



ON-LINE FIG 1. Distribution of motion parameters with respect to the type of fMRI task (language versus motor).

On-line Table 1: Description of administered fMRI tasks

Task	No. Times Performed	Block Length (sec)	Task Block	Control Block	No. Task Blocks	No. Control Blocks	Total Scan Length (min)
Foot motor	4	20	Bilateral repetitive flexion of toes/forefoot	Rest	6	6	4
Finger motor	6	20	Bilateral alternating finger tapping	Rest	6	6	4
Tongue motor	2	20	Repetitive lateral motion of tongue	Rest	6	6	4
Face motor	6	20	Repetitive lip pursing	Rest	6	6	4
Picture naming	3	20	Covert naming of picture (Boston Naming Test)	Visually attend to abstract shapes	6	6	4
Semantic decision	6	20	Press button if 2 simultaneously presented words are semantically related in any way	Press button if 2 simultaneously presented lines of nonalphabetic characters match	6	6	4
Sentence completion	3	20	Covertly fill in blank in a presented sentence	Visually attend to nonalphabetic characters presented in sentence structure	6	6	4
Word generation	5	20	Covertly generate as many words as possible beginning with presented letter	Visually attend to nonalphabetic character	6	6	4

On-line Table 2: Detailed information of the specific discrepancies for all 14 disagreements between the 2 primary readers^a

Specific Discrepancy between Readers	Subject No.	Paradigm	Reader 1 (Y/N)	Reader 2 (Y/N)	Reader 3 (Y/N)
ICA vs realignment alone, reduced false-positives	2	Semantic decision	N	Y	Y
ICA vs realignment alone, reduced false-positives	3	Finger motor	N	Y	N
ICA vs realignment alone, new real areas of activation	3	Word generation	N	Y	Y
ICA vs realignment alone, new real areas of activation	3	Word generation (repeat)	N	Y	Y
ICA vs motion scrubbing, new real areas of activation	3	Word generation	N	Y	Y
ICA vs motion scrubbing, new real areas of activation	3	Word generation (repeat)	N	Y	Y
ICA vs realignment alone, new real areas of activation	5	Finger motor	Y	N	Y
ICA vs motion scrubbing, new real areas of activation	5	Finger motor	Y	N	Y
Realignment alone, diagnostic scan	5	Finger motor	N	Y	N
Motion scrubbing, diagnostic scan	5	Finger motor	N	Y	N
ICA vs realignment alone, reduced false-positives	6	Semantic decision	Y	N	Y
Motion scrubbing vs realignment alone, improved statistics	6	Word generation	Y	N	N
Realignment alone, diagnostic scan	7	Sentence completion	N	Y	N
Motion scrubbing, diagnostic scan	7	Sentence completion	N	Y	N

Note:—Y indicates yes; N, no.

^a The distribution of subjects and specific paradigms and the point of disagreement are listed. Last, the decision by the third reader is included.