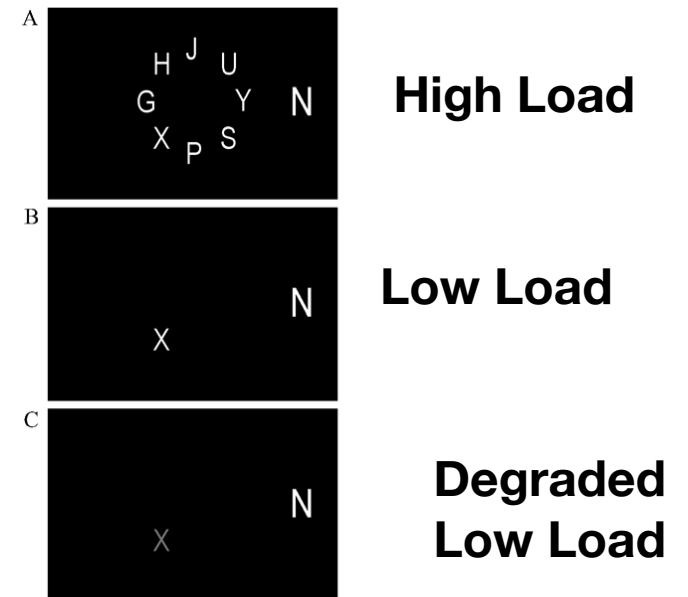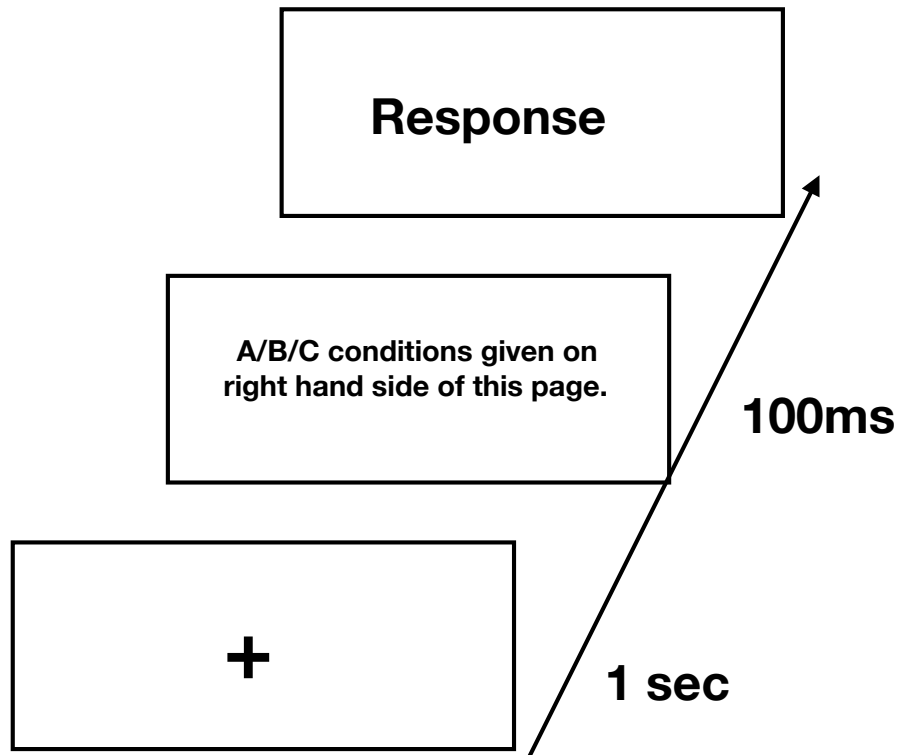# G5: Effect of memory load on selective attention

Instructions

- Each trial started with fixation point for 1sec.

- Followed by presentation of stimulus for 100ms.

- Participants were supposed to report the presence of target in the display.

TASK

Response

A/B/C conditions given on right hand side of this page.

100ms

+

1 sec

A — High Load

B — Low Load

C — Degraded Low Load

Lavie et al, 2003

Instructions

- Each trial starts with a fixation point for 1 sec.
- This is followed by presentation of the stimulus (A/B/C) for 100ms in previous slide.
- After this participants are supposed to respond as soon as possible (reaction time task):
    - Press N on the keyboard when N was the target displayed in the circle
    - Press X on the keyboard when N was the target displayed in the circle
- This experiment has three conditions:
    - Low load condition: Where only the target (letter X or N) is presented in the circle.
    - High load condition: Where along with the target (letter X or N) 7 other letters are presented in the circle.
    - Low load degraded: This is exactly similar to low load condition except for the fact that the target letter would be of low contrast as compared to one used in the low and high load conditions.
- Remember along with the target you will have to present another stimulus at either RHS or LHS of the circle randomly (to distract the attention). See last slide and paper's experiment 1 for reference. This stimulus could be
    - Same as the target in that trial => Compatible condition.
    - One of the target letter (N/X) but not the target letter presented in the trial => Incompatible condition.
    - Different than the target letter and the distractor presented in the circle => Neutral condition.

Analysis

Compare RT under the three conditions for high, low and low degraded load conditions for compatible, incompatible and neutral distractor presentation (Figure 2 A of the Lavie et al, 2003).