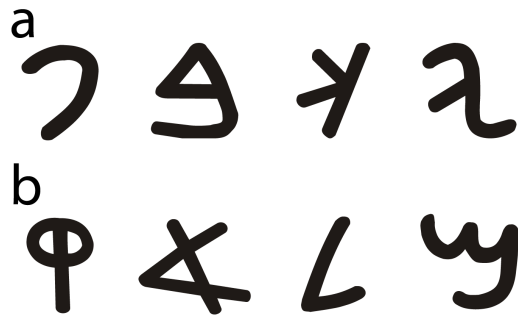


Supplementary Figure 1. Forced response paradigm with example data and corresponding speed-accuracy trade-off. a) Participants heard a sequence of four metronome tones, and were instructed to respond synchronously with the fourth tone. Varying the onset of the stimulus relative to this deadline allowed us to effectively control participant reaction times. b) Data from an example participant on the familiarization task. Participants responded to the appearance of a picture of a hand with a shaded index, middle, ring, or little finger by pressing with the corresponding digit. Illustrations of these stimuli are presented on the y axis (with superimposed colored circles). Responses to each stimulus are shown on the horizontal axis (jitter on the y axis is shown to allow illustration of responses that occurred at the same latency). Circle colors indicate the finger the participant used to respond (e.g. blue circles present responses made with the index finger). c) Data from panel B quantified using a speed-accuracy trade-off. A sliding window (running average across a 100ms window) determined the accuracy for a given time. Note that initial performance is essentially at chance (i.e. at times <300ms participants do not have time to process the stimulus; therefore, to meet the imposing deadline, they select a response at random), after which accuracy increased with time.



Supplementary Figure 2. Experimental Stimuli. As Experiment 1 involved a crossover design, two sets of distinct stimuli (set a, top row, and set b, lower row) were used in a counterbalanced order. The finger to which each stimulus initially corresponded was also randomized in a counterbalanced fashion.