

Transcranial magnetic stimulation reveals two functionally distinct stages of motor cortex involvement during perception of emotional body language.

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Supplementary Data

Visual recognition of body expressions was compared in the three experiments. To this aim, accuracy scores were analyzed by means of a mixed model three-way ANOVA with Area (3 levels: Exp1M1right, Exp2M1left and Exp3Sham) as a between-subjects factor, and Time (2 levels: 150 and 300ms) and Movement type (4 levels: static, happy, neutral and fearful) as within-subjects factors. The ANOVA showed a main effect of Time ($F(1,53) = 19.50, p < 0.0001$) and Movement Type ($F(3,159) = 19.22, p < 0.0001$) and these main effects were qualified by a significant Time x Movement Type interaction ($F(3,159) = 3.07, p = 0.03$; see Supplementary Table 1). Importantly, the Time x Area interaction was also significant ($F(2,53) = 3.57, p = 0.035$). This was accounted for by the fact that in Exp1M1right, accuracy was lower in the early (150 ms) relative to the late (300 ms) temporal condition (92.8% vs 95.8%, $p = 0.0006$), whereas no similar change in performance was found in the other two experiments ($p > 0.12$). Notably, the Time x Area interaction was not qualified by the triple interaction ($F(3,159) = 0.78, p = 0.59$). Thus, accuracy was generally lower in the early relative to the late conditions of Exp1M1right and this effect was similar across visual conditions (Supplementary Table 1).

Supplementary Table 1

	150 ms				300 ms			
	Static	Happy	Neutral	Fearful	Static	Happy	Neutral	Fearful
Exp1M1right	99.0 ± 2.4	91.7 ± 12.2	87.0 ± 10.9	93.7 ± 6.7	98.7 ± 2.7	93.7 ± 9.3	93.3 ± 6.8	97.3 ± 4.0
Exp2M1left	99.7 ± 1.5	94.0 ± 12.0	86.3 ± 10.7	96.3 ± 5.9	100.0 ± 0.0	93.7 ± 10.0	88.0 ± 9.6	97.0 ± 4.0
Exp3Sham	98.8 ± 3.6	90.8 ± 6.8	91.7 ± 7.5	95.0 ± 5.7	98.8 ± 2.7	91.7 ± 8.6	93.8 ± 7.9	97.9 ± 5.3

Supplementary Table 1 Mean ± standard deviation of accuracy scores (% correct responses) in the recognition task during observation of static, happy, neutral and fearful body postures in the first experiment (Exp1M1right), the second experiment (Exp2M1left) and the third control experiment (Exp3Sham) with TMS delivered at 150 or 300 ms after stimulus onset