



Two monkeys were trained to make arm-reaching movements in 6 directions in the horizontal plane from a common center position, by holding a handle that was freely movable in the two-dimensional plane. In some sessions, only 2 random-chosen opposite directions were used to reduce the session duration, concerning 21% and 39% of the sessions in monkey T and M, respectively. The monkeys had continuous feedback about hand and the 6 possible target positions (red outlines) on a vertical monitor in front of them. Behavioral setup and task.

Left, drawing of the experimental apparatus showing the SC epoch (note the cursor on the central fixation dot). Right, sequence of task events (not to scale). Start indicates the moment when the monkey brought the cursor to the center of the screen to initiate a new trial. The musical note indicates the presentation of a tone. Tone pitch differed according to delay duration. All screen-shots shown in the diagram stayed on until the next one appears (cursor not shown). TC, temporal cue (200 ms duration); SC, spatial cue (55 ms duration); D1, delay 1, D2, delay 2. Both delays had either short duration (700ms in monkey T and 1000ms in monkey M) or long duration (1500ms in monkey T and 2000ms in monkey M). There was also a 700ms delay between start and TC.