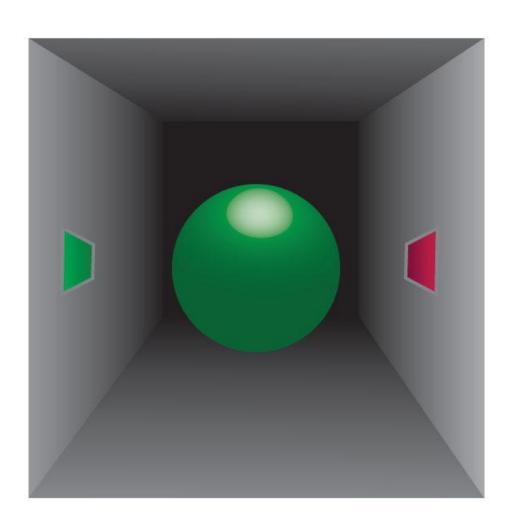














Thinking Errors: Monkey Jar Thinking

Thinking for the short term and/or seeing only particles; seeing only "now" but not how current actions lead to future outcomes; seeing only parts but not how they're related.



Monkey Jar thinking

- Examples
 - Tragedy of the commons
 - American autos



Thinking Errors: Lost Key Thinking

Looking for information/solutions/answers somewhere only because that's where the information is easy to access.



Lost Key Thinking

- Examples
 - Measuring results: call Center
 - Treating the symptoms



Thinking Errors: Categorization Errors

We take cognitive shortcuts in our reasoning to help us make sense quickly, but fail to verify the accuracy.

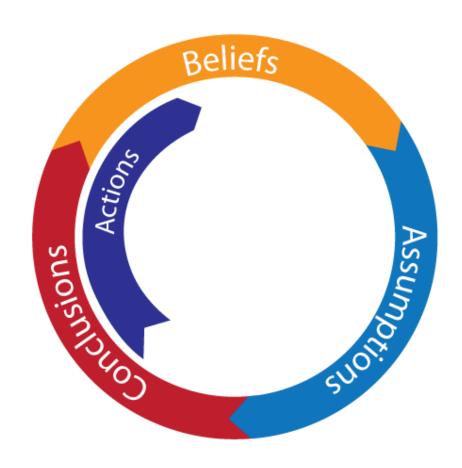


Categorization Errors

- Examples
 - Stereotyping
 - Biases



How Positional Thinking Errors Reinforce Themselves





Logic/Reasonableness

- What is it?
- What determines if something is logical?
- Is logic ever wrong?



Logic/Reasonableness

Logic is nothing more than the rules YOU'VE made up for navigating within your constructed universe!



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Logic is nothing more than the rules YOU'VE made up for navigating within your constructed universe!

 There are as many different systems of logic as there are people on the earth. (The jury's out on extra-terrestrials)



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Logic is subjective like taste. Nothing is ever "illogical";
 things are just "differently-logical"



What Does All of This Mean?

We need a new of thinking about thinking, and that way is

Non-Positional Thinking



Non-Positional Thinking: An Ideal to Strive For

 Comes out of the knowledge that we cannot trust what we think we know.



Non-Positional Thinking: An Ideal to Strive For

- Comes out of the knowledge that we cannot trust what we think we know.
- Rises above the "position" to examine all positions



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It does this by:

 Questioning the underlying thinking, assumptions, and reasoning behind and issue...and related issues





Humility



Humility

Curiosity



Humility

Curiosity

Courage



Becoming a Non-Positional Thinker: Tips

ask...

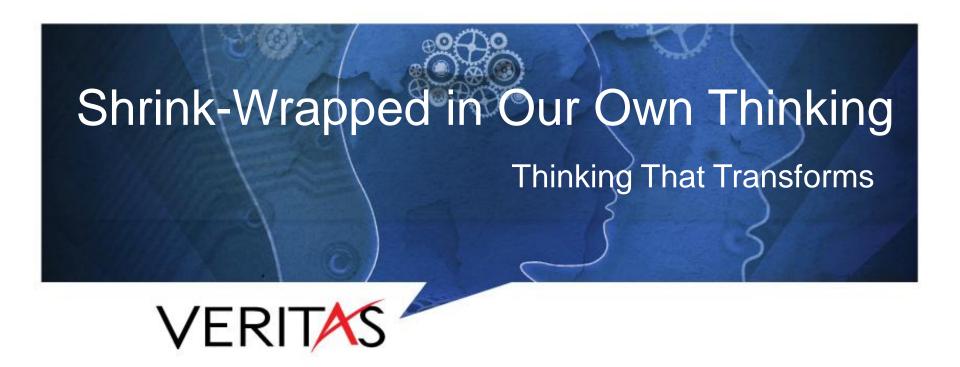
- What do I think is so?
- What assumptions have I made?
- What if my assumptions were wrong?
- What could be alternative explanations?
- Is there anything that could persuade me that I am wrong?



Parting Thought...

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

Will Rogers



Questions/Comments/Feedback

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Additional Information

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