

PSY100

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Welcome!

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- Please note: these slides are to HELP YOU take notes, not to replace your notes. Consider this as a skeleton outline around which to take notes, with these slides providing this basic framework to save you from having to copy everything down. Instead, you can focus on understanding the material and making it mean something to you.

Fundamental Insights

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1) Reality is a story, told to us by our brains.

Our brains are artists, not mirrors

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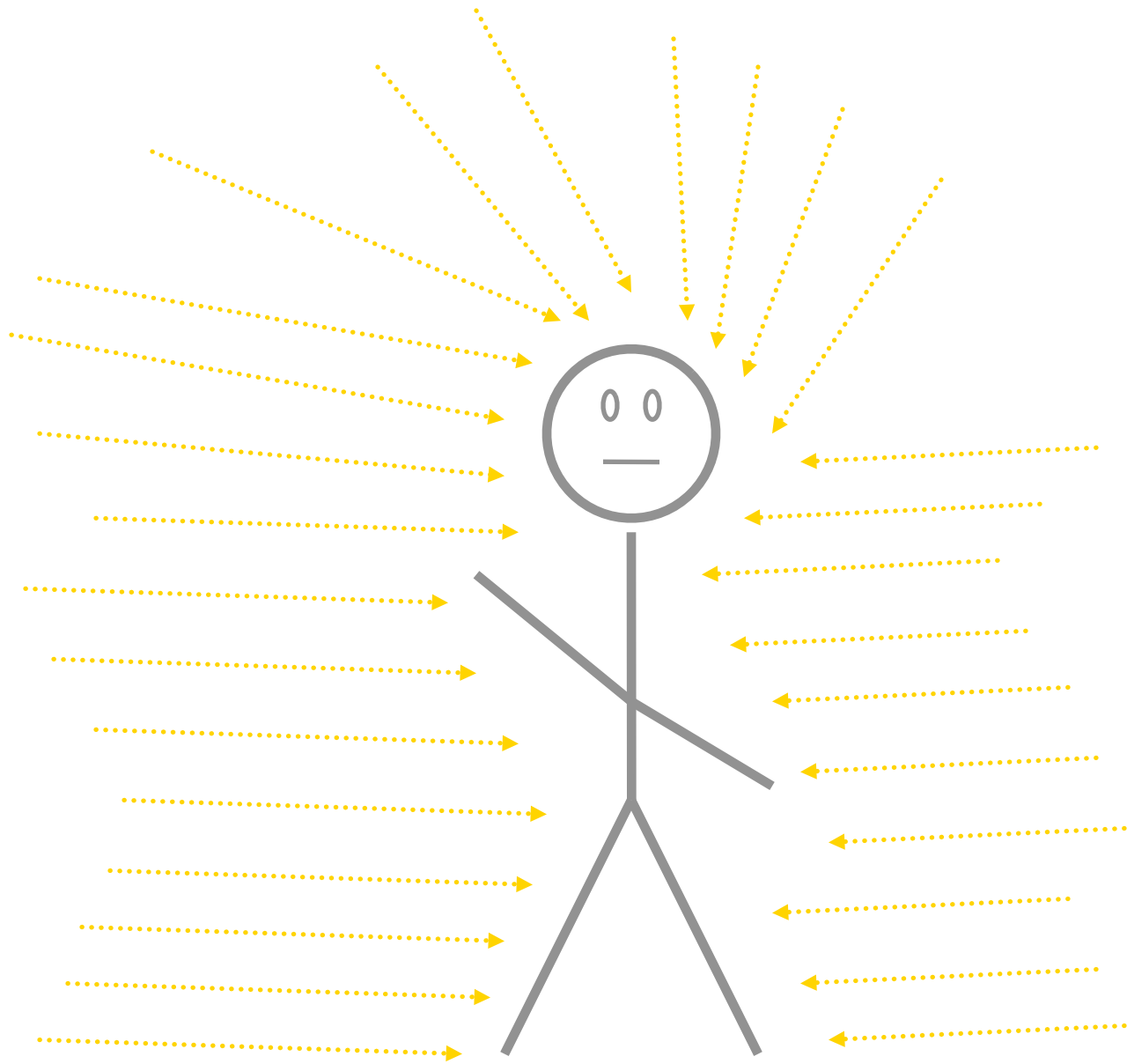
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- 1) This construction process involves a lot of guesswork – “filling in the gaps”
- 2) This subjective representation occurs within the brain.



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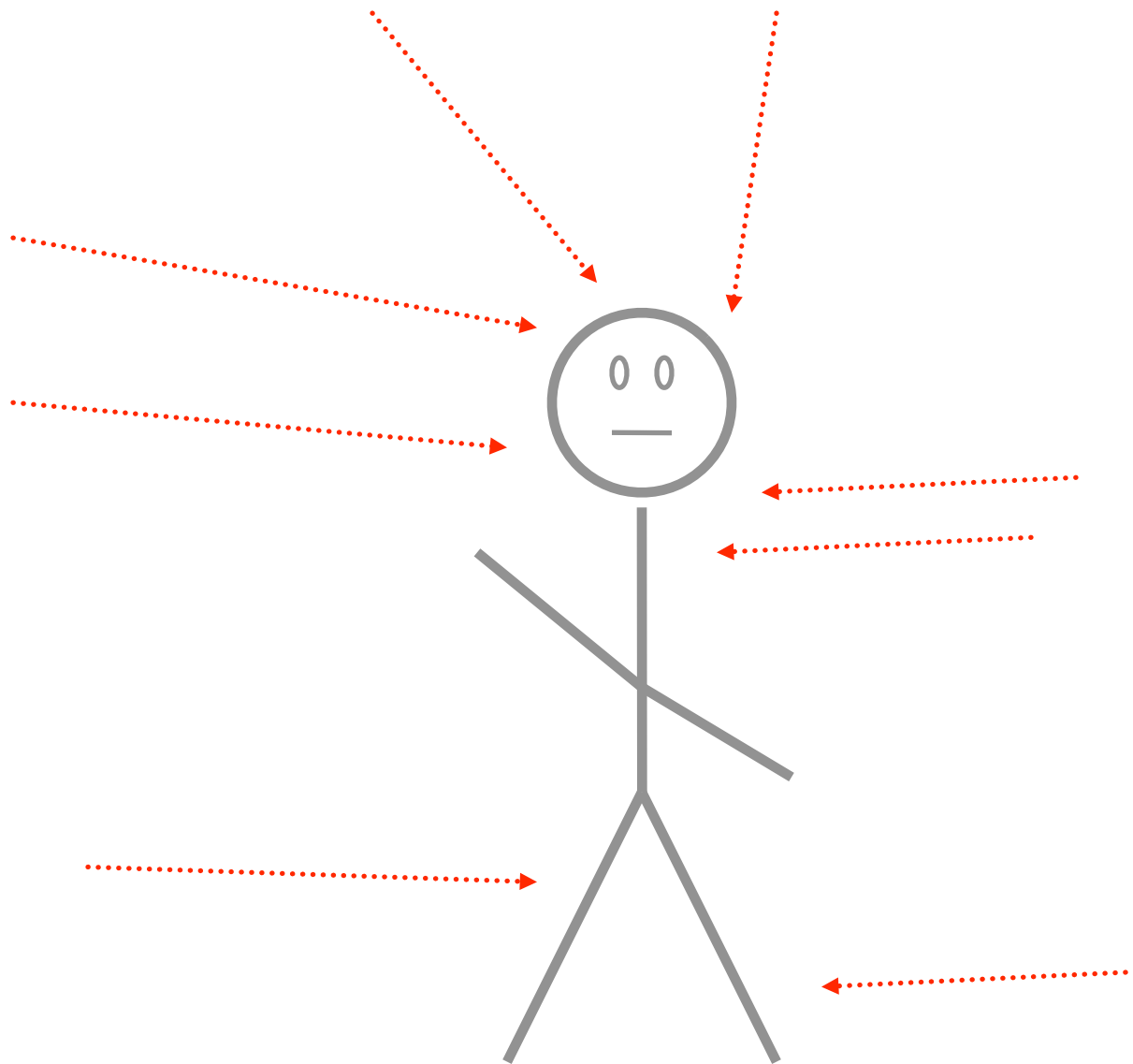
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- the sensitivity of our sensory mechanisms

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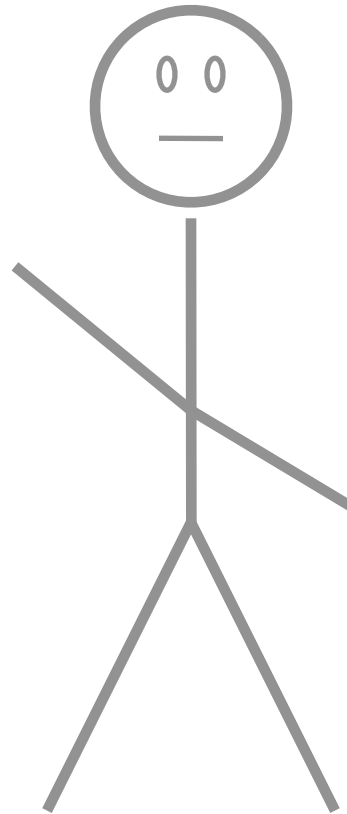
The limitations of our sensory-perceptual system are due to:

- the sensitivity of our sensory mechanisms
- our attentional capacity





= PERCEPTION



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- Perception is a process of creative story-telling and inference making. We have to fill in a lot of gaps.
- This is highly functional.....most of the time.
- But this means that we are not directly interacting with reality, but rather, we are creating a **fiction** about reality, and we hope it's a pretty close match.

But how does the Mind perceive Reality?

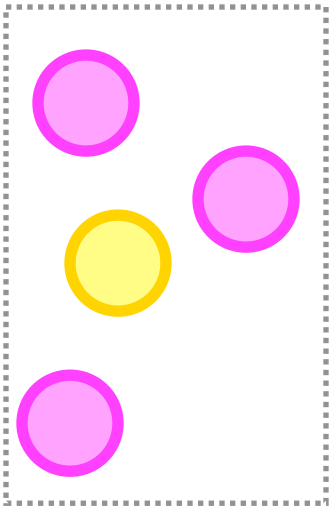
- Perception is a process of PATTERN-MATCHING
- It is as though our brains look for a correspondence between patterns that have been stored in it through our past experience, and the patterns of sensory stimuli it is currently experiencing.

- the brain uses its pre-existing patterns (i.e., “knowledge”) to decode incoming sensory signals

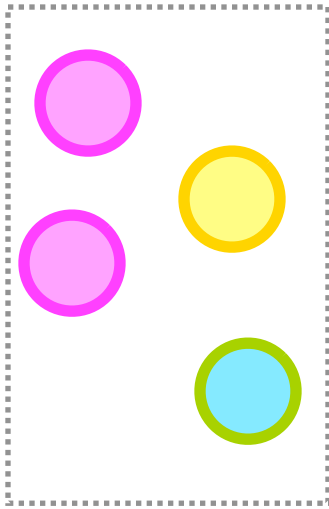
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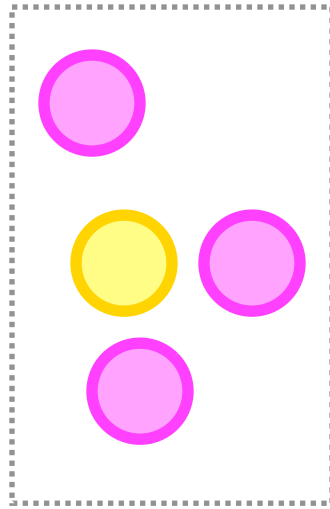
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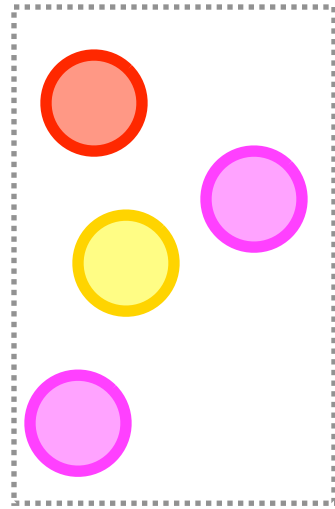
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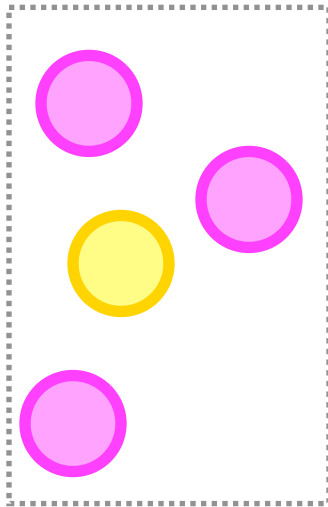
JUSTICE



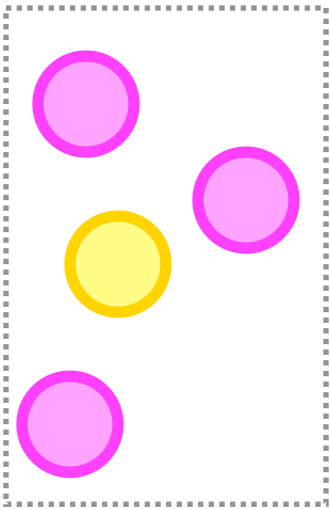
I AM
AWESOME!



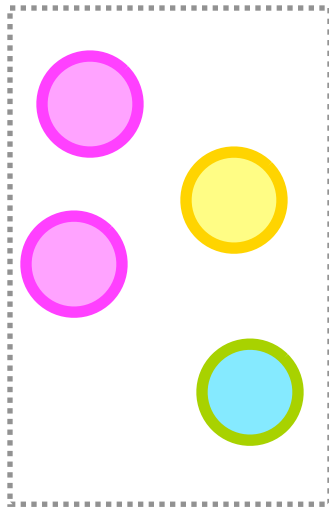
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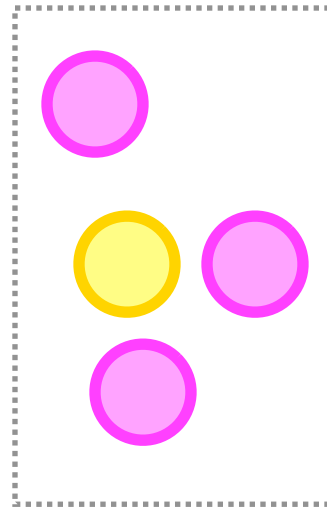
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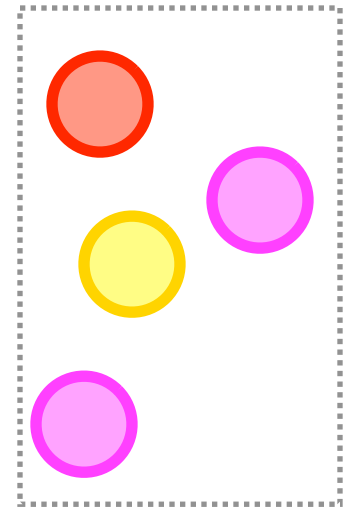
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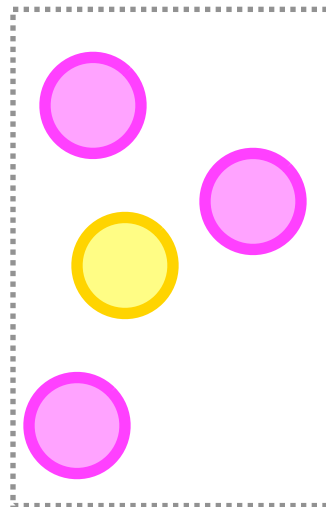
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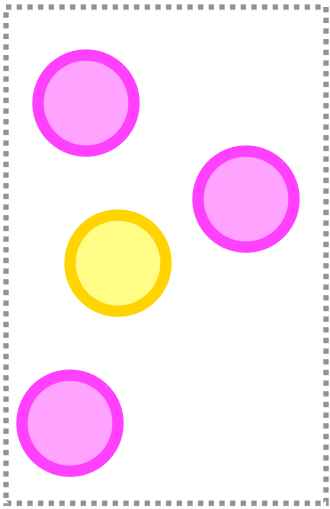
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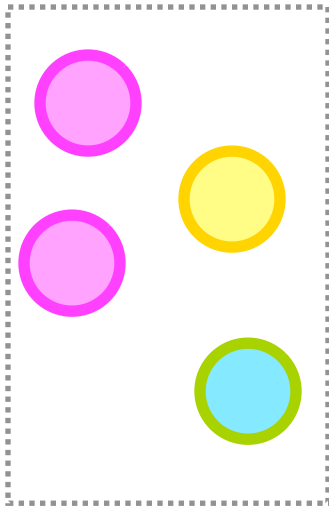
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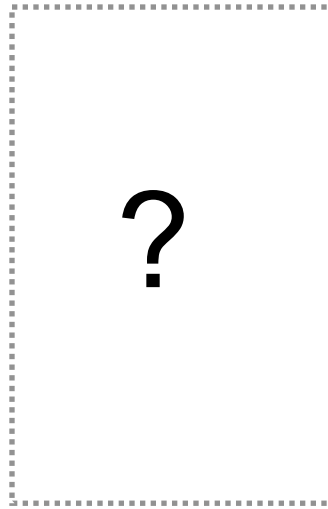
Hi MOM!



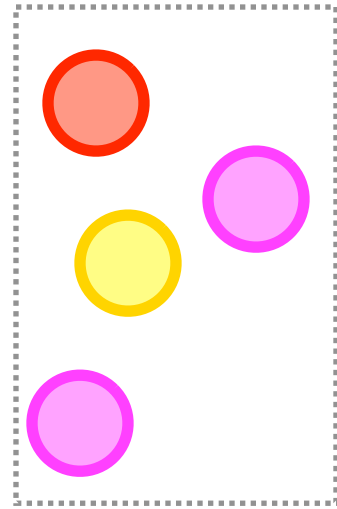
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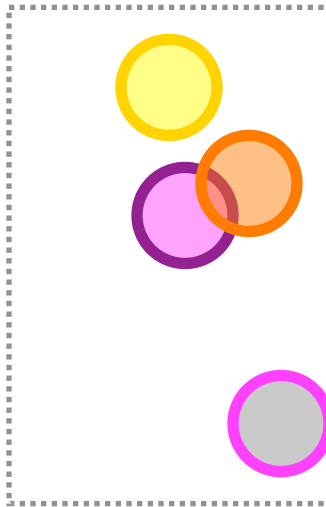
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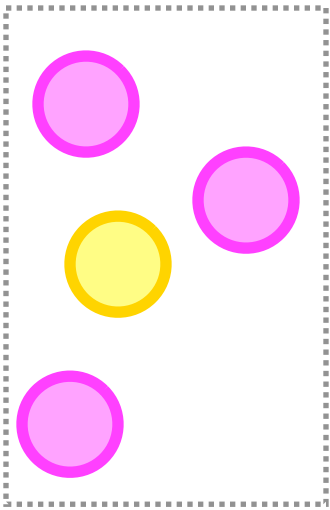


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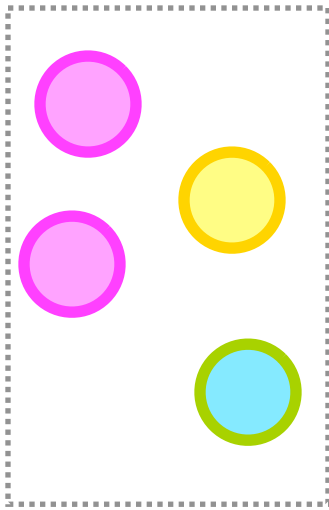


BUFFALO

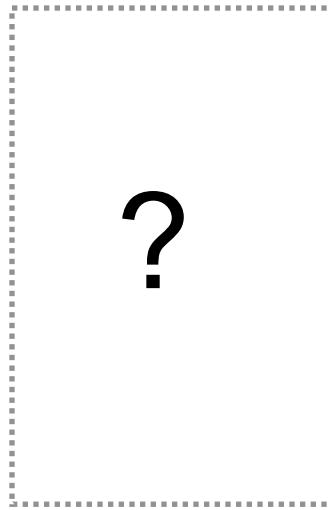




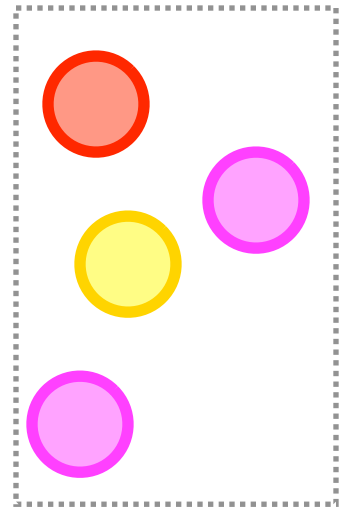
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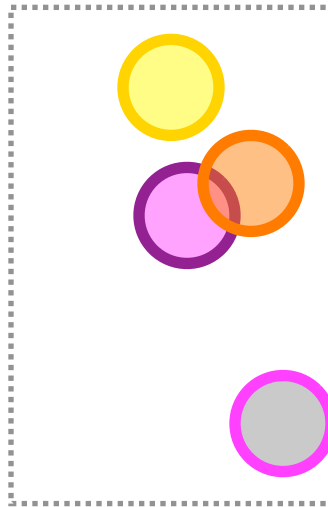
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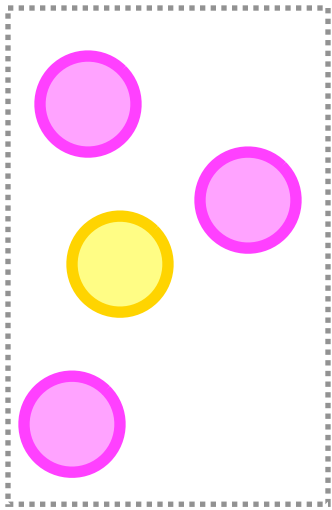
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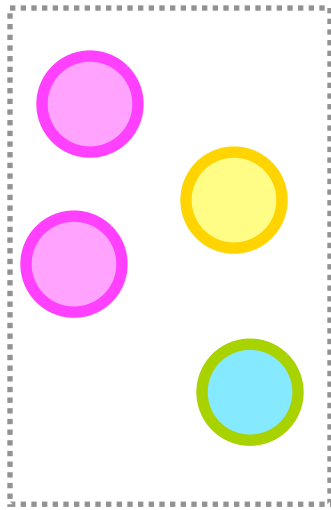
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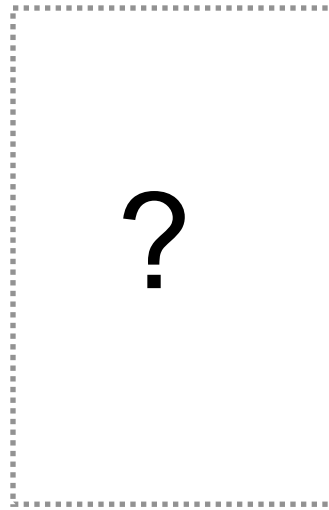
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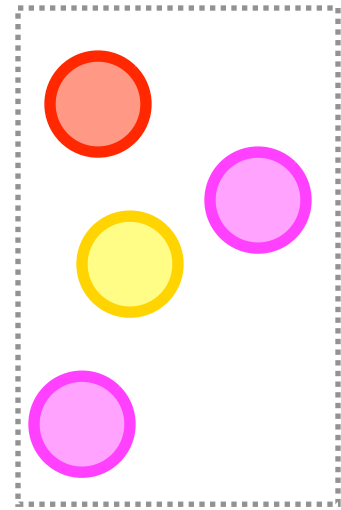
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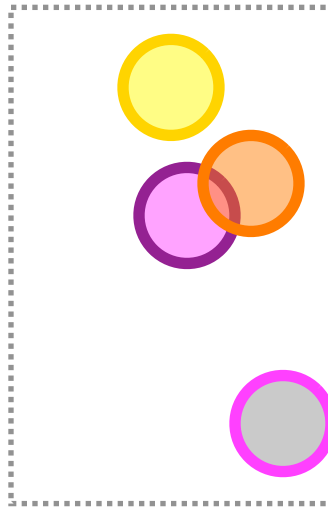
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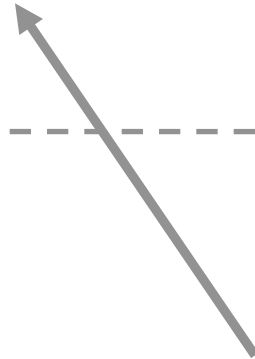
MAGIC



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Fundamental Insight #1

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This construction process involves interpreting patterns of sensory information with pre-existing patterns stored in the brain.

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Implications?

We don't live in the real world, but in a constructed world.

This construction process involves interpreting patterns of sensory information with pre-existing patterns stored in the brain.

We regularly make errors in this construction process, and there are systematic ways in which we do so.

Fundamental Insight #2

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We have a limited information processing capacity.

Therefore, we take shortcuts:

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Because perception --> behaviour, our biases can actually create their own reality!

“self-fulfilling prophecies”

Biases are often based on our motivations, which can alter the information we pay attention to, the information we dredge up from our memories, and the meaning that we read into our experiences.

- e.g., most awesome person? biggest jerk?

What we can learn from our biases

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Humility – we have many biases; we do not see reality “as it is”; thus, we shouldn’t get too attached to our judgements & perceptions & should take a multi-perspective approach as much as possible

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Empowerment – our perceptions of Reality are **constructed**, and we have quite a bit of control over that (and we can gain much more control than we currently have!!!)

The Primacy of Attention

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ATTENTION determines how we are affected by the circumstances of our lives (e.g., anger, depression, regret, anxiety, VS. hope, happiness, appreciation), how well we perform on tasks, and many other things.

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ATTENTION! ATTENTION! ATTENTION!

- Attention also affects Quality of experience.
- e.g., wine tasting; listening to tunes....

E.g., Flow States

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Mihaly Csikzentmihalyi

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The result? No matter the domain, peak experiences are pretty much the same.

The critical factor is the amount of attention focused on the present activity (another way to say this is the amount of ORDER in consciousness, which is determined by the degree of attentional focus)

Fundamental Insight #3

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EVERYTHING is the same!!! (i.e., a complex network of biological/neurological processes).

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- You might like to think that you live in the real world, but you don't; you live in your brain.

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What is “knowledge” really?

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What is Mom? Wolverine? Love? Truth?

Enlightenment? Ice cream? Your worst memory? Tennis serve? Chess strategy?

How to drive stick shift? 9/11? A post-materialistic worldview? Angelina Jolie?

Depression? God?

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All of these things are (in your mind) neural
conversations.

your brain is an incredibly intricate **network** of neurons, much like a culture is a network of people

those neurons communicate and form larger patterns and structures, much like our culture communicates and forms institutions and systems of meaning

- when neurons release their electro-chemical messages to other neurons, an association begins to form between them
- the more they communicate, the stronger the association gets, until it becomes virtually automatic and instantaneous
- these neural conversations are not independent....imagine how confusing that would be!

Therefore, our neural conversations (i.e., concepts, etc.) are interconnected, based on past associations. As these interdependent associations build over time, our brains become increasingly adapted to our environments.

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e.g., liking & similarity, emotion & physiology, persuasion/marketing and emotion