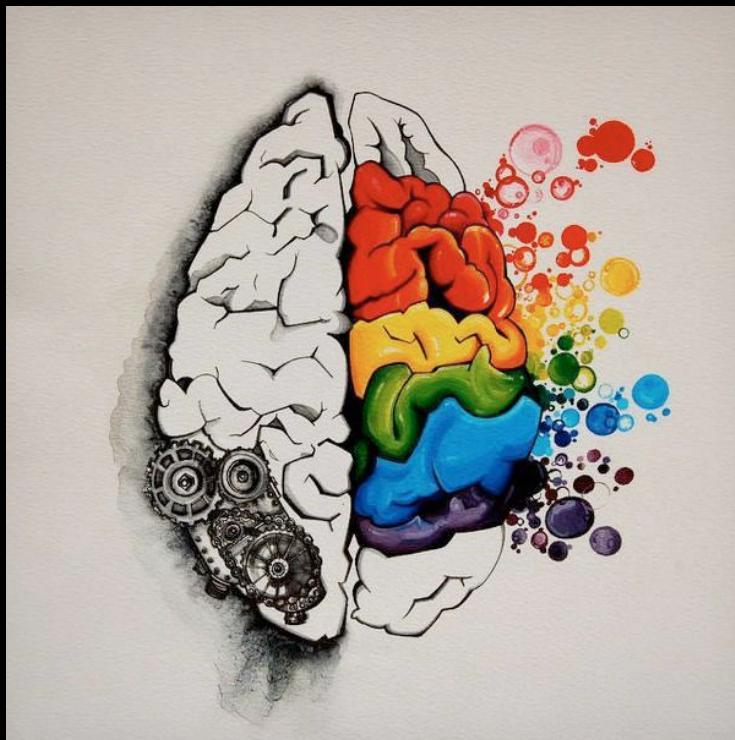


# TOTAL RECALL

IMPLICIT LEARNING AS A  
CRYPTOGRAPHIC PRIMITIVE

TESS SCHRÖDINGER



- **INTRODUCTION**
- **CURRICULUM VITAE**
- **COGNITIVE MEMORY**
- **CONSCIOUSNESS**
- **SUB CONSCIOUSNESS**

## PERCEIVED REALITY

Conscious  
Subconscious

Unconscious

HUMAN PSYCHE

SEA OF  
UNIVERSAL CONSCIOUSNESS

*Thoughts & Perceptions*

*Memories & Stored Knowledge*

# Subconscious

*Fears*

*Violent Motives*

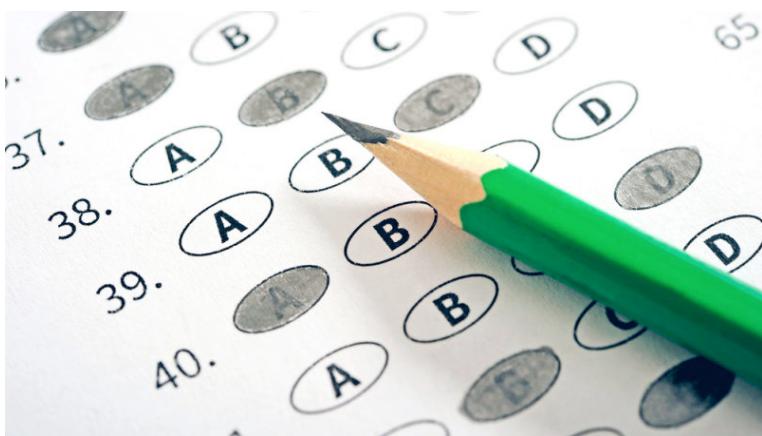
*Unacceptable Sexual Desires*

*Irrational Wishes*

*Immoral Urges*

*Shameful Experiences*

*Selfish Needs*



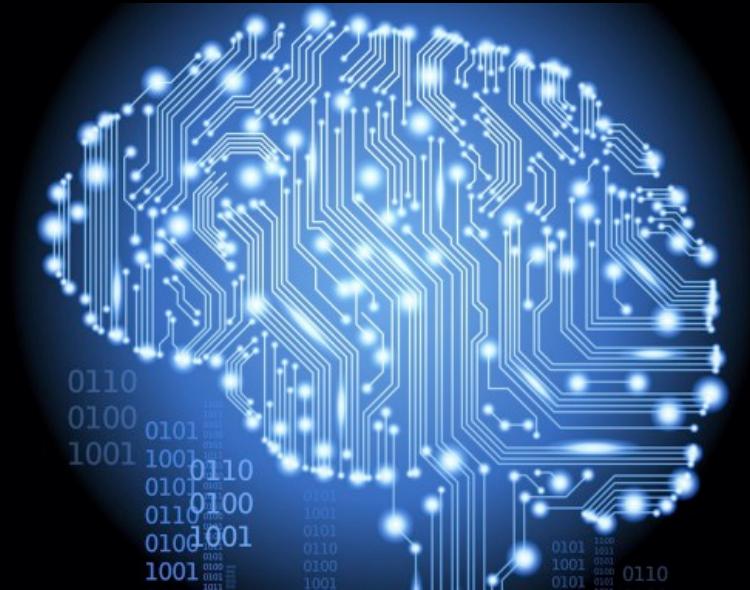
## **EXPLICIT MEMORY**

- **EPISODIC**
- **SEMANTIC**

## **IMPLICIT MEMORY**

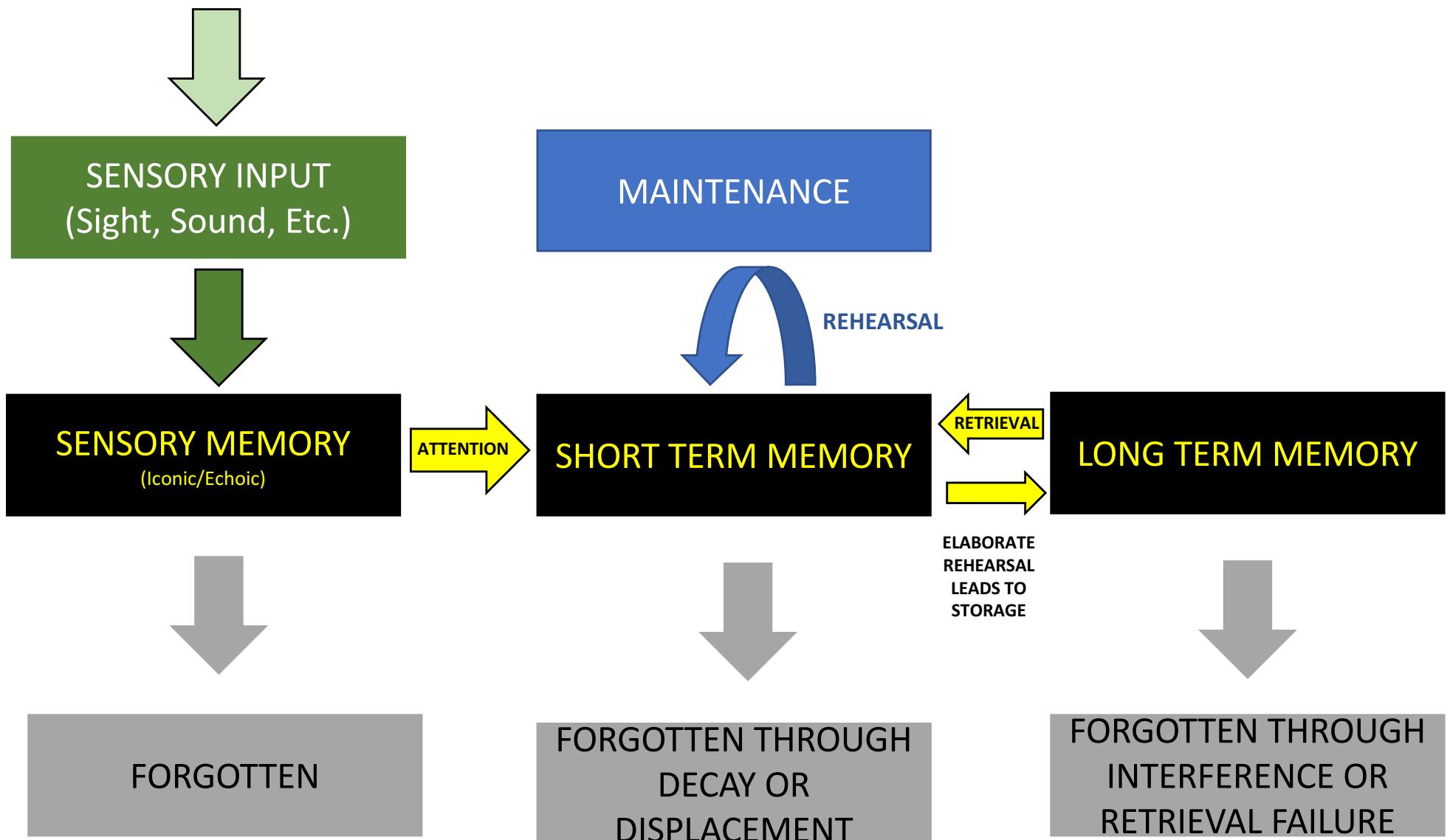
# STAGES OF MEMORY

- **ENCODING**
- **STORAGE**
- **RETRIEVAL**
  - **CONTEXT, ASSOCIATE, MOOD**



ENVIRONMENTAL  
INPUT

# ATKINSON & SHIFFRIN MODEL



# PASSWORDS & HUMAN MEMORY LIMITATIONS

NUMBER OF NEURONS

1 BILLION

Number of connections each  
Neurons forms with other neurons

1,000

Resultant number of connections

1 TRILLION

Total Brain Memory Storage Capacity

*2.5 petabytes  
(A million gigabytes)*

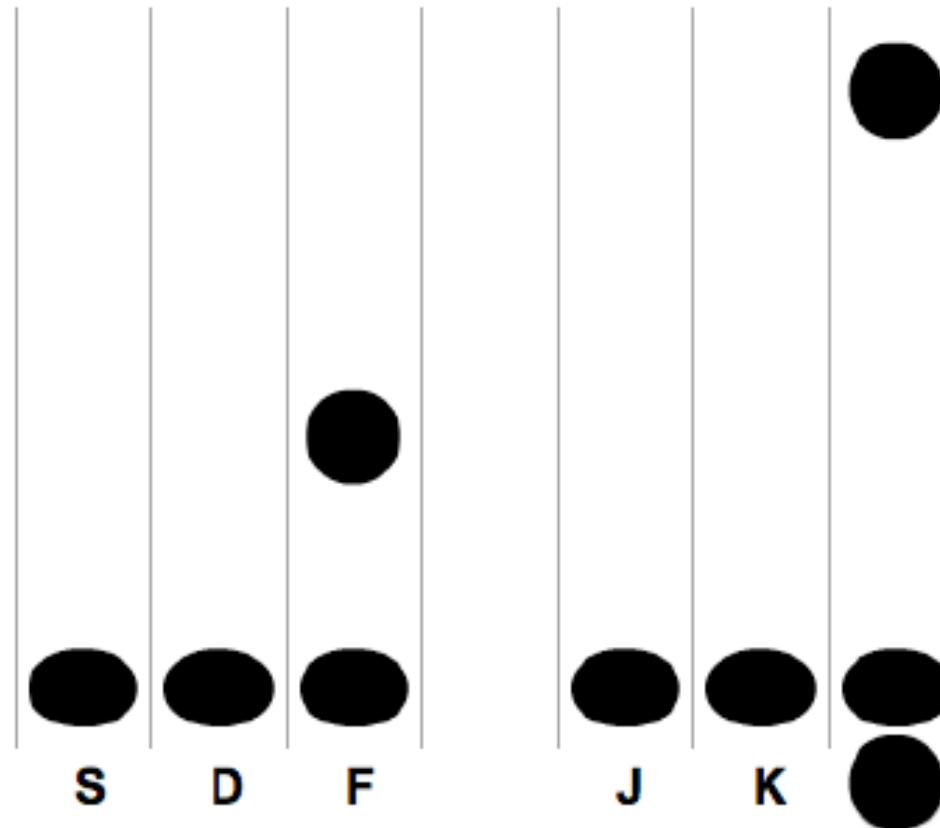
*Around 3 million hours of TV shows.*



# CURRENT RESEARCH

“NEUROSCIENCE MEETS CRYPTOGRAPHY”



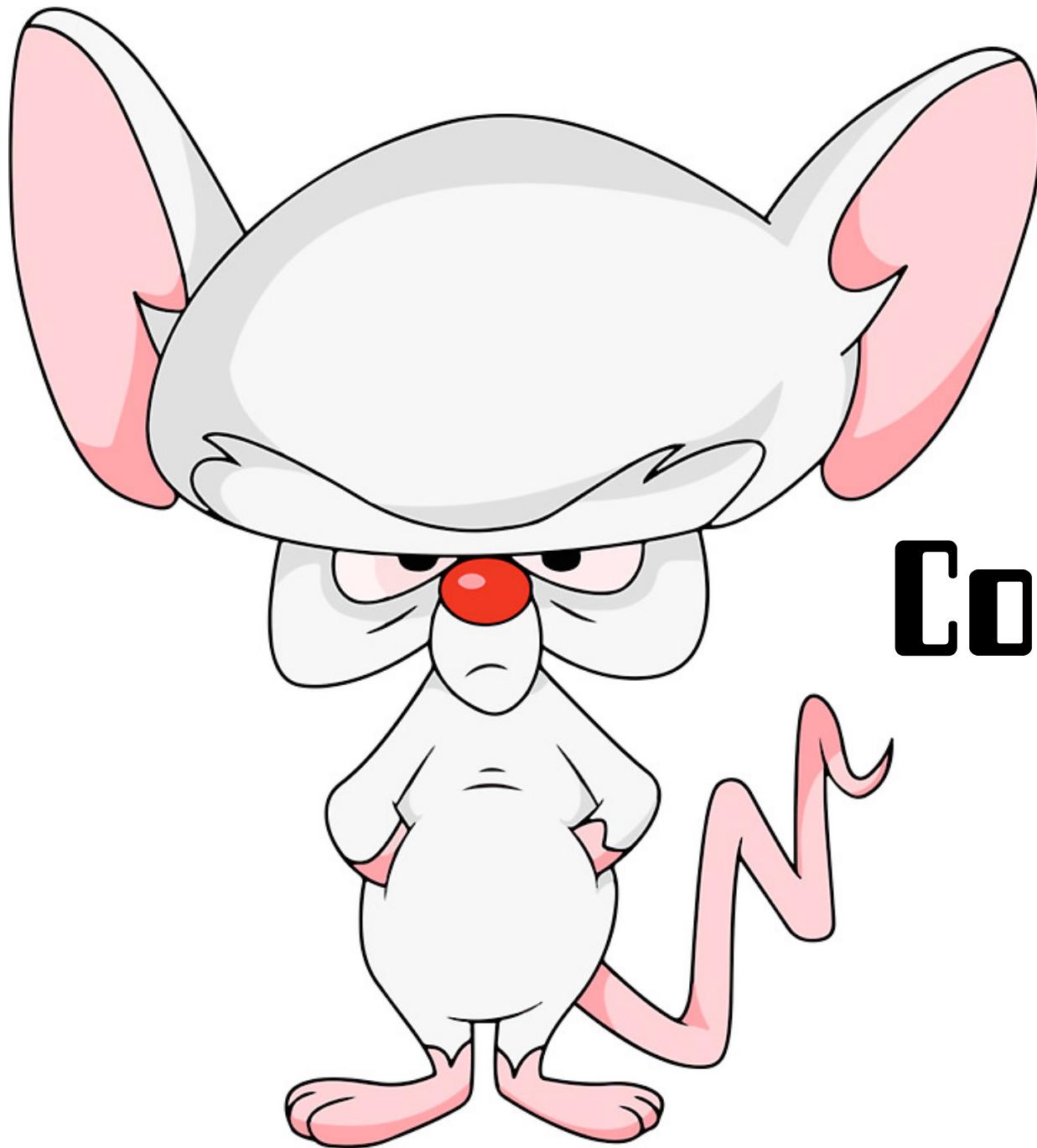


Progress This Section



Score **425**

Streak **0**



# Conclusions



# QUESTIONS