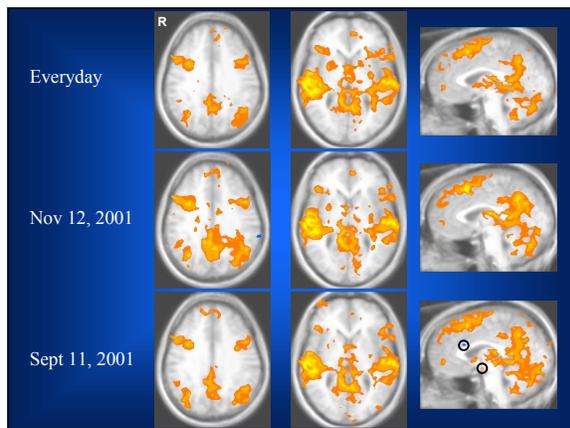


## The audio-diary method

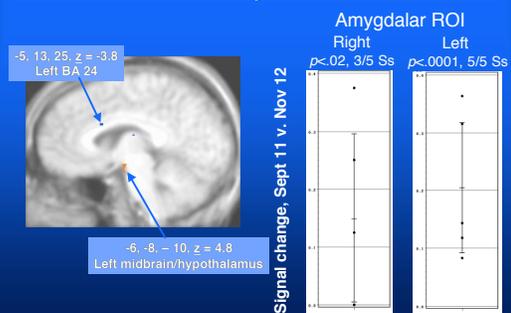
- Unique events documented on portable audio recorder
- Participants ( $N = 5$ ) do not listen to recordings
- Recordings sampled from pool and edited for presentation during fMRI
- Recording conditions – 5 recordings (30 s) per condition
  - September 11, 2001
  - Control conditions
    - Everyday (non-emotional)
    - November 12, 2001
  - Visual fixation

## Ratings

- Encoding (uniqueness, emotional change, importance)
  - Sept 11 > other two conditions
  - Nov 12 > everyday condition
- Retrieval (re-experiencing of thoughts, feelings, visual imagery, frequency of re-activation)
  - Sept 11 > other two conditions
  - Nov 12 = everyday condition



## September 11 vs. November 12



## Summary

- Everyday and emotional events
  - Mediodorsal posterior and prefrontal cortex, ventrolateral prefrontal cortex, lateral temporoparietal cortex, medial temporal regions, thalamus
  - Remote memory recovery, working memory, spatiomotor imagery, self-related information processing
- Emotional events
  - Limbic regions (amygdala, hypothalamus)
  - Coding of emotional significance
  - Deactivation of dorsal cingulate regions
  - Reciprocal relations between emotional and cognitive neural systems

## Flashbulb memory

- Brown & Kulik (1977)
  - High level of surprise, consequentiality
  - “Primary live quality that is almost perceptual”
  - Livingston (1967): “Now Print!”
- Neisser (1982), McLoskey et al (1988)
  - Flashbulb memories subject to distortion
  - Linkage of own history with “History”
  - Emotions prompt retellings, elaboration
  - No special mechanism

