The fallibility of memory
THE RECONSTRUCTION

- The new human consists of actual fossils along with man-made casts
- Casts are based on *inferences*

MEMORY IS RECONSTRUCTION

- The unlikely event of a *perfect* memory
- We do not have all of the pieces
- The pieces get distorted with time
- What we remember is an approximation of the actual event
RECONSTRUCTION, DISTORTION, INACCURACY

- Distortions through commission
  - Making misattributions
  - Adding information
Pane

Shade
House

Open
Curtain

Frame
Sash

Screen
Shutter
Bed

Rest
Awake

Snore
Tired

Dream
Wake

Snooze
Blanket

Doze
Slumber

Nap
Drowsy

Drowsy
Candy

Sugar
Nice

Honey
Soda

Chocolate
We have years of memories

Bits and pieces of these memories are associated with other memories

Through the act of reconstruction with insert or add details

The reconstructed skeleton is not as it once was
DISTORTION DUE TO MISATTRIBUTIONS

Where did that bit of information come from?

DID I TURN OFF THE STOVE, OR DID I JUST THINK ABOUT DOING IT?
MISATTRIBUTIONS THROUGH IMAGINATION

- **Session 1**: Perform or imagine actions

- **Session 2**: Imagination
  
  "Imagine kissing the frog."
  
  "Imagine kissing the frog. Imagine the color of the frog. Imagine the feel of the frog against your lips."

- **Session 3**: Testing

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FALSE "DID" RESPONSES TO ONLY IMAGINED ACTIONS

[Bar chart showing false did responses]

- **simple**
- **elaborate**
MISATTRIBUTION OF SOURCE

Witness a crime
Report the crime

Introduction of new information
- Other witnesses
- Incorrect/inconsistent news reports
- Prior memories

Testify!
- Can you be accurate?

THE UNRELIABLE NATURE OF EYEWITNESS ACCOUNTS
DIFFICULTY DIFFERENTIATING AMONG SOURCES OF INFORMATION

- Did I imagine it? Did I dream that detail? (internal source)
- Did I read that on twitter? (external source)
- Can I trust my memory?

MEMORY IS FALLIBLE

- It is fallible because it is a reconstruction
- Memories are a blend of information actually encoded, and inferences based on prior knowledge, expectations, beliefs, attitudes, and new information.
- Memories are like reconstructed dinosaurs or newly discovered humans
OUR AUTOBIOGRAPHY IS WRITTEN BY AN UNRELIABLE NARRATOR