

General Psychology

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This Class is All About You

- Your brain
- Your memories
- Your fears
- Your mental disorders
- Your joys
- Your friends (and the stuff they make you do..)
- Your parents
- ...



Who Are You?

Unique! (probably want to avoid younique..)

But your brain has a lot in common with others..

So we can make some pretty good guesses..



You Don't Know Much..

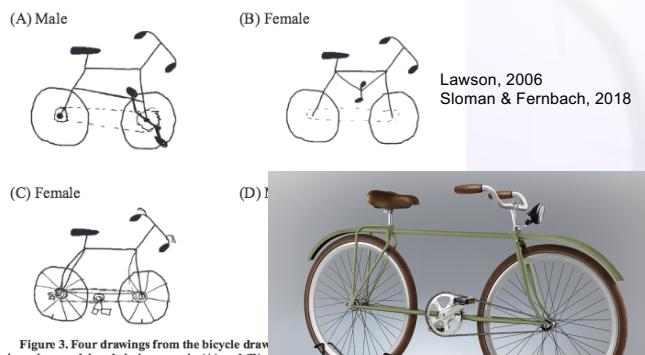
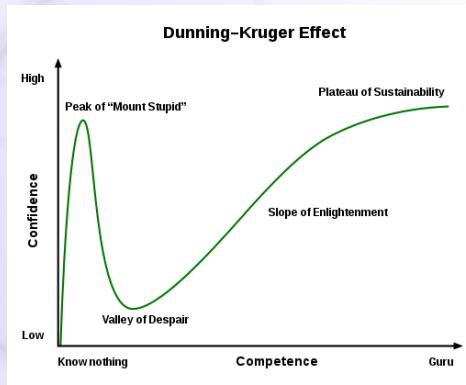


Figure 3. Four drawings from the bicycle drawings show pedal and chain errors in (A) and (B), and the rare triple combination of frame, pedal, and chain in (D). Four participants stated that they (A) cycled at least once a week, while only one participant cycled daily.

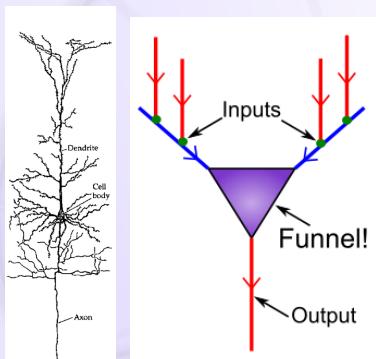
And you don't know you don't know..
(anosognosia of everyday life..)



And it doesn't really matter!!



Your Brain is one Big Funnel!



Tons of information slamming into you every millisecond!

But your brain just **compresses** everything into what you actually need to know!

Principle #1: Compression

- Stereotypes
- Tweets
- Soundbites
- Texting
- (more pictures please!)

You are Constantly Comparing



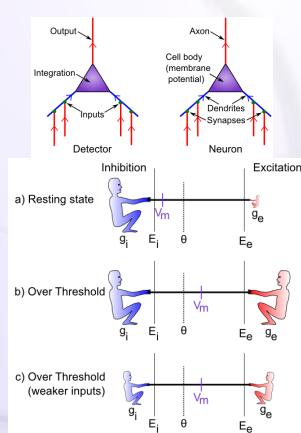
Constantly Seeking News



Principle #2: Contrast



Everything is always relative in your brain
Constantly comparing relative to everything
Including the past (news)



You Struggle with Self Control



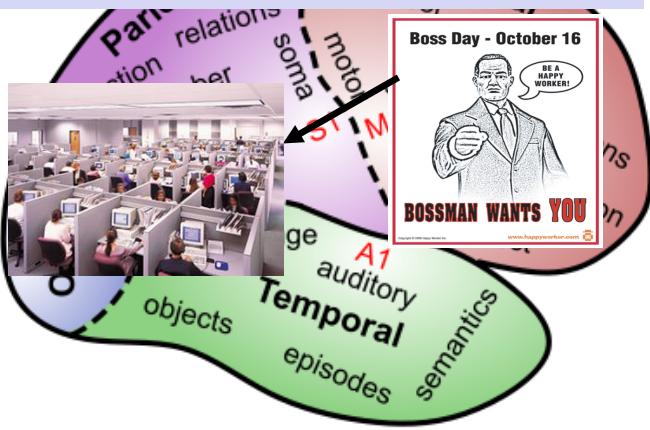
Control it!



Losing it..



Principle #3: Control



The Three C's

Compression: KISS!

Contrast: just have to outrun friend, not the bear..

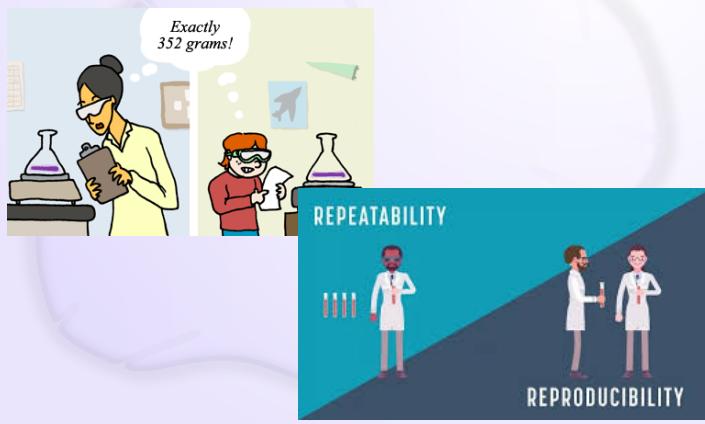
Control: we are all (secret) agents!

Chapter 1: Science vs. Matrix

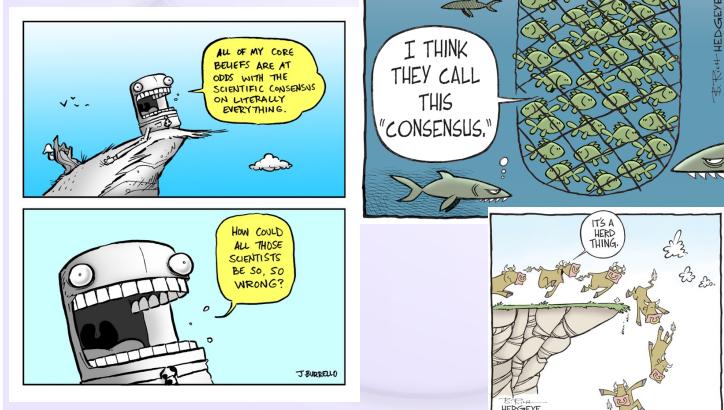


CONSENSUS
THE BEST OF ALL POSSIBLE OUTCOMES.

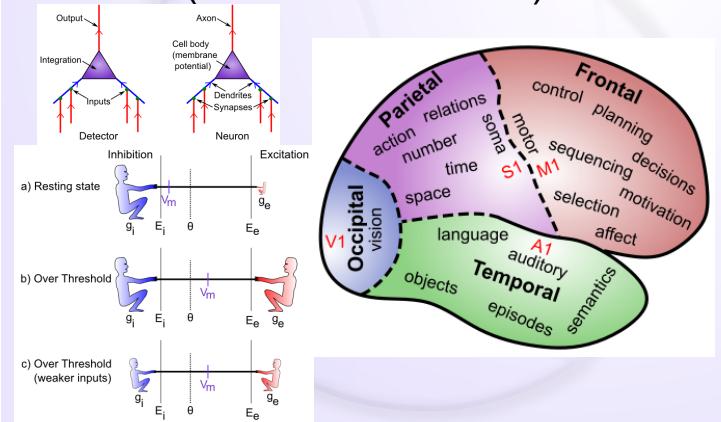
Reproducibility = Consensus



Consensus is hard..



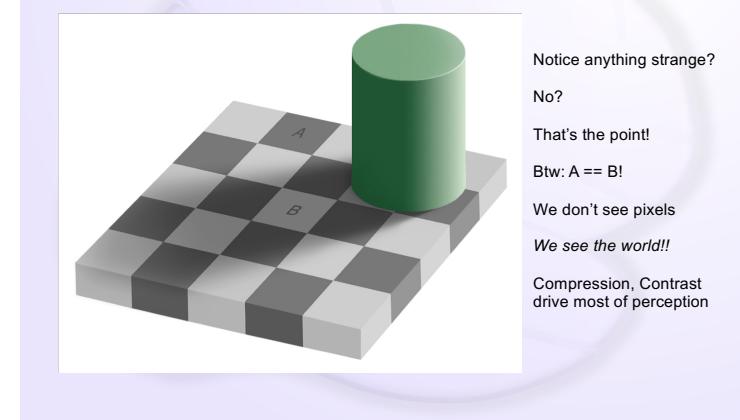
Chapter 2: Neuroscience (basis of the CCC's)



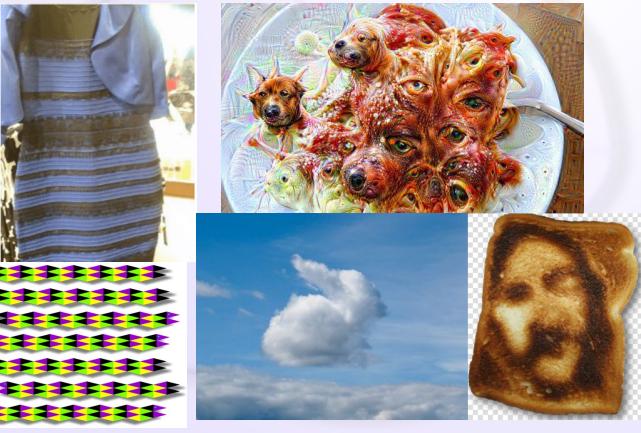
Chapter 3: Consciousness, Drugs..



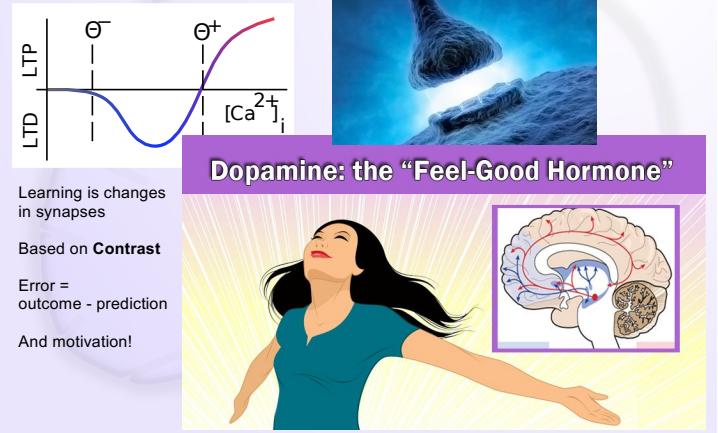
Chapter 4: Perception



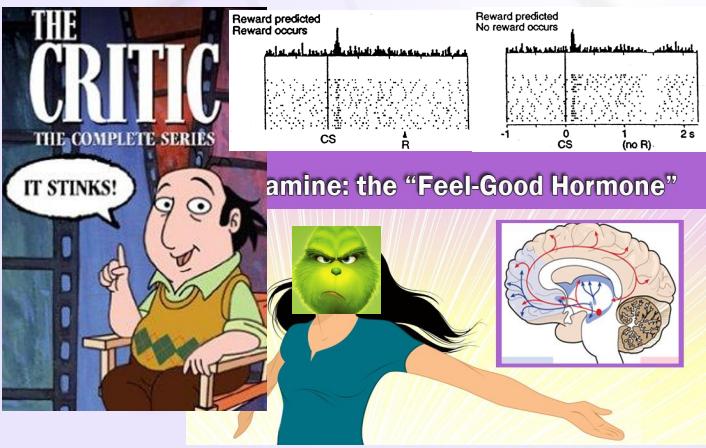
Contrast, Compression, Top-down Control



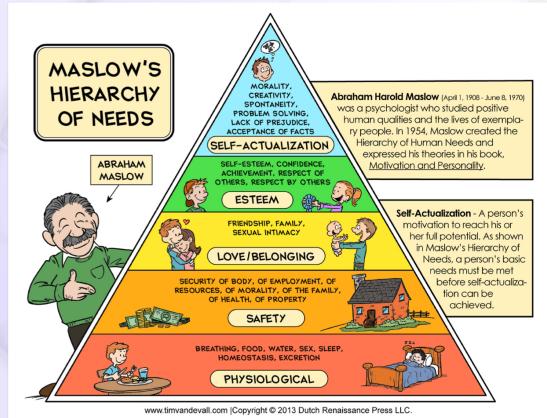
Chapter 5: Learning & Motivation



Dopamine is a Nasty Critic!



The Pyramid of Control!



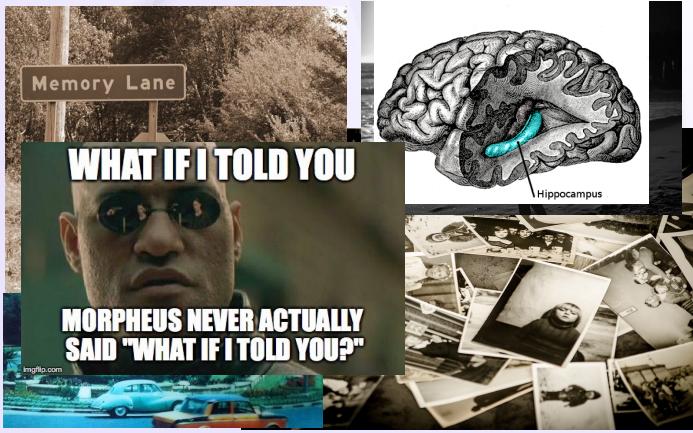
Chapter 6: Memory



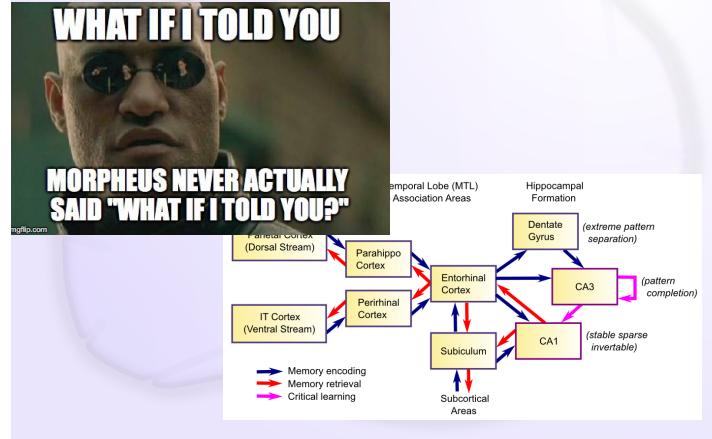
Chapter 6: Memory



Chapter 6: Memory



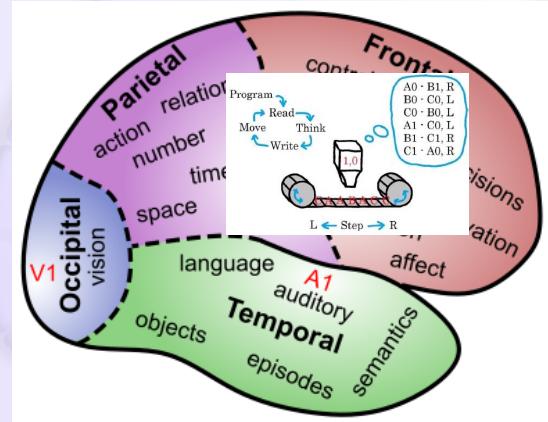
Hippocampus gets Compressed Input



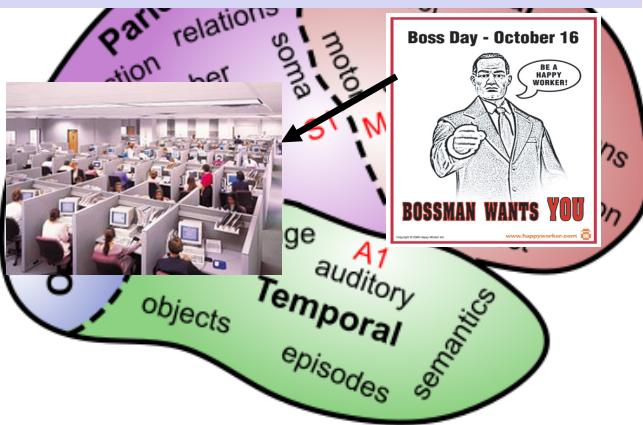
Chapter 7: Thinking & Control



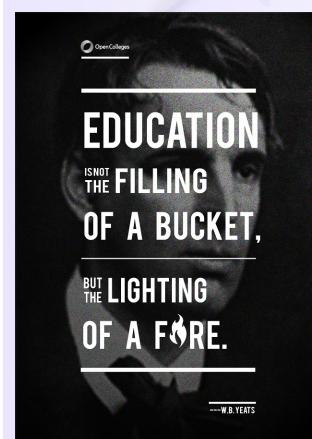
Neural CPU = Turing Machine



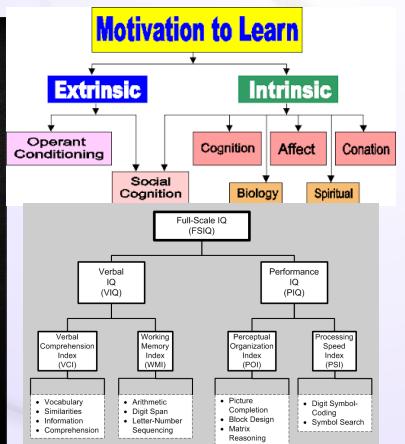
PFC = Control, Working Memory



Motivation is the Driver..



Motivation to Learn



Chapter 9: Social & Personality

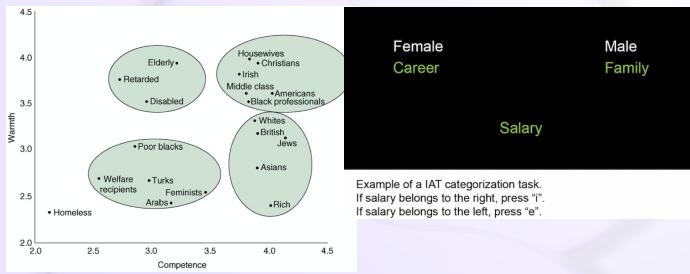
Social comparison = Contrast



You struggle with Self Control



Stereotypes = Compression



Everyone has internalized prevalent stereotypes, even negative ones about their own groups!

Two core dimensions: Competence (Dominance) & Warmth (Agreeableness)

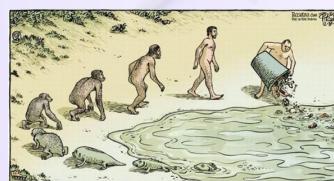
OCEAN of Personality

Big 5 Trait	Example Behavior for LOW Scorers	Example Behavior for HIGH Scorers
Openness	Prefers not to be exposed to alternative moral systems; narrow interests; inartistic; not analytical; down-to-earth	Enjoys seeing people with new types of haircuts and body piercing; curious; imaginative; untraditional
Conscientiousness	Prefers spur-of-the-moment action to planning; unreliable; hedonistic; careless; lax	Never late for a date; organized; hardworking; neat; persevering; punctual; self-disciplined
Extraversion	Preferring a quiet evening reading to a loud party; sober; aloof; unenthusiastic	Being the life of the party; active; optimistic; fun-loving; affectionate
Agreeableness	Quickly and confidently asserts own rights; irritable; manipulative; uncooperative; rude	Agrees with others about political opinions; good-natured; forgiving; gullible; helpful; forgiving
Neuroticism	Not getting irritated by small annoyances; calm; unemotional; hardy; secure; self-satisfied	Constantly worrying about little things; insecure; hypochondriacal; feeling inadequate

In-Group (Love), Out-Group (Hate)

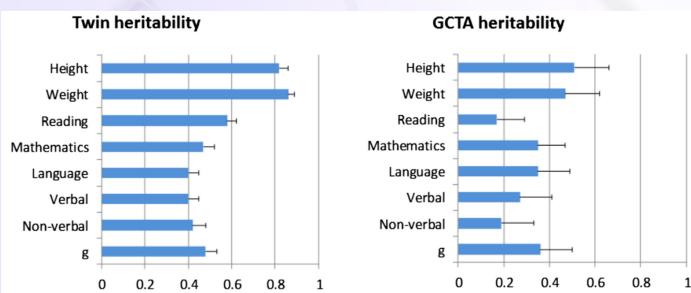


Chapter 10: Evolution & Development



Genes = Lego instruction pages
Base pair (G,C,T,A: Gattaca, nucleotide)
3 = one Lego brick (amino acid)
Gene = Protein = sequence of amino acids (~300 = ~900 bp's, but genes ~27,000 bp)
Alleles = different instructions for different folks – different gene variants

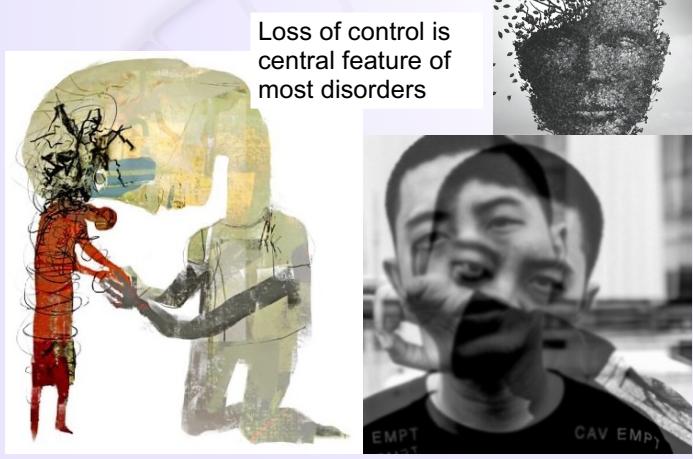
Heritability



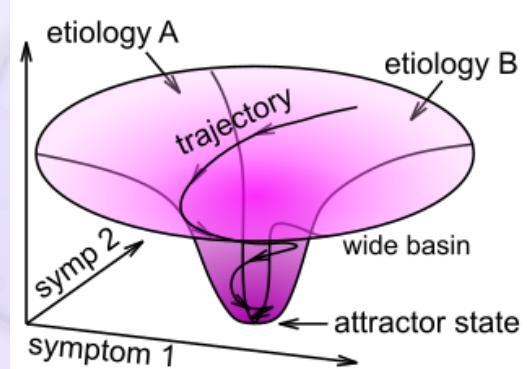
Babies are Sooooo Cute!!!!



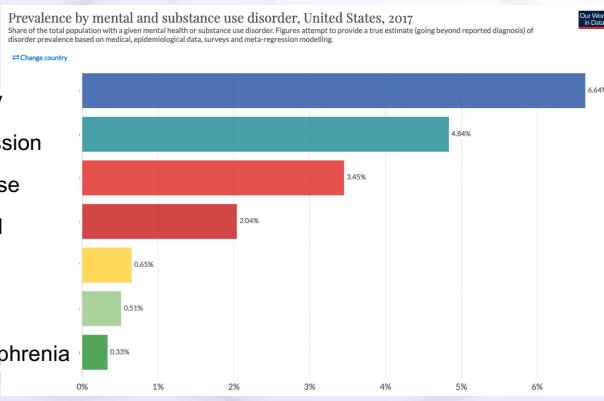
Chapter 11: Disorders



Comorbidity = Attractor
Loss of control / efficacy; Social isolation



It's Rough Out There..



Therapy is Safe Social Bond Rebuilds Self-Efficacy, Control



Therapy (CBT) >= SSRI!



For most anxiety,
depression cases.
Has no side effects!
But is expensive!



The Three C's

Compression: KISS!

Contrast: just have to outrun friend, not the bear..

Control: we are all (secret) *agents*!