INTRODUCTION

Visual object representations are superimposed, helping cause object-to-object anti-priming.

Visual representations of different objects may be superimposed on overlapping sets of synapses (e.g., vertical leg of a piano and of a desk represented by the same node). (Haxby et al., 2001; Tanaka, 1993)

When a familiar object (e.g., a piano) is identified, small synaptic changes may serve to strengthen its visual representation (e.g., a piano identified, small synaptic changes may serve to strengthen its visual representation (Price & Devlin, 2003).)

However, such changes also should interfere with storage of any other familiar object (e.g., a desk) with which it is superimposed (e.g., measurable as piano-to-desk anti-priming).

OBJECT-TO-OBJECT ANTI-PRIMING:

- Young Adults
- Amnesic patients
- Aged-matched controls

RESULTS

1. AUDITORY ENCODING

- Significant anti-priming and positive priming observed.

2. VISUAL TEST

- Tested with an Auditory Phase 3

3. VISUAL ENCODING

- Tested with an Auditory Phase 3

4. VISUAL TEST

- No significant anti-priming observed.

CONCLUSIONS

- Significant visual word-form to visual object-form anti-priming observed.
- Functional evidence against specialized visual word form processing.
- Functional support for superimposition of visual word form and visual object form representations.

REFERENCES


Replicates with different set of subjects?

- Significant anti-priming and positive priming observed.

DOES WORD-TO-OBJECT ANTI-PRIMING REQUIRE VISUAL WORD FORMS?

- Tested with an Auditory Phase 3

- No significant anti-priming observed.