Number of trials for each participant, and for each combination of Validity and Lag (A triangle shows the number of valid trials, in the respective lag-bin, for one participant.)

## **Experiment 1**

## **Experiment 2**

## **RTs for each combination of Validity and Lag**

Average mean RTs are shown in black (same as manuscript). Average median RTs are shown in red.

**Experiment 2** 

**Experiment 1** 

Validity x Lag Validity x Lag (Rare condition only) (Rare condition only) 50 j 50 r N = 21 invalid  $\bigcirc$ 0 0 ° <sub>0</sub> valid 650  $\bigtriangledown$ 650 Number of trials 40 40 ම <mark>ටා</mark>ලා ටෙලා ටි ωo 0 000 000 000 RT [ms] 30 30 0 0 600 600 0 0 0 20 20  $\mathbb{A}$ 550 550  $\mathbf{v}_{\mathbf{v}}^{\mathbf{v}}$ invalid, mean 10 10  $\bigcirc$ valid, median 500  $\nabla$ 500 0 1, 2 3, 4 >4 1, 2 3, 4 >4 Lag Lag

# **Experiment 3 (non-matching)**

50

# **Experiment 3 (matching)**

50 r 0 Ο Ø

#### **Experiment 3 (non-matching)** E

N = 21

N = 16 N = 16 650 1 T



## **Experiment 4 (non-matching)**

## **Experiment 4 (matching)**





**Experiment 4 (non-matching)** 



