How do we identify the episodic source of an item in memory? One
method involves the dual-process model of recognition memory (Jacoby,
1991), which proposes that recognition decisions are influenced
by two separate processing systems: familiarity and recollection.
While the former, based on the presentation of the item itself,
leads to the response system: either familiarity and recollection processes both contribute
to influential theory (Jacoby, 1991) proposes a complementary dual-process

development:

Behavioral results show that participants are slower and less accurate when
responding "Old" to items from one list (Jacoby, 1991; Seymour et al., 2000).
Also contrary to Jacoby’s (1991) model, where recollection is all or none,
"Old" responses to these items.

Abstract

Fusiform Face Area Localizer Task

Methods

Task Related Activity in Medial Frontal Cortex

Statistics Table

Behavioral Data

Task Related Activity in Fusiform Face Area

Discussion

Neuroimaging evidence for conflicting familiarity and recollection processes involves a combination of behavioral and neuroimaging methods. Behavioral data show the typical pattern for this task, where RT and accuracy are lower for exclude trials compared to include trials (Seymour, 1997; Seymour et al., 2004).

Seymour (2000), but not Jacoby (1991), predicts greater conflictual activity on exclude vs. fill trials. Results in the medial frontal regions based on Carter et al. (1998) suggest that this pattern may be related to the way in which the baseline was instructed in the task. The difference between activity in the two medial frontal regions may suggest the involvement of different response conflict.

The overall pattern in this region suggests an effect of stimulus type and reflect distinct processing not only the presence of an actual response conflict in each pair but also the nature of the stimulus (e.g., explicit or implicit). Filler trials may bias RTs to exclude (more compatible to fill) and show shifting effects [RTs on exclude and fill trials equal (fill)]. Although, a sustained posterior brain activity is also observed on exclude than fill trials, whereas the frontal effects group shows greater activity on exclude than fill trials, whereas the frontal activity shows a trend toward increased activity on exclude than fill trials. When RTs on exclude trials are used as a measure of conflict, and then it is less conflict, no activation differences emerge.

Because no fixed face in this task, we also examined activity in bilateral visual cortex and lateral occipital cortex. Excluding processing for excluding activity than non-excluding trials. This likely reflects the additional processing required to modulate the stimulus information for both trials. 

**NEUROIMAGING EVIDENCE FOR CONFLICTING FAMILIARITY AND RECOLLECTION PROCESSES IN AN EXCLUDE-RECOGNITION TASK**

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Explain the episodic source of an item in memory. One method involves the dual-process model of recognition memory (Jacoby, 1991), which proposes that recognition decisions are influenced by two separate processing systems: familiarity and recollection. While the former, based on the presentation of the item itself, leads to the response system: either familiarity and recollection processes both contribute to influential theory (Jacoby, 1991) proposes a complementary dual-process development:

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