• **Working Memory (the lateral prefrontal cortex)**
  
  o **Frontal lobe as a working memory buffer**
    
    - Prefrontal areas are a temporary repository for representations accessed from other neural sites
    - This hypothesis is in concordance with the fact that the prefrontal cortex is intimately connected with post-sensory regions of the temporal and parietal cortices

  o **Recency discrimination task (Milner, 1995)**
    
    - In the recency test, both objects on the test cards had been seen previously and in the item recognition test, only one object had appeared previously
    - Patients who had had a frontal lobectomy in particular patients in whom the lesion encompassed dorsolateral prefrontal regions performed poorly on the recency task compared to both control subjects and patients who had a temporal lobectomy, the frontal patients were not impaired on the item recognition task
    - Frontal lobes play a role in temporarily tagging information

  o **Frontal lobe as an inhibition mechanism**
    
    - Shimamura (1995)
    - Prefrontal cortex may use an inhibitory mechanism to highlight the information most relevant to the current task demands
    - Plays a critical role in selecting task-relevant information

• **Failure of inhibition in social domain (the ventromedial prefrontal cortex)**
  
  o Lhermitte (1983; 1986)
    
    - Patients with frontal lobe lesions
      - Utilization behaviour and imitative behaviour
        - patients demonstrated an exaggerated dependency on environmental cues in guiding their behaviour

• **Social mediation of behaviour**
  
  o Somatic markers (i.e. bodily sensations)
    
    - rapidly narrow the options by automatically anticipating the affective consequence of each action
    - facilitate decision making by influencing candidate responses based on their affective value