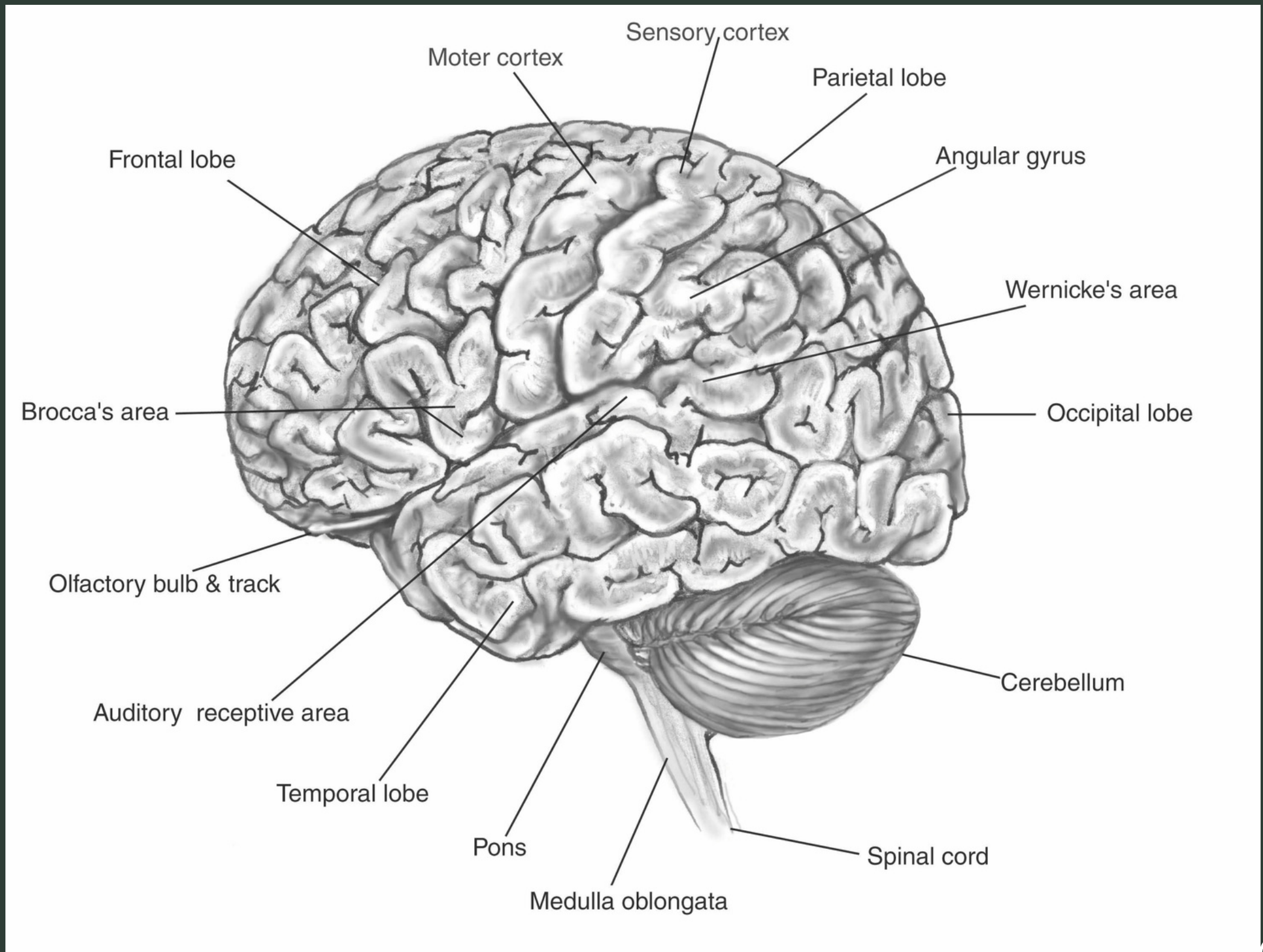


# Frontal Lobe



# Frontal Lobe Functions

- Concentration
- Planning
- Judgement
- Emotional Expression
- Creativity
- Inhibition
- Memory
- Impulse control
- Problem solving
- Social interaction
- Motorfunction
- Voluntary movement

“

"Dear Cerebral Frontal Lobe,  
I think it is time to service  
you, because the so called  
"your decision making" is not  
going well for me for quite a  
long time."

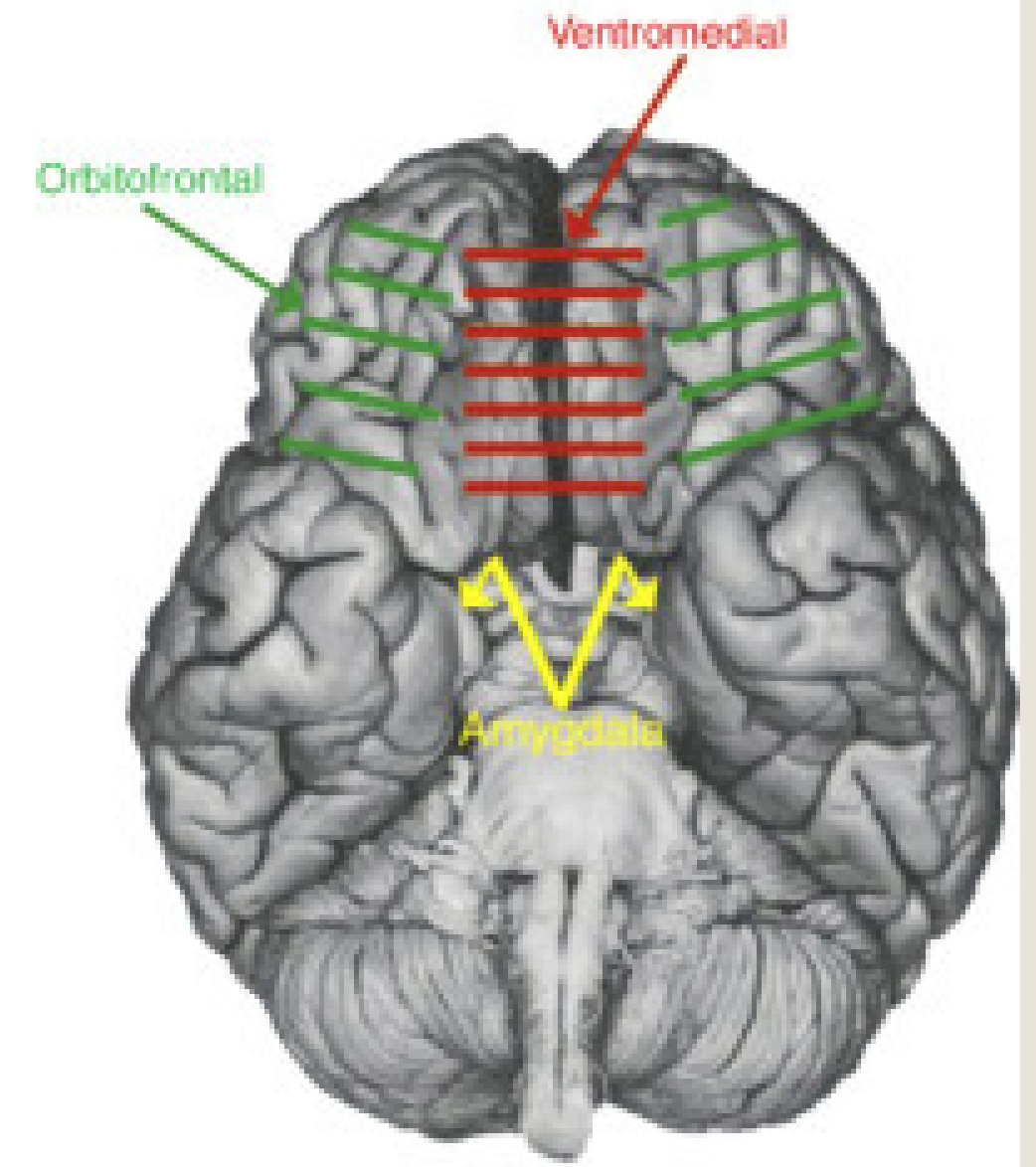
— The Omnist

Frontal Lobe Syndrome, better termed as "Frontal Network Systems, are relatively unique that they may manifest from any brain region because of their wide spread connectivity.

### Frontal lobe syndromes – VPFC

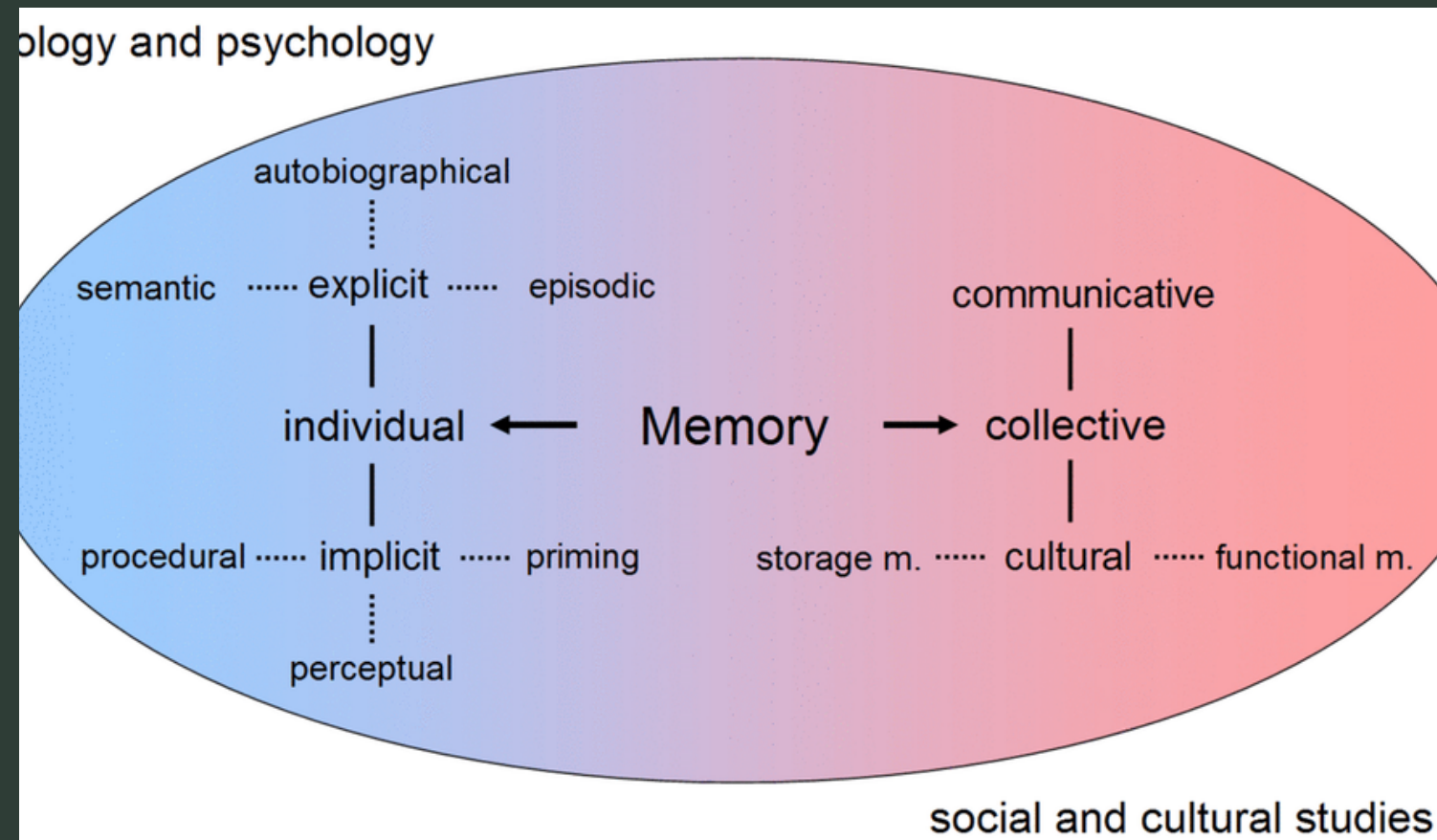
#### Personality changes:

- Impulsivity, disinhibition  
Irritability, less adherence to the social rules and moral principles
- Attention and self-regulation disorders
- Hyperactivity
- Sudden mood changes



"The role of the frontal cortex in memory an investigation of the Von Restorff effect

"Evidence from neuropsychology and neuroimaging indicate that the pre-frontal cortex (PFC) plays an important role in human memory."





**A Correlational Study of the Relationship Between Fluid Intelligence and Semantic Factors in Free Recall**

This experiment was designed to explore the role of the frontal cortex in semantically related memory functions.

In order to investigate this with healthy young adults, a correlational approach was adopted. A correlation between frontal cortex activity and performance on fluid intelligence tests was previously demonstrated in tasks such as the Cattell Culture Fair Test (Duncan et al., 1995, 1996, 2000)

The Cattell Culture Fair Intelligence Test was created by Raymond Cattell in 1949. This was an attempt to measure cognitive abilities devoid of sociocultural and environmental influences.

"IQ scores were calculated based on Cattell test results. Mean IQ for the sample was 107, with a standard deviation of 13. This is above the population mean, as one would expect from a sample of university students."



# What happens if you damage your frontal lobe?

You would not be able to have a normal life without a frontal lobe. You would experience total paralysis of your cognitive abilities and motor control. You would not be able to reason and form simple thoughts, and you also wouldn't be able to move <sup>09</sup>

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**BIOPSYCHOLOGY**

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