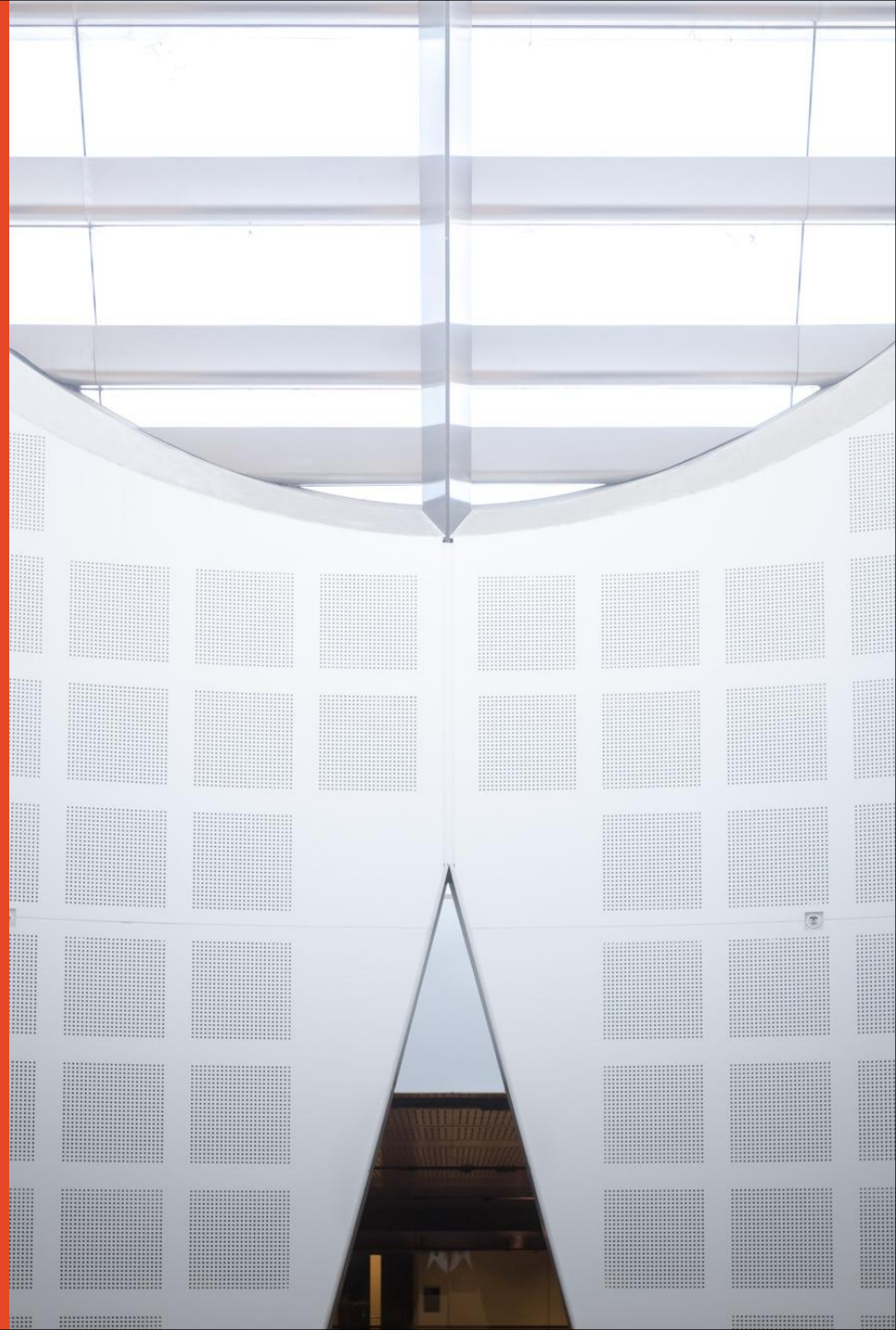


# *Not Guilty: The Psychology of Crime Investigations*

*Presented by  
Dr Celine van Golde  
Faculty of Science, School of  
Psychology*



THE UNIVERSITY OF  
**SYDNEY**



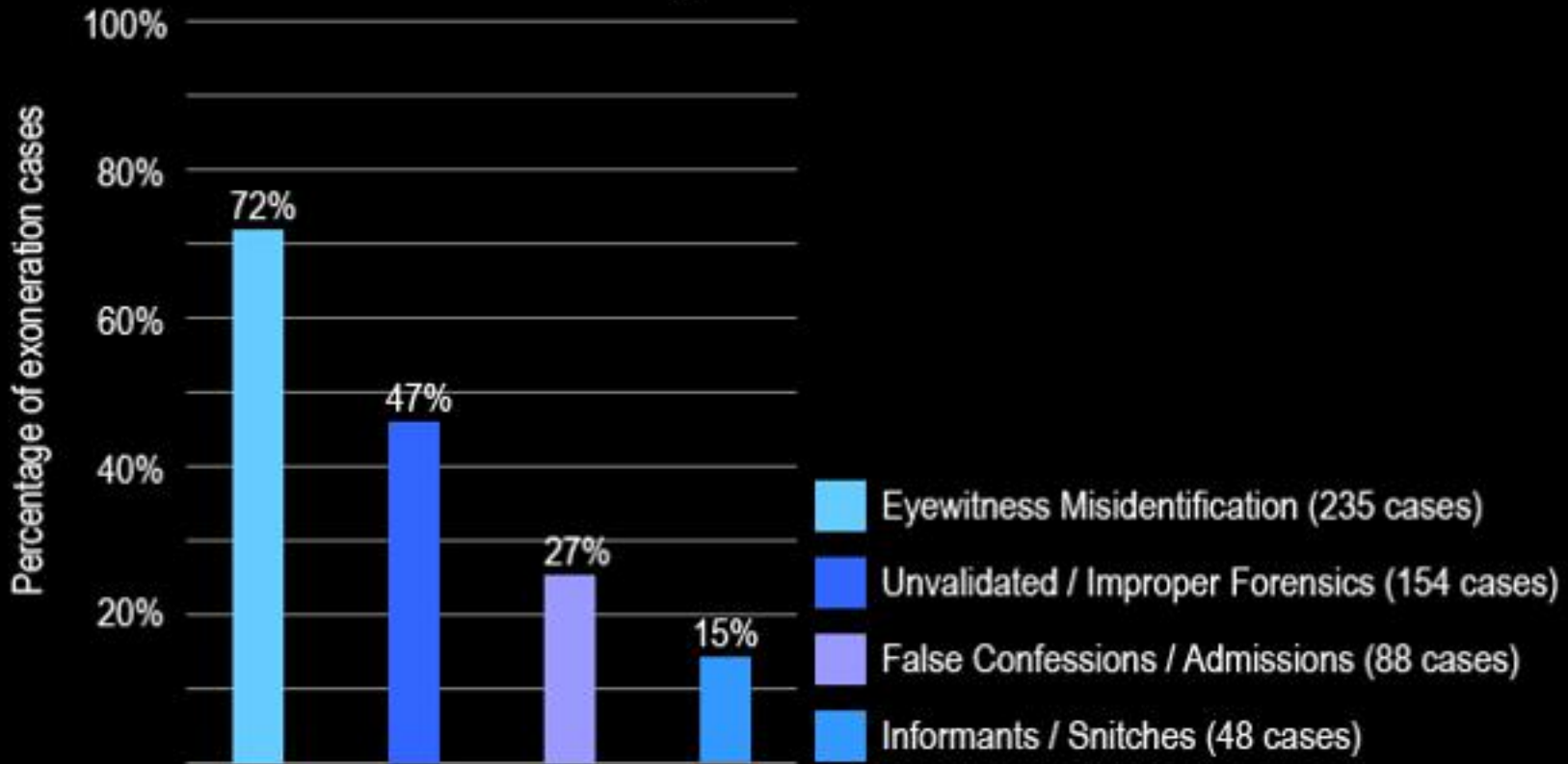
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W guilty by

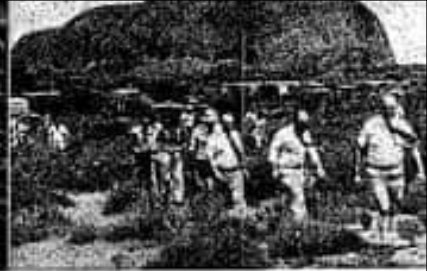
# Causes of wrongful convictions

## Contributing Causes of Wrongful Convictions (first 325 DNA exonerations)

Total is more than 100% because wrongful convictions can have more than one cause.



<https://www.innocenceproject.org/>



The Chamberlains (with sons, left) say a dingo took baby Azaria (centre) near Ayers Rock where (right) coroner's men investigate

# Lost baby riddle of Ayers Rock grips Australia

By ANNE CHISHOLM in Melbourne

A CORONER'S inquest at Ayers Rock, the great lone rock landmark in the red heart of Australia, is investigating the bizarre disappearance of a five-week-old baby girl.

The parents, Michael Chamberlain, 22, a minister in the South Australian church, and his wife Lynda, announced that their daughter Azaria was taken from their car by a dingo

about 100 metres from their home in Ayers Rock, a Queensland town 4000 miles away.

The coroner's inquest is being held in Melbourne.

Impossible. That part of the Chamberlains have revealed outwardly since the baby disappeared.

Preliminary investigations on the clothing of the baby suggest it has been dragged through the bush.

at last  
— Luck Page

**WEATHER — Bureau City forecast:** Fine, Warm, Mainly sunny. Expected top 29, Yesterday 31. Details, Page 56.

**618,982**  
Average daily sale

CALL

# MOTHER QUIZZED OVER ARIA

... professor was said to have slain's throat was cut and inquest into the child's yesterday.

... case had also told the baby's someone with a bloodstained was bleeding.

... Mr Sturges asked Mrs Chamberlain: "Did the Chamberlain say he had a riddle of how Azaria was taken?"

... Mrs Chamberlain: He told me that every morning and he refused to say that Paul Chamberlain said the baby was disappeared.





*A police photo of John Button's car taken after he was charged.*



*John Button's car fitted against the Ford Prefect he crashed into weeks before the fatal crash.*

# Yacht murder witness changes her tune again

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## NEILL-FRASER APPEAL

### Dinghy supposedly used to dump body 'had no evidence'



# THERE WAS NO BLOOD

**DAVID KILLICK**

THERE was no reliable evidence of human blood found in an inflatable dinghy supposedly used to dump the body of Bob Chappell in the River Derwent, the Supreme Court has heard.

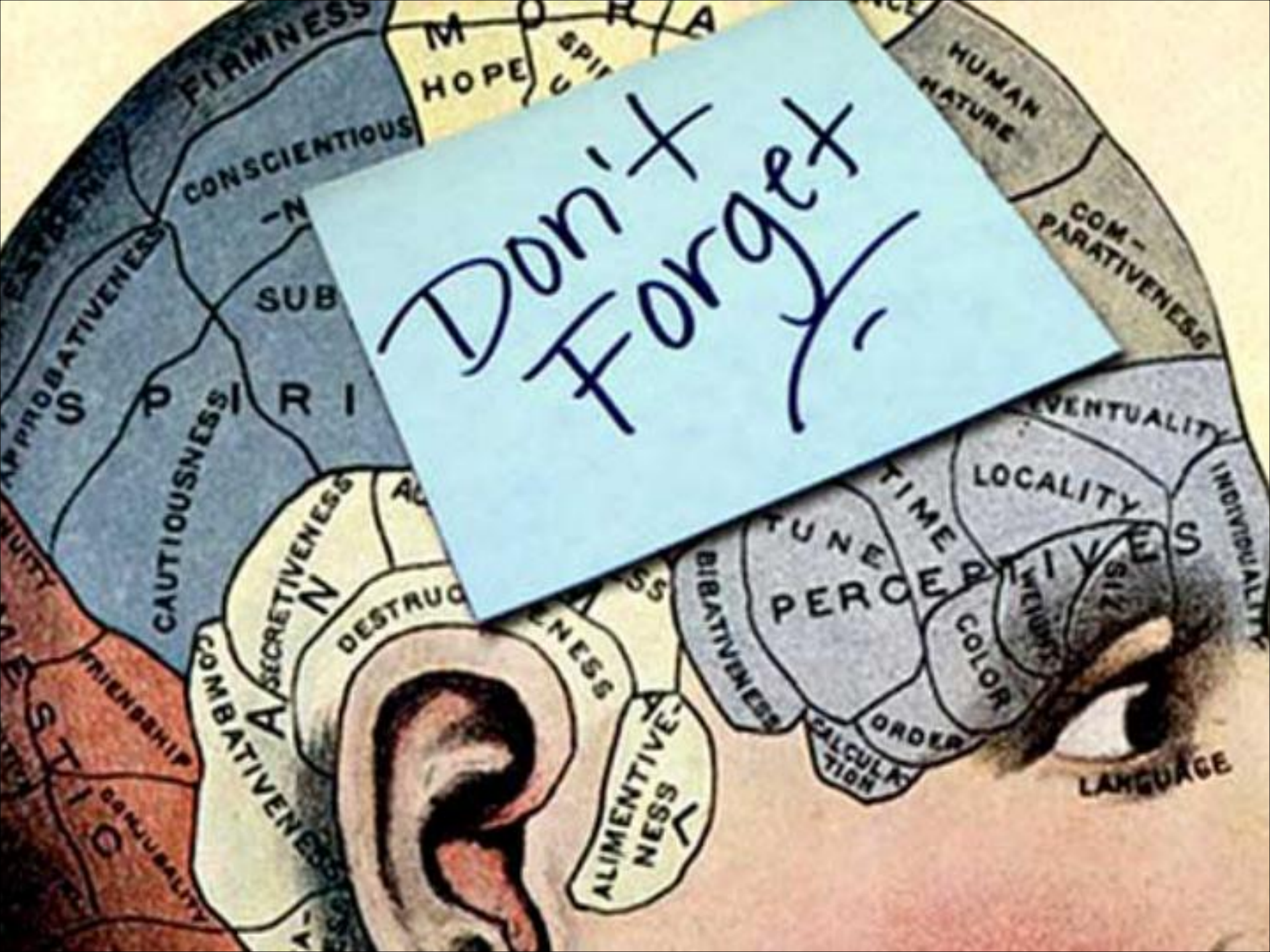
Susan Blyth Neill-Fraser, 62, is using new laws to mount an appeal against her conviction for killing her partner aboard their yacht moored off Sandy Bay on Australia Day, 2009.

The Supreme Court in Hobart has heard evidence there was no scientifically credible bloodstain evidence to support the finding that Ms Neill-Fraser had hauled Mr Chappell's body on to the yacht's deck and into the tender, pictured, before taking it away and dumping it in the river.

**REPORT PAGES 4-5**

ly sunny 24 LAUNCESTON Mostly sunny 26 BURNIE Partly cloudy 22 Details: 44-45





Don't Forget

FIRMNESS

M O R A  
HOPE U SPIT

HUMAN NATURE

CONSCIENTIOUS

COMPARATIVENESS

SUB

CAUTIOUSNESS

R I

EVENTUALITY

INDIVIDUALITY

LOCALITY

SECRETIVENESS

DESTRUCTIVENESS

PERCEPTION

WEIGHT

COLOR

COMBATIVENESS

ALIMENTIVENESS

BIBATIVENESS

ORDER

CALCULATION

LANGUAGE

STING  
FRIENDSHIP  
CONJUGALITY







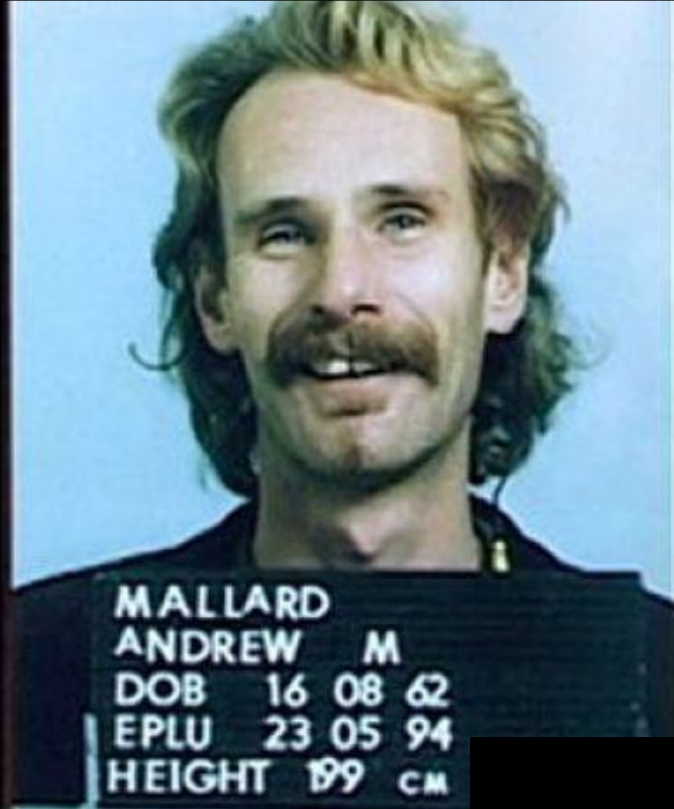




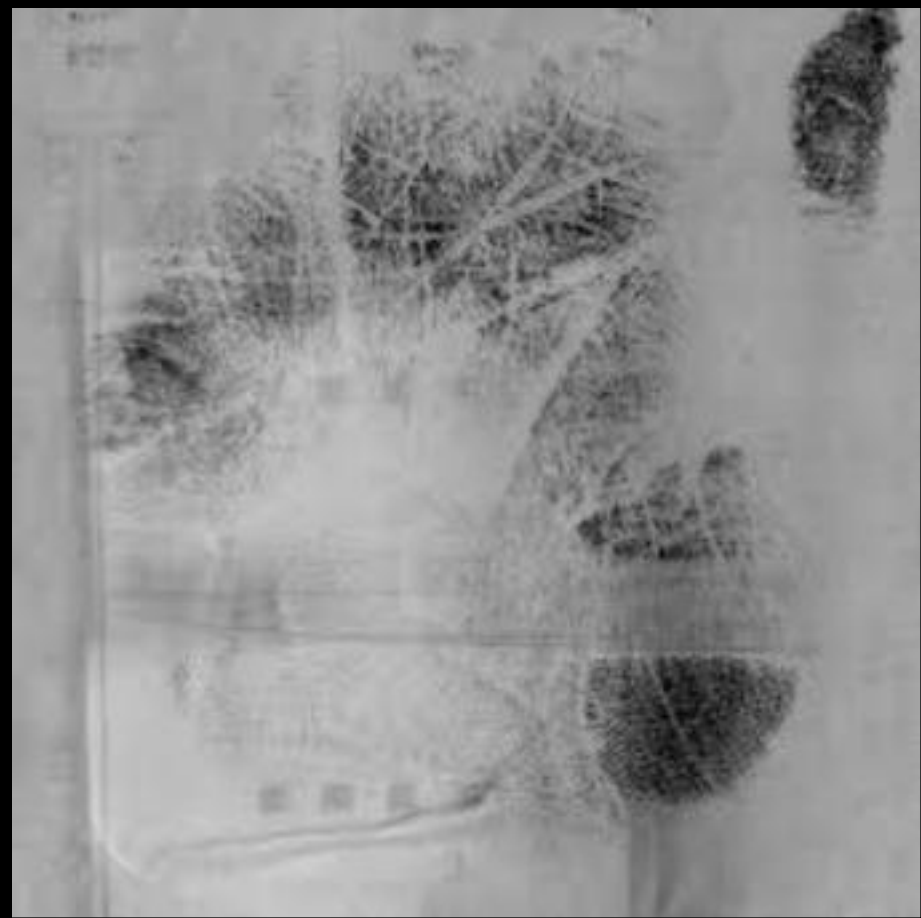
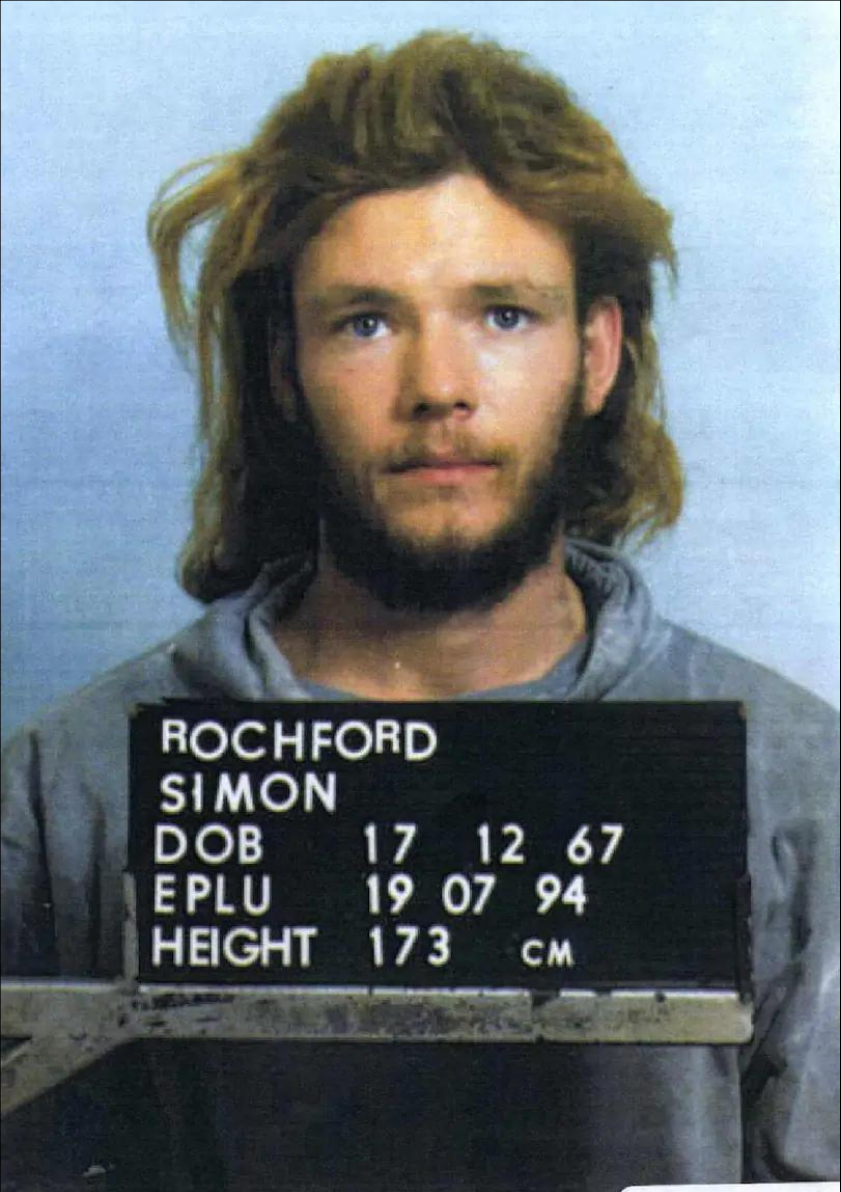
# murder

**MOSMAN** Park business-woman Pam Lawrence was clubbed to death with a weapon like the one pictured left.

Murder squad detectives have revealed to the *Sunday Times* what the weapon looks like in a bid to help trap the killer.

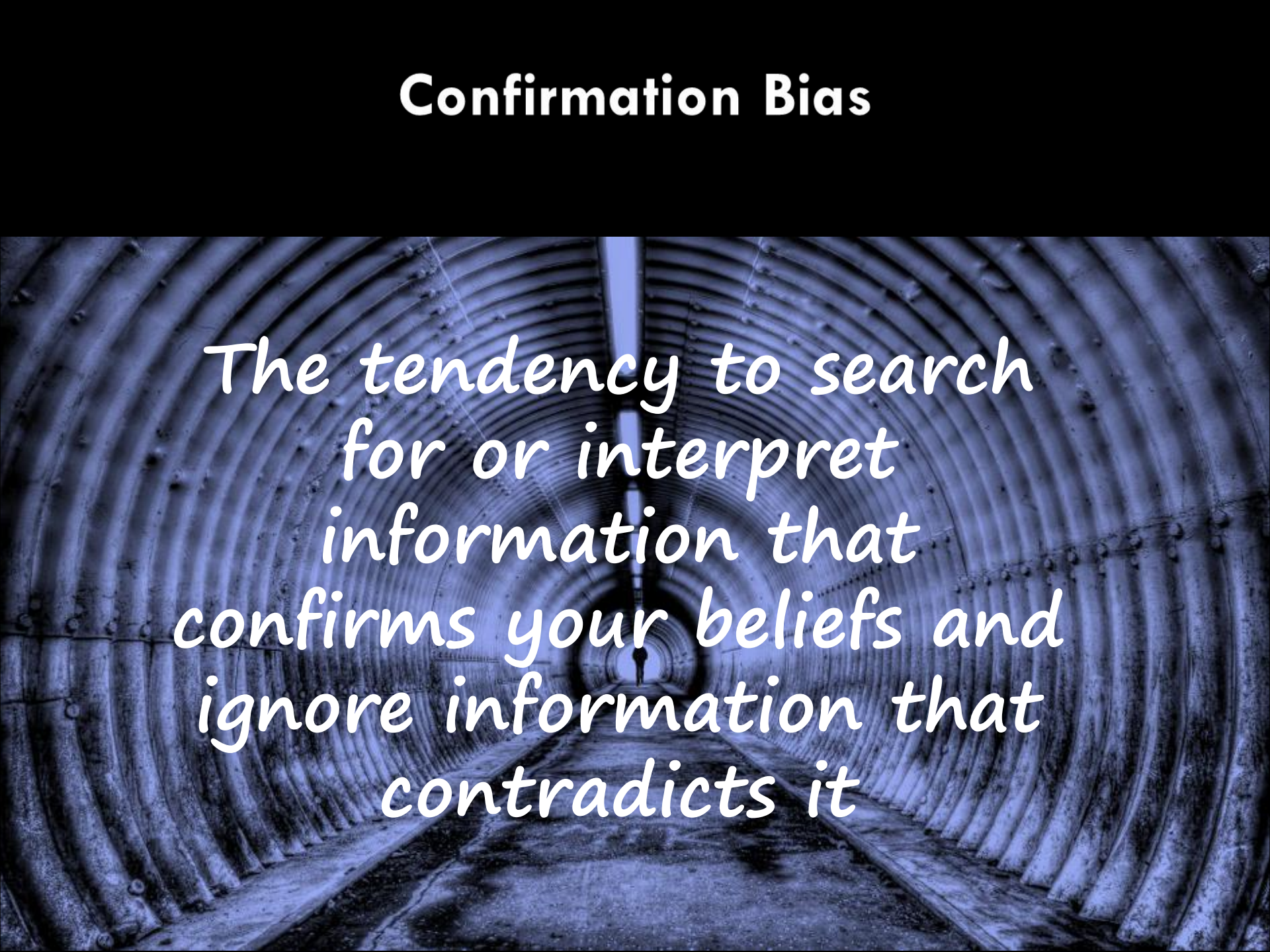


MALLARD  
ANDREW M  
DOB 16 08 62  
EPLU 23 05 94  
HEIGHT 199 CM



# Confirmation Bias

*The tendency to search for or interpret information that confirms your beliefs and ignore information that contradicts it*

A blue-tinted photograph of a long, narrow tunnel with corrugated metal walls, receding into the distance where a small figure is visible.

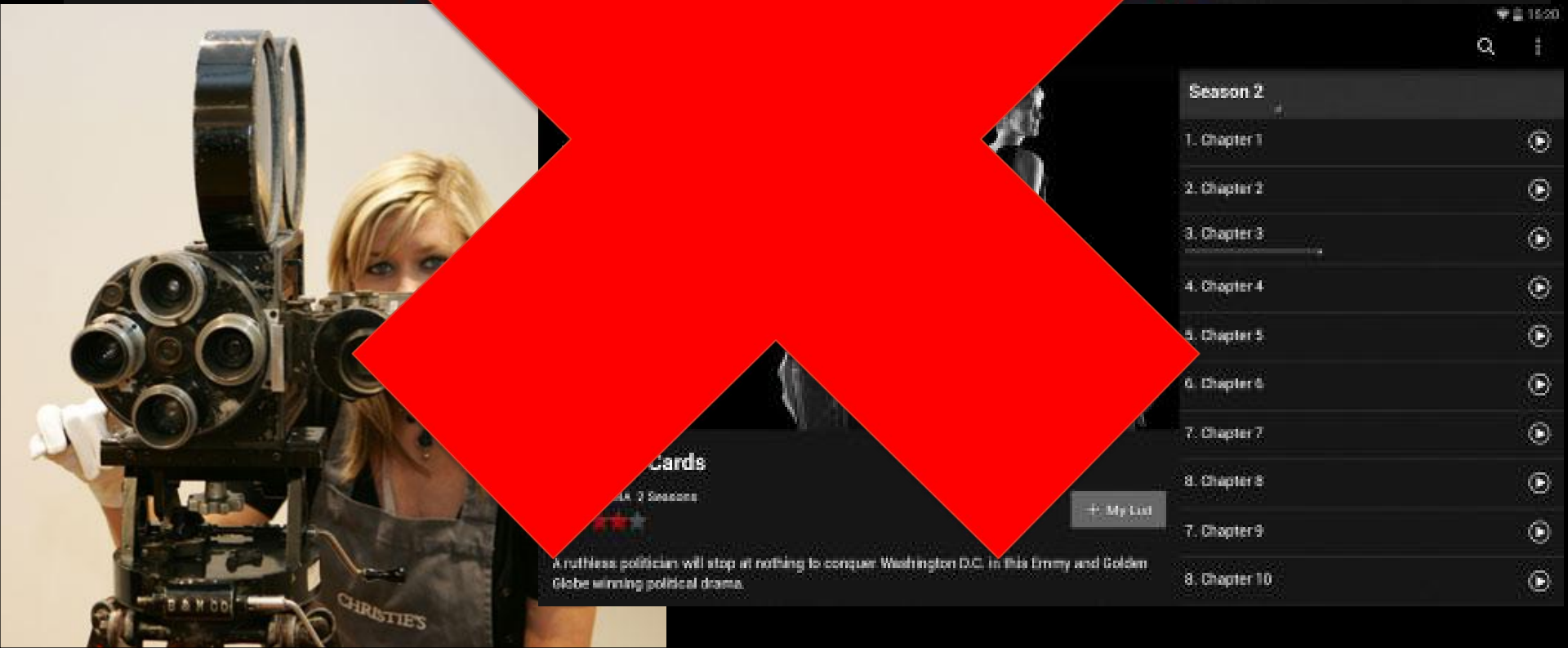
# Confidence

Confidence inflates  
over time



# Memory is reconstructive

# MEMORY





Your memory of  
an event is  
affected by many  
factors

# Memory stages



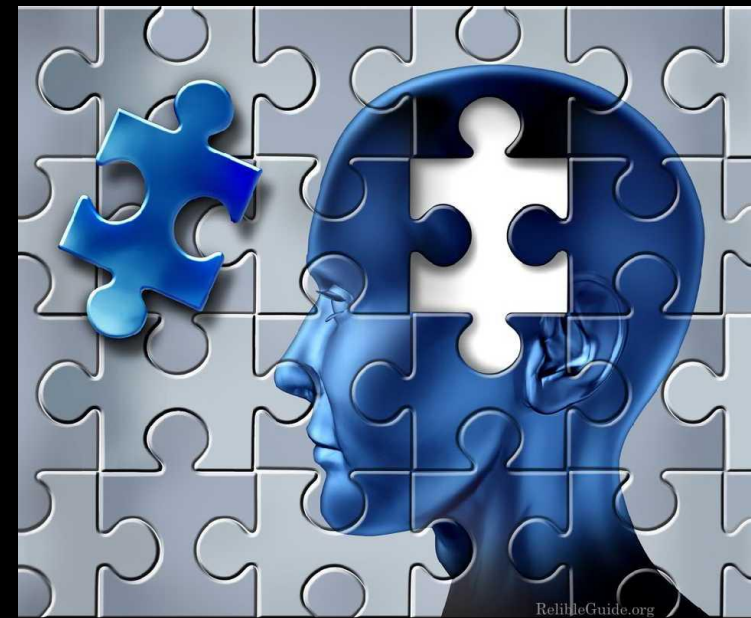
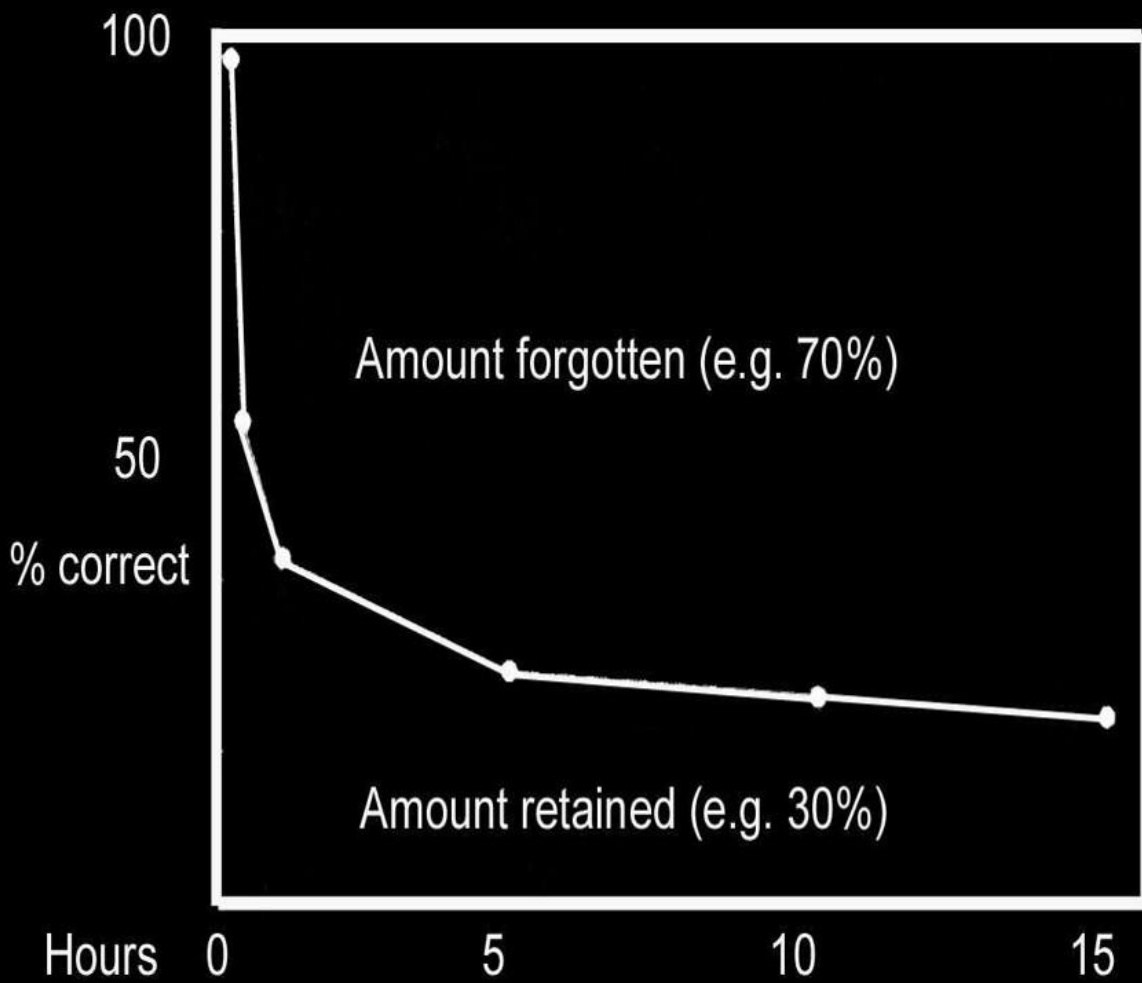
# *“Obvious Factors”*



**Hi, Mom. Do you like my mansion?**

# Memory stages





*The influence of questions and suggestions*

# *The Influence of questions and suggestions*







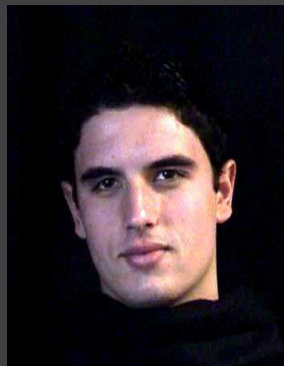




1



2



3



4



5



6



7



8



9

# Choice Blindness



# Memory Blindness

When a person fails to perceive alterations made to their previous memory reports (Cochran, Greenspan, Bogart, & Loftus, 2016).

1. What colour was the thief's jacket?

- Blue
- Green
- Red
- Purple
- Orange
- Yellow

2. How tall was the thief?

- 5'7
- 5'8
- 5'9
- 5'10
- 5'11
- 6'
- 6'1
- 6'2



1. What colour was the thief's jacket?

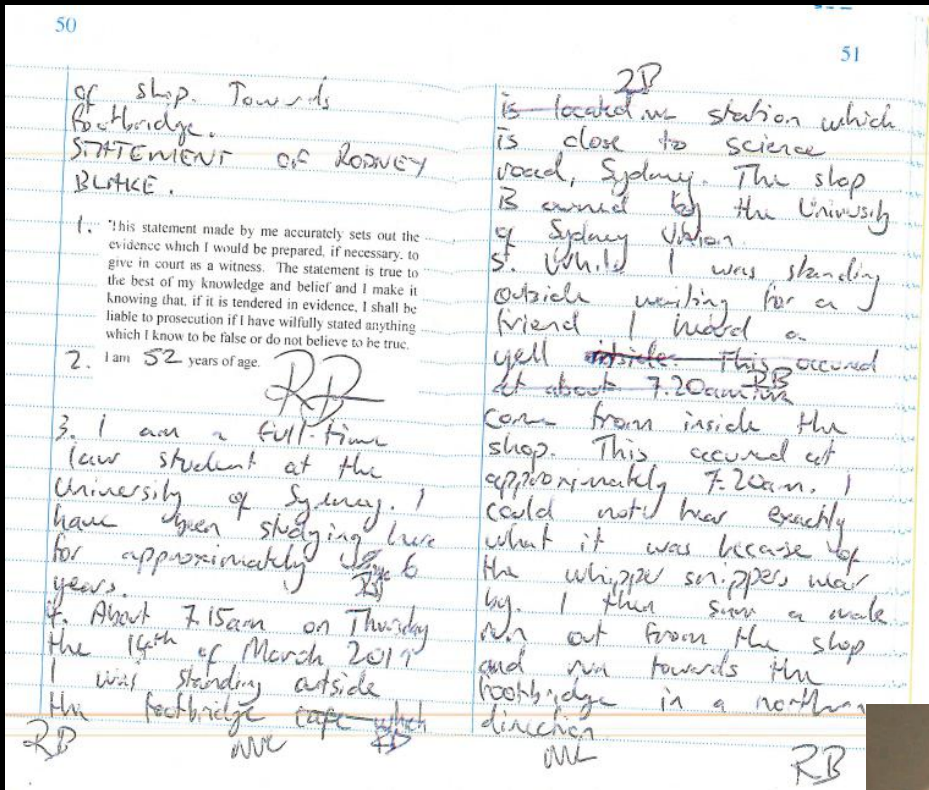
- Blue
- Green
- Red
- Purple
- Orange
- Yellow

2. How tall was the thief?

- 5'7
- 5'8
- 5'9
- 5'10
- 5'11
- 6'
- 6'1
- 6'2



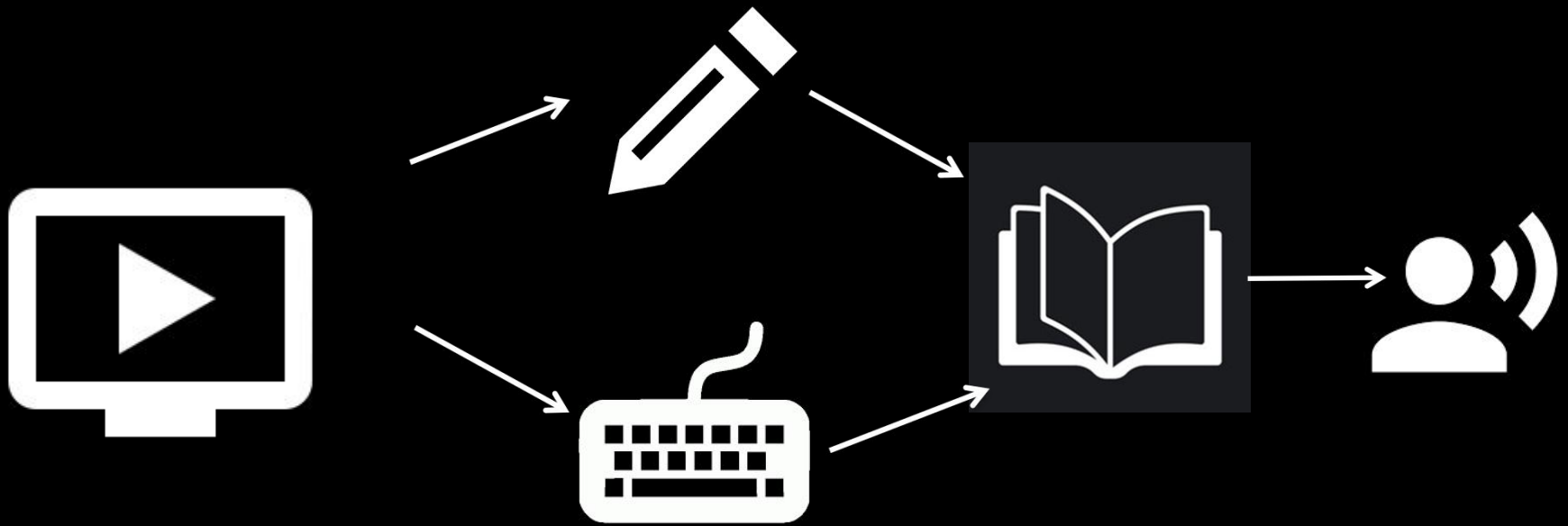
# Recall Memory and Modality



VS



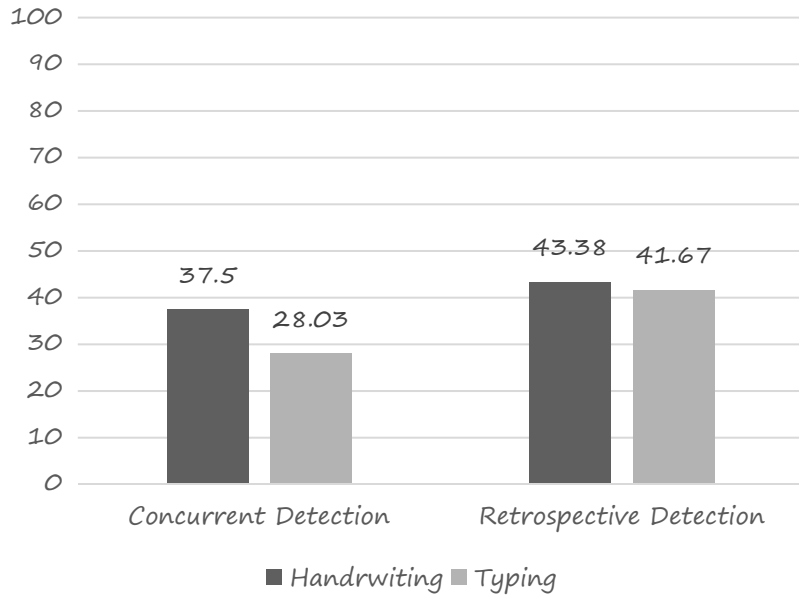
# Method



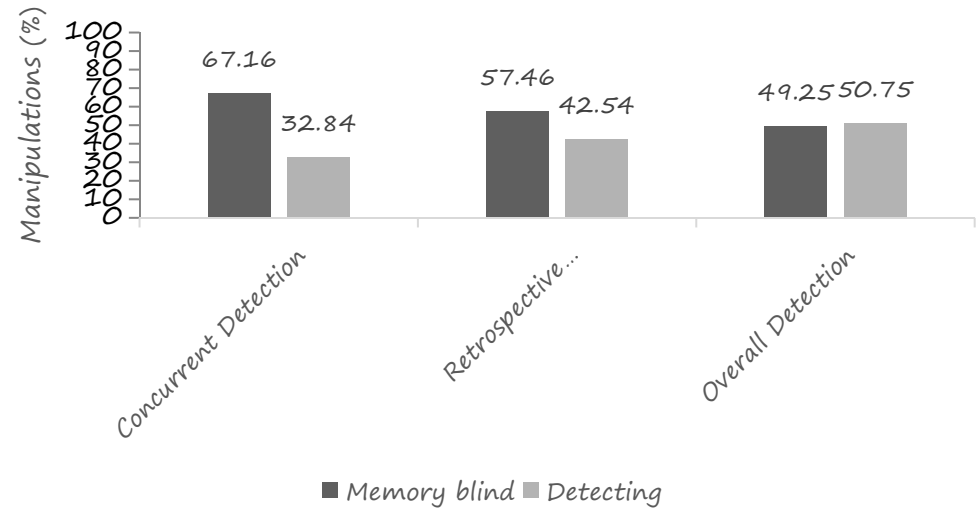
N=67

# Results

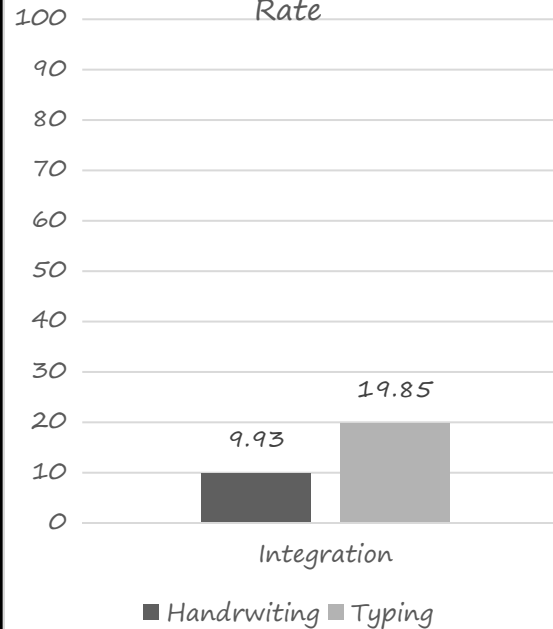
### Misinformation Detection Rate



### Memory Blindness

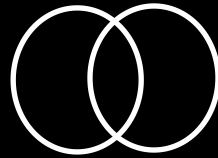


### Misinformation Integration Rate



# Further Factors

- Item similarity;



- Difficulty;



- Confidence;



- Online presentation;





1. Voluntary False Confession



2. Coerced Compliant False Confession

3. Coerced Internalise False Confession

# *First Impressions*

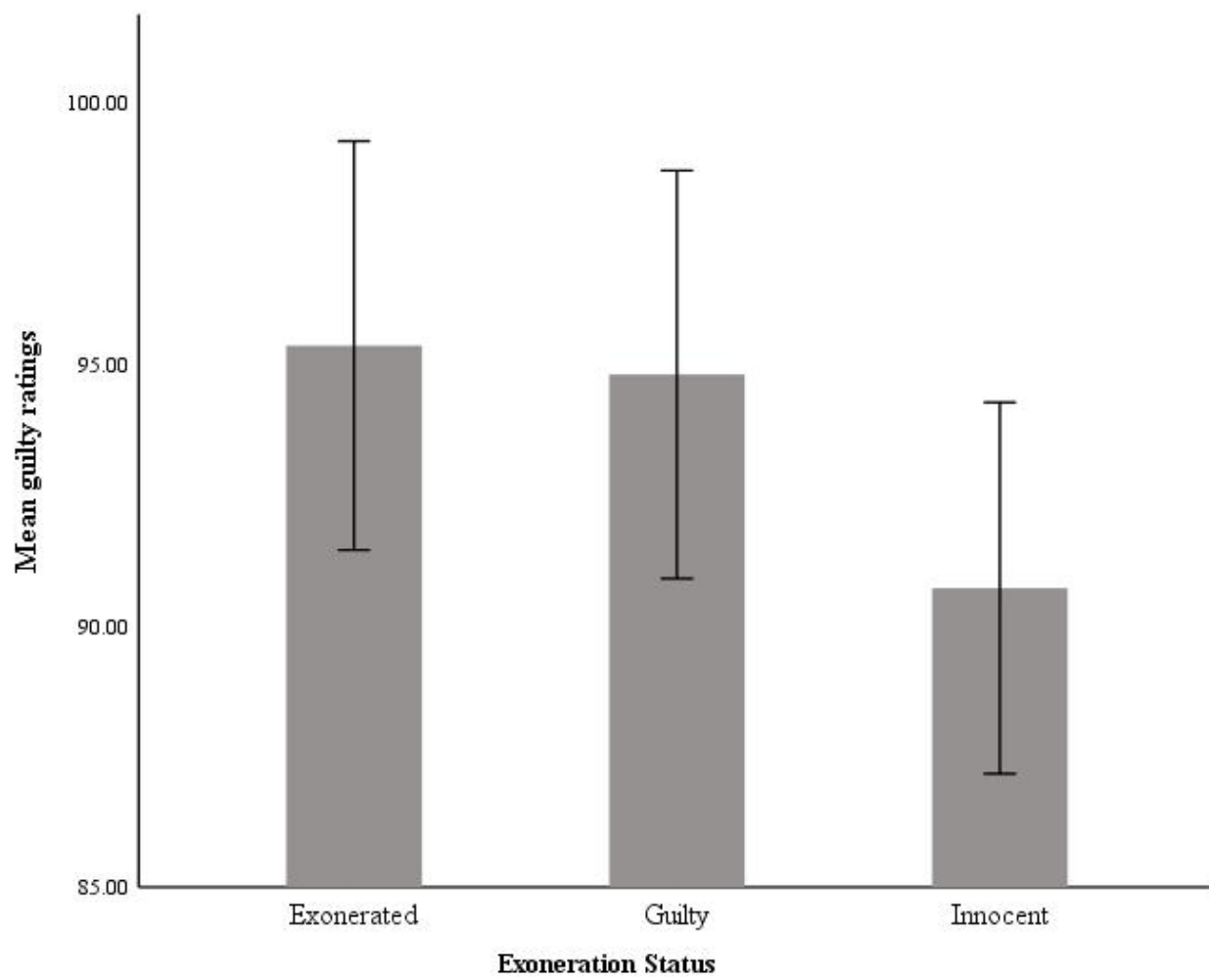




A vicious crime was committed on the 30<sup>th</sup> of August 2015. You will now see photos of different people. For each person, on a scale from 0 to 200, please indicate how likely is it that the depicted person committed the crime.

A vicious rape was committed on the 30<sup>th</sup> of August 2015. You will now see photos of different people. For each person, on a scale from 0 to 200, please indicate how likely is it that the depicted person committed the crime.

committed the crime



# First Impressions



*Testing the Steven Avery Effect: Are Exonerees at an Increased Risk of Being Convicted of a New Offense? Smalarz, Melishkevich, BA, Muñoz, & Shelton, (2020)*

*What do we learn from this?*

*Overhaul of various police and trial procedures*

*Legal Reform*

*Focus on preventing*

Thank you

Any questions:

@ [celine.vangolde@sydney.edu.au](mailto:celine.vangolde@sydney.edu.au)

 @celinevangolde

W

was guilty of



# Overall Remarks

- Memory Blindness is a robust finding for recall memory (when an experimenter is present)
- It does not appear that recall modality affects the occurrence as much as specific task details/requirements
- This indicates a true issue within applied settings