Background

- Different task contexts may lead people to prepare attention in different ways.
- An example of different contexts could be a series of selective attention trials that are mostly incongruent/incompatible vs. mostly congruent/compatible.
- There is debate in the literature about the underlying processes that modulate preparation to attend.
- Different task contexts may lead people to prepare attention in different ways.

Control: Selective Attention (SA) at T1 Produces Attentional Blink at T2

**TASK:** Ignore T0. Identify the red word (T1) then white word (T2) and report them at end of trial.

- Exp. 1 and 2 used the exact same method as the Control Exp., but we manipulated what appeared at T0, and how people prepared to encode it.

Discussion and References

- Preparing to selectively attend to red words can impact the efficiency of SA at a later point in time.
- Preparation may involve preparing a task template (representation) that is subject to associative learning of control states and task context.
- By this view, The effect in Exp. 2. appears to be a result of long-term cumulative learning, where the state of preparation is associated with task context.

Exp. 1: Selective Preparation for “Red” Impacts Selection Efficiency

- How does preparation to name a word at T0 impact selection at a later point in time (at T1)?

Control

- Name All Group: name T0 if word
- Name Red Group: name T0 if red word

Randomly intermixed

**TASK:** Name All Group: name T0 if word
Name Red Group: name T0 if red word

(T0 Colour)

Name Red performed substantially better than Name All.
Stimuli were the same, only difference was preparation set by instructions.
Preparing for red words at T0 influences SA processes for red words at T1.

Exp. 2: Preparation Effects Reflect Cumulative Learning

- Does the influence of preparation depend on multi-trial learning?
- At start of every trial, Ps were instructed what colour to name at T0 with a cue (R or G).

Prepare: Preparation for “Red” Impacts Selection Efficiency

- Preparation differed between Name Red trials and Name Green Trials only when T0 instruction repeated for many trials (3a).
- Preparation effect depends on cumulative experience, reminiscent of selection history effects.