

UBC is situated on the ancestral, traditional, and unceded territory of the [xʷməθkʷəy̓əm \(Musqueam\) People](#)

HOW TO SUCCEED: LEARNING STRATEGIES FROM PSYCHOLOGY

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Department of Psychology



Welcome!

Why are you here?

What a degree says:

- I can learn
- I can adapt
- I can self-manage
- I am accountable

Metacognition

Learn about how you think, work, do

Consider university as job training:

- Instructors → Bosses
- Classmates → Coworkers
- Assignments → Projects
- Deadlines → Deadlines



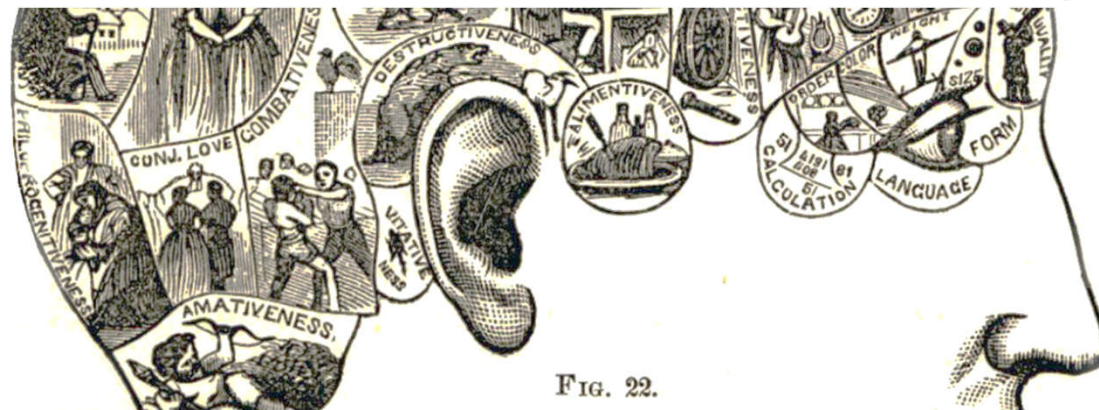
Psychology

Science of Mind and Behavior

What is behind poverty, politics, technology, environmental issues, art, culture, injustice, war, peace?

- Psychology is a young science
- Humans are very biased about humans
- Working with theories, models
- Understanding statistics, a probabilistic view

*How people work,
not how to fix them!*



**STATISTICS
MEAN NEVER
HAVING TO
SAY YOU'RE
CERTAIN**

MISLEADING STATISTICS
**THE AVERAGE ADULT HAS
ONE TESTICLE**



Meaningful > Just True

CONTENT SHOULD BE USEFUL, NOT JUST PRETTY
vert.ms/Baddata



I USED TO THINK
CORRELATION IMPLIED
CAUSATION.

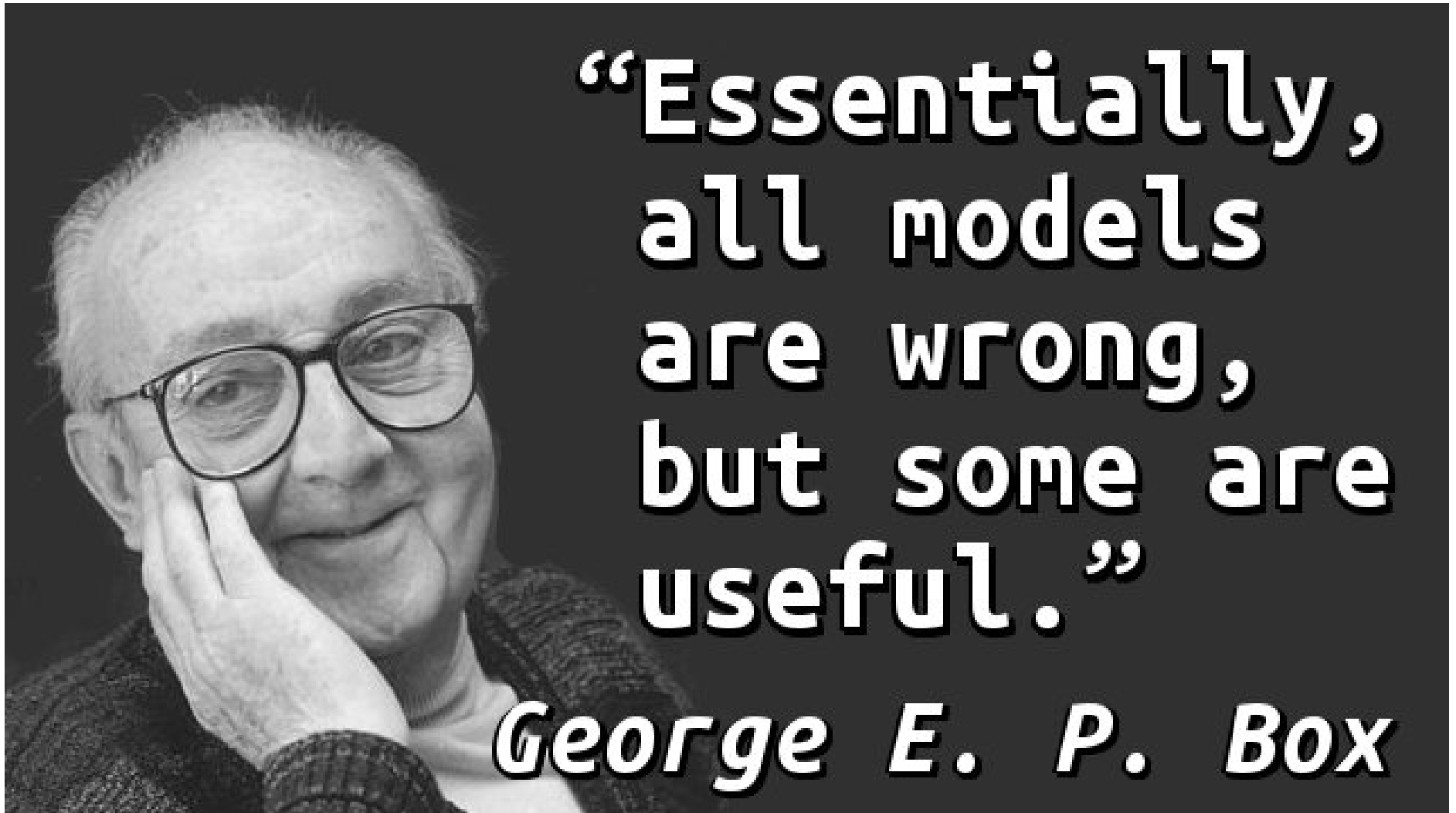


THEN I TOOK A
STATISTICS CLASS.
NOW I DON'T.



SOUNDS LIKE THE
CLASS HELPED.
WELL, MAYBE.





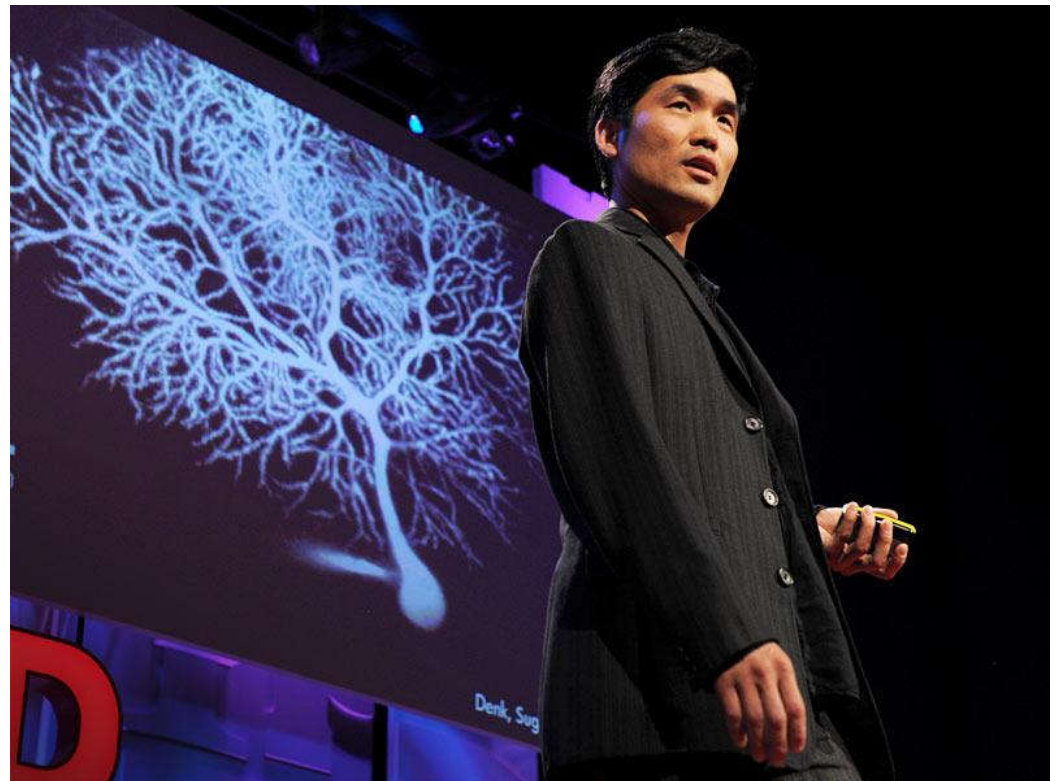
**“Essentially,
all models
are wrong,
but some are
useful.”**

George E. P. Box

Learning in the Brain

You are your connectome

- **Brain connections = riverbed for stream of thought**
- **Stream can change riverbed!**



Learning in the Brain

Neurogenesis

Sandrine Thuret:

You can grow new brain cells. Here's how



TED@BCG London · 11:04 · Filmed Jun 2015

6 subtitle languages

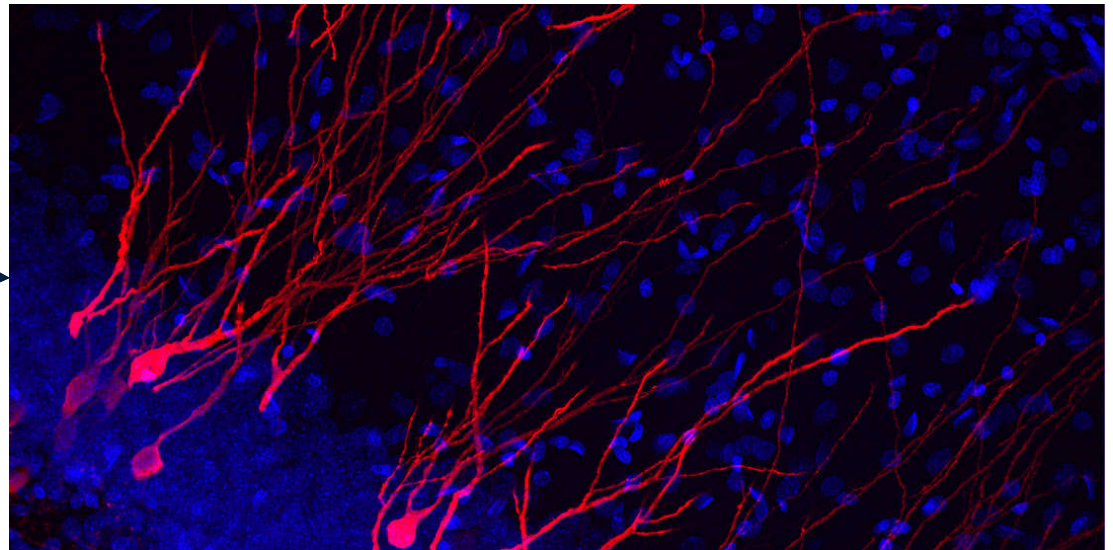
View interactive transcript

Learning in the Brain

Neurogenesis

- **Helped by:** learning, exercise, diet, sleep, sex
- **Hurt by:** sleep deprivation, stress, caffeine*, anti-depressants*, age

Jason Snyder at UBC!



Mindset

No matter what
your ability is,
effort is what
ignites that ability
and turns it into
accomplishment.

Carol Dweck



Mindset

- **Fixed: I am smart; Failure as threat**
- **Growth: I can change; Failure as opportunity**



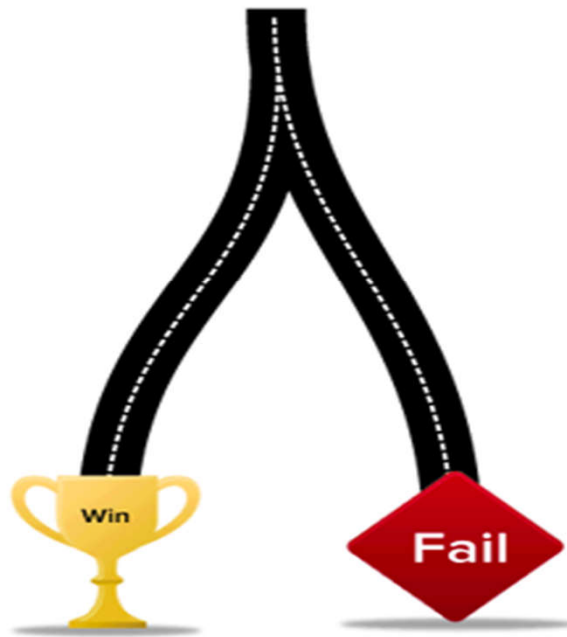
Mindset



Mindset

Fixed

**What Most
People Think**



Growth

**What Successful
People Know**

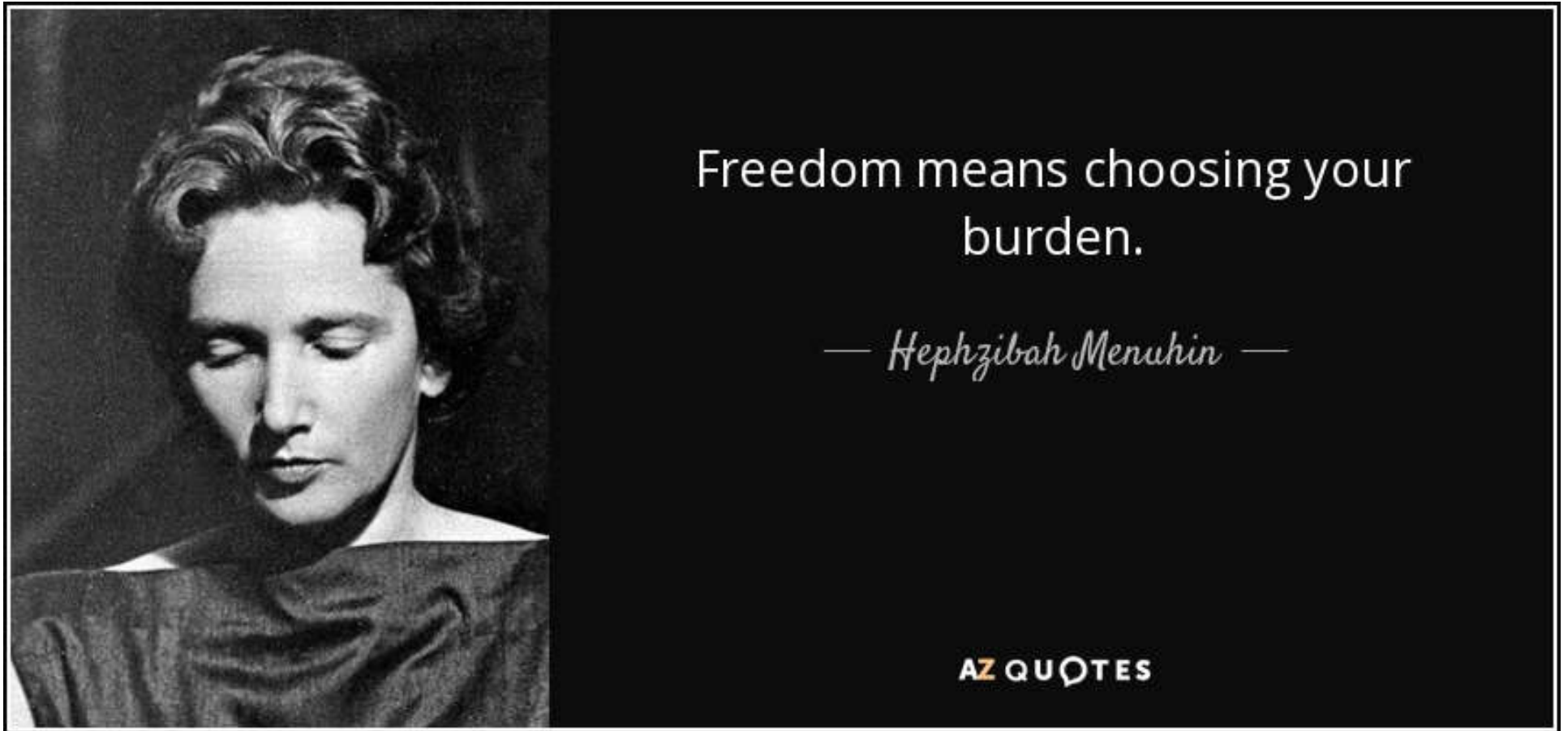


@douglaskarr

Mindset



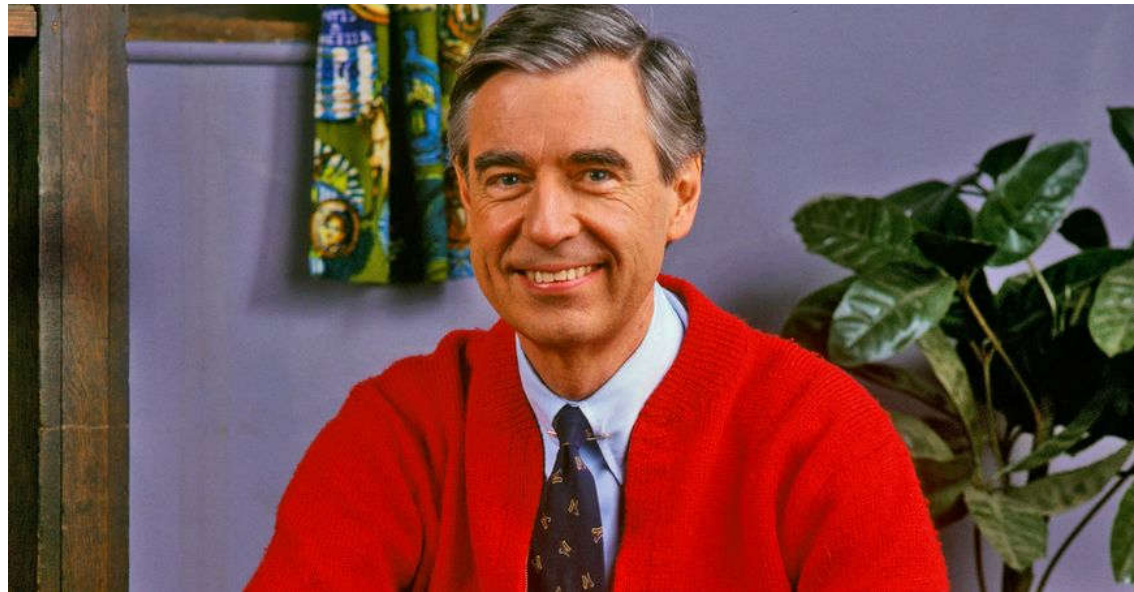
Mindset



Mindset

- **Emotion management → cognition management**
- **“Feelings are mentionable and manageable” – Mr. Rogers**
- **Talking with friends**
- **Re-framing**
- **Journaling**

UBC
Wellness
Centre!



Summary so far . . .

Neurological

- Your abilities, skills, knowledge are in your brain connections
- You can change this (supported by good sleep, exercise, diet)

Psychological

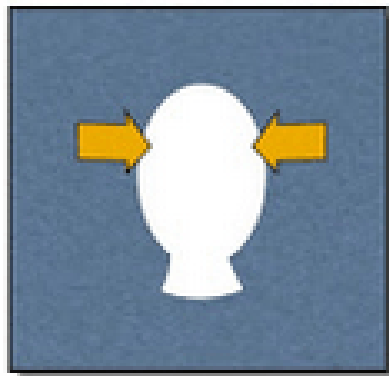
- Mindset facilitates growth; self-transformation
- Embrace the struggle!

Study Techniques

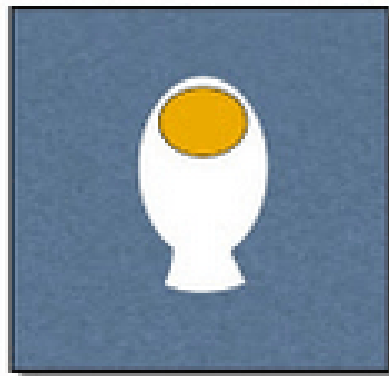
Basic Memory Mechanics



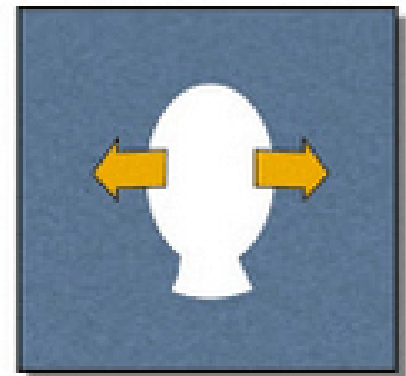
Attention



Encoding



Storage



Retrieval

All involve skills you can improve!

Study Techniques

Attention

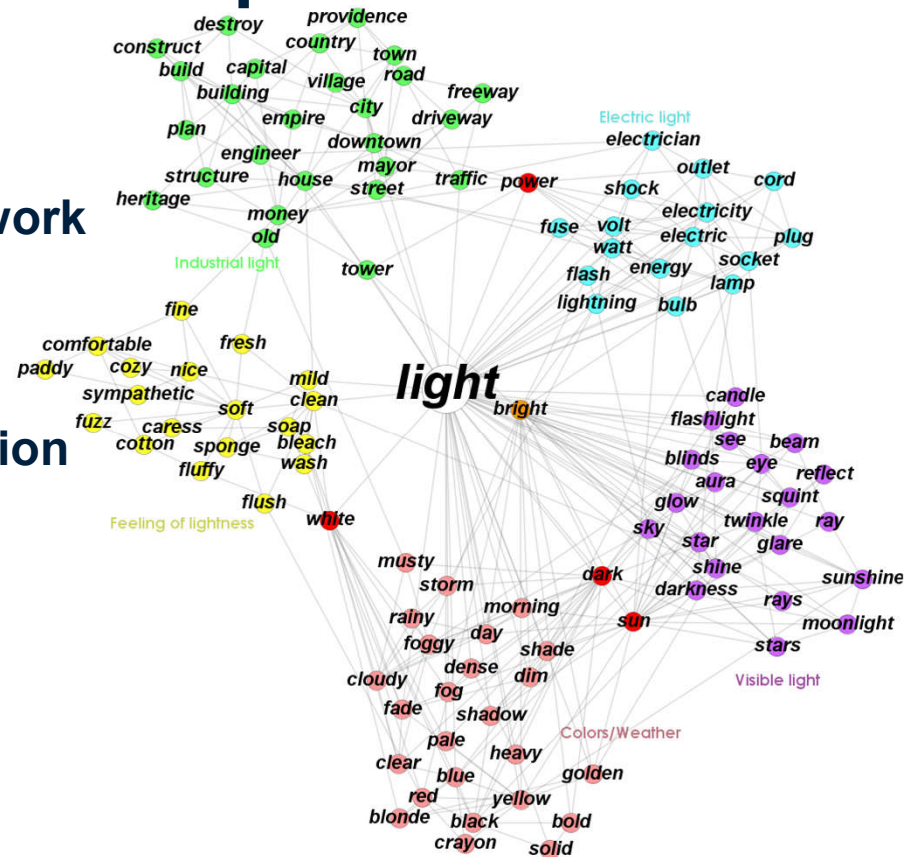
- You're paying for lecture time – use it well!
- Come prepared: Read *before* lecture
 - prepare an outline, questions
- Ditch distractions
- Be awake



Study Techniques

Encoding

- Build your own conceptual network
- Associations, connections
 - e.g. mnemonics
- Elaboration, enriching
 - e.g. multimodal representation



Study Techniques

Storage / Consolidation

- **Sleep!**
- **Even in pieces: Naps!**

Cabral, T., Mota, N. B., Fraga, L., Copelli, M., McDaniel, M. A., & Ribeiro, S. (2018). Post-class naps boost declarative learning in a naturalistic school setting. *npj Science of Learning*, 3(1), 14.
<https://doi.org/10.1038/s41539-018-0031-z>



Study Techniques

Retrieval

- Recognition is not Recall
- Practice recall!
 - Flash cards, testing

POP QUIZ

What helps or hurts neurogenesis?

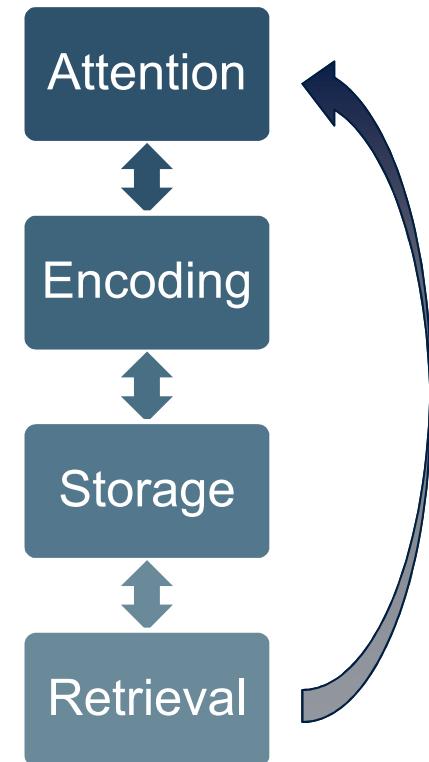




Study Techniques

Stages are interdependent and cyclic

- Useful memory depends on each link working



Study Techniques

Putting it all together

- **Pacing: leverage sleep, attention, novelty**
- **Spacing: alternate activity**
- **Plan ahead: schedule work and play**
- **Sleep, exercise, diet**
- **Get social support, coaching buddy**
- **Game-day planning for exams**
- **All gets better with practice!**
- **Get it done, on to fun!**

Work the system!

- **Read the syllabus! It's your contract**
- **Use office hours; get TA support**
- **Be proactive; ask questions, take chances**
- **Supplement with online resources**
- **Use other UBC resources**

Test Wiseness

Written answer

- **Ask about point form**
- **Grammar and spelling may count for intelligibility**
- **Be concise; you do not need to fill the space**
- **Imagine the rubric; what's important?**

Summary

- **Your brain can change – that's why you're here!**
- **Actively engaging struggle → success**
- **Plan challenges in frequent, small doses**
- **Learn how you learn: metacognition**
- **Face fear; practice process → easier goals**
- **Take good care of yourself!**

More Info

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