## Supplementary material

## Material \& Methods

## Procedure

Table S1. Experimental conditions.

| Block | Condition | Task | No. of PM | No. of P | Target | Arm | Feedback | CP | Prisms | CR | Light |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| rotated | Pretest | HS | - | 5 | - | - | no | central | - | no | off |
|  |  | VS | - | 5 | - | - | no | central | - | yes | off |
|  |  | PS | 5 | - | - | right | no | central | - | yes | off |
|  |  | IT | 5 | - | - | left | no | central | - | yes | off |
|  | Adaptation <br> 1. Posttest | AD | 30 | - | central | right <br> see Pre | est | right | right | no | off |
|  | Readaptation | READ | 30 | - | central | right | yes | right | - | no | off |
| central | Pretest | HS | - | 5 | - | - | no | central | - | no | off |
|  |  | VS | - | 5 | - | - | no | central | - | yes | off |
|  |  | PS | 5 | - | - | right | no | central | - | yes | off |
|  |  | IT | 5 | - | - | left | no | central | - | yes | off |
|  | Adaptation <br> 1. Posttest | AD | 30 | - | central | $\begin{aligned} & \text { right } \\ & \text { see Pret } \end{aligned}$ |  | central | right | yes | off |
|  | Readaptation | READ | 30 | - | central | right | yes | central | - | yes | off |

No. of PM: number of pointing movements; No. of P: number of pictures; CP: chair position; CR: chin rest; HS: head straight ahead; VS: visual straight ahead; PS: proprioceptive straight ahead; IT: intermanual transfer; AD: adaptation; READ: readaptation. Grey labeled conditions depict the additional condition in group IT.

Table S2. Experimental conditions.

| Block | Condition | Task | No. of PM | No. of $\mathbf{P}$ Target | Feedback | CP | Prisms | CR | Light |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dark | Adaptation | AD | $30 / 60 / 90$ | - | central | yes | right | right | no | off |
|  | Readaptation | READ | $30 / 60 / 90$ | - | central | yes | right | - | no | off |
| Light | Adaptation | AD | $30 / 60 / 90$ | - | central | yes | right | right | no | on |
|  | Readaptation | READ | $30 / 60 / 90$ | - | central | yes | right | - | no | on |

No. of PM: number of pointing movements (30, 60 or 90 movements); No. of P: number of pictures; CP: chair position; CR: chin rest; AD: adaptation; READ: readaptation.

