

## Supplementary Information

### List of studies used for meta-analysis

*Table 1: Published studies employing foot movements tasks used in the meta-analysis (Healthy Controls only)*

<b>Publication</b>	<b>Paradigm/ Contrast</b>	<b>No. of subjects</b>	<b>Foci</b>	<b>Bimanual</b>
(Dimitrova et al., 2006)	Mediolateral foot movement	12	2	RF
(Blatow et al., 2011)	Toe flexion-extension vs Rest	16	1	RF
	Toe flexion-extension vs Rest	16	1	LF
(Ciccarelli et al., 2006)	Dorsi-plantar flexion ankle vs Rest	18	8	RF
(Ciccarelli et al., 2005)	Dorsi-plantar flexion ankle vs Rest	18	11	RF
	Dorsi-plantar flexion ankle vs Rest	18	9	LF
(Dobkin et al., 2004)	Active ankle vs Rest	12	8	RF
(Gerardin et al., 2003)	Toes flexion/extension	7	9	RF
(Kapreli et al., 2007)	Ankle flexion/extension vs Rest	18	6	RF
	Ankle flexion/extension vs Rest	18	8	LF
	Toes flexion/extension vs Rest	18	7	RF
	Toes flexion/extension vs Rest	18	6	LF
(Katschnig et al., 2011)	Ankle dorsiflexion	20	2	RF
(Hsieh et al., 2009)	No conversation > Fixation (pedal press)	10	23	RF
(Lotze et al., 2000a)	Foot vs Rest	30	1	RF
(Rotte et al., 2002)	Toes	9	16	RF
	Knee	9	17	RF
(MacIntosh et al., 2004)	Ankle dorsiflexion	12	6	RF
(Sahyoun et al., 2004)	Ankle dorsiflexion vs Rest	12	24	RF
(Stippich et al., 2007)	Toes flexion-extension vs Rest	14	3	RF
	Toes flexion-extension vs Rest	14	3	LF
	Foot vs Rest	14	1	RF
	Foot vs Rest	14	1	LF
(Villiger et al., 2013)	Foot vs Rest (O-MIT>baseline)	14	15	RF

Table II: Published studies employing eye movements tasks used in the meta-analysis (Healthy Controls only)

<b>Publication</b>	<b>Paradigm/ Contrast</b>	<b>No. of subjects in group study</b>	<b>Foci</b>
(Luna et al., 1998)	Saccades vs Fixation	10	12
(Bristow et al., 2005)	Voluntary Blinking vs Fixation	14	15
(Connolly et al., 2000)	Pro-Saccade vs Fixation	7	7
	Anti-Saccade vs Fixation	7	13
(Gagnon et al., 2002)	Saccade Control Task vs Fixation	7	10
(Gerardin et al., 2003)	Saccadic Eye Movement	7	12
(McDowell et al., 2002)	Saccades	14	5
(Nitschke et al., 2004)	Triple-Step Saccades vs Fixation	6	2
	Visually-Guided Saccades vs Fixation	6	2
(Brown et al., 2006)	Pro-Saccade Response vs Fixation	10	17
	Anti-Saccade Response vs Fixation	10	20
	Anti-Saccade Response vs No-go Response	10	16
	Pro-Saccade Response vs No-go Response	10	2
(Nelles et al., 2009)	Saccades vs Fixation (Young Adults)	11	9
(Kimmig et al., 1999)	Saccades vs Fixation	6	1
(Kimmig et al., 2001)	Saccades vs Fixation	15	14
(Perry and Zeki, 2000)	Target vs Null (Saccade movement during task)	7	17
(Corbetta et al., 1998)	Eye movement vs Fixation	6	29
(Koyama et al., 2004)	Serial Saccades vs Fixation	20	35
(Rotte et al., 2002)	Eyes (subjects moved their eyes sideways)	9	16
(Simon et al., 2004)	Saccades only	10	8
(Simon et al., 2002)	Saccades vs Fixation	10	17
	Saccades only	10	5
	Visually Guided Saccades vs Fixation	11	5
(Merriam et al., 2001)	Visually Guided Saccades vs Fixation	11	5
(Postle and Hamidi, 2007)	Saccades vs Rest (no memory)	12	42
(Konen et al., 2004)	Predictable and Unpredictable Saccades vs Fixation	11	21
(Matsuda et al., 2004)	Saccades vs Rest	21	9
	Anti-Saccades vs Rest	21	17
(Ettinger et al., 2008)	Standard Anti-Saccade	17	15
	Standard Saccades	17	15
	Saccade vs Fixation	15	10
(Astafiev et al., 2003)	Saccade vs Fixation	15	10
(Heide et al., 2001)	Triple-Step Saccades vs Fixation without peripheral	6	18
	Visually-guided Saccades vs Fixation without peripheral	6	10

Table III: Published studies employing hand movements tasks used in the meta-analysis (Healthy Controls only)

Publication	Paradigm/ Contrast	No. of subjects in group study	Foci	Bimanual
(Dimitrova et al., 2006)	Activation in finger movement (sequential button pressing)	12	11	RH index
(Drobyshevsky et al., 2006)	Visual-Motor Task (subjects tapped their fingers)	31	5	Bimanual fingers
(Müller et al., 2003)	Random vs Same	8	19	All fingers excluding thumb on preferred hand
	Random vs Sequence	8	23	All fingers excluding thumb on preferred hand
(Riecker et al., 2006)	Main effects during finger movement, young subjects	10	6	RH index
	Positive linear Effects during finger movement, young subjects	10	4	RH index
	Negative linear Effects during finger movement, young subjects	10	2	RH index
(Forn et al., 2007)	2-Back vs 0-Back, subjects raised right hand	10	10	RH
(E et al., 2003)	Group analysis for flexion/extension	7	10	RH
	Group analysis for flexion/extension	7	14	LH
(Milner et al., 2007)	Simple grip vs Rest	17	2	RH
	Complex grip vs Rest	17	7	RH
(Creem-Regehr and Lee, 2005)	Finger clenching vs Rest	12	10	RH
(Mostofsky et al., 2009)	Finger sequence vs Rest	13	9	RH
	Finger sequence vs Rest	13	8	LH
(Mostofsky et al., 2006)	Sequential Finger Tapping vs Rest	11	3	RH
	Sequential Finger Tapping vs Rest	11	5	LH
(van Duinen et al., 2008)	Finger Abduction vs Rest	10	30	RH index
	Finger Abduction vs Rest	10	46	LH index
	Activity correlating with “Activation Per Se”, Contractions	10	29	RH index
	Activity correlating with “Activation Per Se”, Contractions	10	25	LH index
(Dhamala et al., 2003)	Brain activity correlated with increased rate of finger tapping	13	2	RH index
	Finger tapping correlations with complexity (D1-D0)	13	3	RH index
	Finger tapping correlations with complexity (D2-D0)	13	2	RH index
	Finger tapping correlations with complexity (D3-D0)	13	3	RH index
(Wilson et al., 2004)	Moving fingers	10	2	Bimanual
(Cunnington et al., 2006)	Observation vs Self-selection finger gesture movements	14	10	RH
(Mallol et al., 2007)	Manual Fingers Movement	11	17	RH
(Lehericy et al., 2006)	Simple vs Rest	12	8	RH index
	Scale sequence vs Rest	12	11	RH
	Complex sequence vs Rest	12	27	RH

(Yoo et al., 2005)	Sequential finger tapping activation	10	17	RH*
(Hanakawa et al., 2008)	Finger tapping sequence movement	13	13	RH
(Hanakawa et al., 2003)	Finger tapping sequence activations in relation to response movement	10	25	RH
	Finger tapping sequence activations associated with task performance	10	6	RH
(Aramaki et al., 2006)	Parallel	15	18	Bimanual index and middle fingers
	Mirror	15	7	Bimanual index and middle fingers
	Phase Transition	15	22	Bimanual index and middle fingers

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Table IV: Published studies employing mouth movements tasks used in the meta-analysis (Healthy Controls only)

<b>Publication</b>	<b>Paradigm/ Contrast</b>	<b>No. of subjects</b>	<b>Foci</b>
(Dimitrova et al., 2006)	Activation in Tongue movement	12	2
(Riecker et al., 2000)	Horizontal Tongue movement	10	4
(Fraser et al., 2002)	Water Swallowing	8	8
(E et al., 2003)	Lip movement	7	18
(Martin et al., 2004)	Voluntary Saliva Swallow	14	15
	Voluntary Tongue Elevation	14	23
(Martin et al., 2001)	Naïve saliva swallowing	14	6
	Voluntary saliva swallowing	14	6
	Water bolus swallowing	14	9
(Ogura et al., 2012)	Lip pursing/stretching	8	7
	Tongue Protrusion	8	5
	Lateral Tongue movement	8	13
(Fesl et al., 2003)	Tongue Movement vs Rest	11	8
(Watanabe et al., 2004)	Tongue touches left tooth vs Rest	24	18
	Tongue touches right Tooth vs Rest	24	17
	Tongue retraction vs Rest	24	11
(Grabski et al., 2011)	Tongue vs Rest	13	20
	Jaw muscle vs Rest	13	21
	Lips vs Rest	13	20
(Lotze et al., 2000b)	Lip pursing vs Rest	7	2
	Tip of Tongue vs Rest	7	2
(Lotze et al., 2000a)	Lips vs Rest	30	2
(M et al., 2002)	Tongue	9	12
	Lips	9	17
(Suzuki et al., 2003)	Swallowing vs no swallowing (Corfield et al., 1999)	11	5
(Corfield et al., 1999)	Tongue contraction	8	17
(Martin et al., 2007)	Water swallow vs Rest	8	24
(Brown et al., 2008)	Lips vs Fixation	16	15
	Tongue movement vs Fixation	16	11
(Lowell et al., 2008)	Overt swallowing vs Rest	14	34

## References (including studies used for movement tasks meta-analysis)

- ARAMAKI, Y., HONDA, M., OKADA, T. & SADATO, N. 2006. Neural correlates of the spontaneous phase transition during bimanual coordination. *Cerebral cortex*, 16, 1338-1348.
- ASTAFIEV, S. V., SHULMAN, G. L., STANLEY, C. M., SNYDER, A. Z., VAN ESSEN, D. C. & CORBETTA, M. 2003. Functional organization of human intraparietal and frontal cortex for attending, looking, and pointing. *Journal of Neuroscience*, 23, 4689-4699.
- BLATOW, M., REINHARDT, J., RIFFEL, K., NENNIG, E., WENGENROTH, M. & STIPPICH, C. 2011. Clinical Functional MRI of Sensorimotor Cortex Using Passive Motor and Sensory Stimulation at 3 Tesla. *Journal of Magnetic Resonance Imaging*, 34, 429-437.
- BRISTOW, D., FRITH, C. D. & REES, G. 2005. Two distinct neural effects of blinking on human visual processing. *NeuroImage*, 27, 136-145.
- BROWN, M. R. G., GOLTZ, H. C., VILIS, T., FORD, K. A. & EVERLING, S. 2006. Inhibition and generation of saccades: Rapid event-related fMRI of prosaccades, antisaccades, and nogo trials. *NeuroImage*, 33, 644-659.
- BROWN, S., NGAN, E. & LIOTTI, M. 2008. A larynx area in the human motor cortex. *Cerebral cortex*, 18, 837-845.
- CICCARELLI, O., TOOSY, A. T., MARSDEN, J. E., WHEELER-KINGSHOTT, C. M., MILLER, D. H., MATTHEWS, P. M. & THOMPSON, A. J. 2006. Functional response to active and passive ankle movements with clinical correlations in patients with primary progressive multiple sclerosis. *Journal of Neurology*, 253, 882-891.
- CICCARELLI, O., TOOSY, A. T., MARSDEN, J. F., WHEELER-KINGSHOTT, C. M., SAHYOUN, C., MATTHEWS, P. M., MILLER, D. H. & THOMPSON, A. J. 2005. Identifying brain regions for integrative sensorimotor processing with ankle movements. *Experimental Brain Research*, 166, 31-42.
- CONNOLLY, J. D., GOODALE, M. A., DESOUZA, J. F., MENON, R. S. & VILIS, T. 2000. A comparison of frontoparietal fMRI activation during anti-saccades and anti-pointing. *Journal of neurophysiology*, 84, 1645-1655.
- CORBETTA, M., AKBUDAK, E., CONTURO, T. E., SNYDER, A. Z., OLLINGER, J. M., DRURY, H. A., LINENWEBER, M. R., PETERSEN, S. E., RAICHLE, M. E., VAN ESSEN, D. C. & SHULMAN, G. L. 1998. A common network of functional areas for attention and eye movements. *Neuron*, 21, 761-773.
- CORFIELD, D. R., MURPHY, K., JOSEPHS, O., FINK, G. R., FRACKOWIAK, R. S. J., GUZ, A., ADAMS, L. & TURNER, R. S. 1999. Cortical and subcortical control of tongue movement in humans: a functional neuroimaging study using fMRI. *Journal of Applied Physiology*, 86, 1468-1477.
- CREEM-REGEHR, S. H. & LEE, J. N. 2005. Neural representations of graspable objects: Are tools special? *Cognitive Brain Research*, 22, 457-469.
- CUNNINGTON, R., WINDISCHBERGER, C., ROBINSON, S. & MOSER, E. 2006. The selection of intended actions and the observation of others' actions: A time-resolved fMRI study. *NeuroImage*, 29, 1294-1302.
- DHAMALA, M., PAGNONI, G., WIESENFELD, K., ZINK, C. F., MARTIN, M. & BERNIS, G. S. 2003. Neural correlates of the complexity of rhythmic finger tapping. *NeuroImage*, 20, 918-926.
- DIMITROVA, A., DE GREIFF, A., SCHOCH, B., GERWIG, M., FRINGS, M., GIZEWSKI, E. R. & TIMMANN, D. 2006. Activation of cerebellar nuclei comparing finger, foot and tongue movements as revealed by fMRI. *Brain Research Bulletin*, 71, 233-241.
- DOBKIN, B. H., FIRESTINE, A., WEST, M., SAREMI, K. & WOODS, R. 2004. Ankle dorsiflexion as an fMRI paradigm to assay motor control for walking during rehabilitation. *NeuroImage*, 23, 370-381.
- DROBYSHEVSKY, A., BAUMANN, S. B. & SCHNEIDER, W. 2006. A rapid fMRI task battery for mapping of visual, motor, cognitive, and emotional function. *NeuroImage*, 31, 732-744.

- E, G., S, L., B, P. J., T, D. M. S., F, M. J., F, P., Y, A., D, L. B. & C, M. 2003. Foot, hand, face and eye representation in the human striatum. *Cerebral cortex*, 13, 162-169.
- ETTINGER, U., FFYTCH, D. H., KUMARI, V., KATHMANN, N., REUTER, B., ZELAYA, F. O. & WILLIAMS, S. C. R. 2008. Decomposing the neural correlates of antisaccade eye movements using event-related fMRI. *Cerebral cortex*, 18, 1148-1159.
- FESL, G., MORIGGL, B., SCHMID, U. D., NAIDICH, T. P., HERHOLZ, K. & YOUSRY, T. A. 2003. Inferior central sulcus: Variations of anatomy and function on the example of the motor tongue area. *NeuroImage*, 20, 601-610.
- FORN, C., BARROS-LOSCERTALES, A., ESCUDERO, J., BENLLOCH, V., CAMPOS, S., ANTONIA PARCET, M. & AVILA, C. 2007. Compensatory activations in patients with multiple sclerosis during preserved performance on the auditory N-back task. *Human brain mapping*, 28, 424-430.
- FRASER, C., POWER, M., HAMDY, S., ROTHWELL, J., HOBDA, D., HOLLANDER, I., TYRELL, P., HOBSON, A., WILLIAMS, S. & THOMPSON, D. 2002. Driving plasticity in human adult motor cortex in associated with improved motor function after brain injury. *Neuron*, 34, 831-840.
- GAGNON, D., O'DRISCOLL, G. A., PETRIDES, M. & PIKE, G. B. 2002. The effect of spatial and temporal information on saccades and neural activity in oculomotor structures. *Brain : a journal of neurology*, 125, 123-139.
- GERARDIN, E., LEHERICY, S., POCHON, J. B., DU MONTCEL, S. T., MANGIN, J. F., POUPON, F., AGID, Y., LE BIHAN, D. & MARSAULT, C. 2003. Foot, hand, face and eye representation in the human striatum. *Cerebral cortex*, 13, 162-169.
- GRABSKI, K., LAMALLE, L., VILAIN, C., SCHWARTZ, J. L., VALLEE, N., TROPRES, I., BACIU, M., LE BAS, J. F. & SATO, M. 2011. Functional MRI assessment of orofacial articulators: Neural correlates of lip, jaw, larynx, and tongue movements. *Human brain mapping*, 0, 0-0.
- HANAKAWA, T., DIMYAN, M. A. & HALLETT, M. 2008. Motor planning, imagery, and execution in the distributed motor network: A time-course study with functional MRI. *Cerebral cortex*, 18, 2775-2788.
- HANAKAWA, T., IMMISCH, I., TOMA, K., DIMYAN, M. A., VAN GELDEREN, P. & HALLETT, M. 2003. Functional properties of brain areas associated with motor execution and imagery. *Journal of neurophysiology*, 89, 989-1002.
- HEIDE, W., BINKOFSKI, F., SEITZ, R. J., POSSE, S., NITSCHKE, M. F., FREUND, H. J. & KOMPFF, D. 2001. Activation of frontoparietal cortices during memorized triple-step sequences of saccadic eye movements: An fMRI study. *European Journal of Neuroscience*, 13, 1177-1189.
- HSIEH, L., YOUNG, R. A., BOWYER, S. M., MORAN, J. E., GENIK, I. R. J., GREEN, C. C., CHIANG, Y. R., YU, Y. J., LIAO, C. C. & SEAMAN, S. 2009. Conversation effects on neural mechanisms underlying reaction time to visual events while viewing a driving scene: fMRI analysis and asynchrony model. *Brain Research*, 1251, 162-175.
- KAPRELI, E., ATHANASOPOULOS, S., PAPATHANASIOU, M., VAN HECKE, P., KELEKIS, D., PEETERS, R., STRIMPAKOS, N. & SUNAERT, S. 2007. Lower limb sensorimotor network: Issues of somatotopy and overlap. *Cortex*, 43, 219-232.
- KATSCHNIG, P., SCHWINGENSCHUH, P., JEHNA, M., SVEHLIK, M., PETROVIC, K., ROPELE, S., ZWICK, E. B., OTT, E., FAZEKAS, F., SCHMIDT, R. & ENZINGER, C. 2011. Altered functional organization of the motor system related to ankle movements in Parkinson's disease - Insights from functional MRI. *Movement Disorders*, 26, S245-S245.
- KIMMIG, H., GREENLEE, M. W., GONDAN, M., SCHIRA, M., KASSUBEK, J. & MERGNER, T. 2001. Relationship between saccadic eye movements and cortical activity as measured by fMRI: Quantitative and qualitative aspects. *Experimental Brain Research*, 141, 184-194.
- KIMMIG, H., GREENLEE, M. W., HUETHE, F. & MERGNER, T. 1999. MR-Eyetracker: A new method for eye movement recording in functional magnetic resonance imaging. *Experimental Brain Research*, 126, 443-449.
- KONEN, C. S., KLEISER, R., WITTSACK, H. J., BREMMER, F. & SEITZ, R. J. 2004. The encoding of saccadic eye movements within human posterior parietal cortex. *NeuroImage*, 22, 304-314.

- KOYAMA, M., HASEGAWA, I., OSADA, T., ADACHI, Y., NAKAHARA, K. & MIYASHITA, Y. 2004. Functional magnetic resonance imaging of macaque monkeys performing visually guided saccade tasks: Comparison of cortical eye fields with humans. *Neuron*, 41, 795-807.
- LEHERICY, S., BARDINET, E., TREMBLAY, L., VAN DE MOORTELE, P. F., POUCHON, J. B., DORMONT, D., KIM, D. S., YELNIK, J. & UGURBIL, K. 2006. Motor control in basal ganglia circuits using fMRI and brain atlas approaches. *Cerebral cortex*, 16, 149-161.
- LOTZE, M., ERB, M., FLOR, H., HUELSMANN, E., GODDE, B. & GRODD, W. 2000a. fMRI evaluation of somatotopic representation in human primary motor cortex. *NeuroImage*, 11, 473-481.
- LOTZE, M., SEGGEWIES, G., ERB, M., GRODD, W. & BIRBAUMER, N. 2000b. The representation of articulation in the primary sensorimotor cortex. *Neuroreport*, 11, 2985-2989.
- LOWELL, S. Y., POLETTI, C. J., KNORR-CHUNG, B. R., REYNOLDS, R. C., SIMONYAN, K. & LUDLOW, C. L. 2008. Sensory stimulation activates both motor and sensory components of the swallowing system. *NeuroImage*, 42, 285-295.
- LUNA, B., THULBORN, K. R., STROJWAS, M. H., MCCURTAIN, B. J., BERMAN, R. A., GENOVESE, C. R. & SWEENEY, J. A. 1998. Dorsal cortical regions subserving visually guided saccades in humans: An fMRI study. *Cerebral cortex*, 8, 40-47.
- M, R., M, K. & J, H. H. 2002. Functional magnetic resonance imaging for the evaluation of the motor system: Primary and secondary brain areas in different motor tasks. *Stereotactic and functional neurosurgery*, 78, 3-16.
- MACINTOSH, B. J., MRAZ, R., BAKER, N., TAM, F., STAINES, W. R. & GRAHAM, S. J. 2004. Optimizing the experimental design for ankle dorsiflexion fMRI. *NeuroImage*, 22, 1619-1627.
- MALLOL, R., BARROS-LOSCERTALES, A., LOPEZ, M., BELLOCH, V., PARCET, M. A. & AVILA, C. 2007. Compensatory cortical mechanisms in Parkinson's disease evidenced with fMRI during the performance of pre-learned sequential movements. *Brain Research*, 1147, 265-271.
- MARTIN, R., BARR, A., MACINTOSH, B., SMITH, R., STEVENS, T., TAVES, D., GATI, J., MENON, R. & HACHINSKI, V. 2007. Cerebral cortical processing of swallowing in older adults. *Experimental Brain Research*, 176, 12-22.
- MARTIN, R. E., GOODYEAR, B. G., GATI, J. S. & MENON, R. S. 2001. Cerebral cortical representation of automatic and volitional swallowing in humans. *Journal of neurophysiology*, 85, 938-950.
- MARTIN, R. E., MACINTOSH, B. J., SMITH, R. C., BARR, A. M., STEVENS, T. K., GATI, J. S. & MENON, R. S. 2004. Cerebral areas processing swallowing and tongue movement are overlapping but distinct: A functional magnetic resonance imaging study. *Journal of neurophysiology*, 92, 2428-2443.
- MATSUDA, T., MATSUURA, M., OHKUBO, T., OHKUBO, H., MATSUSHIMA, E., INOUE, K., TAIRA, M. & KOJIMA, T. 2004. Functional MRI mapping of brain activation during visually guided saccades and antisaccades: Cortical and subcortical networks. *Psychiatry research*, 131, 147-155.
- MCDOWELL, J. E., BROWN, G. G., PAULUS, M. P., MARTINEZ, A., STEWART, S. E., DUBOWITZ, D. J. & BRAFF, D. L. 2002. Neural correlates of refixation saccades and antisaccades in normal and schizophrenia subjects. *Biological psychiatry*, 51, 216-223.
- MERRIAM, E. P., COLBY, C. L., THULBORN, K. R., LUNA, B., OLSON, C. R. & SWEENEY, J. A. 2001. Stimulus-response incompatibility activates cortex proximate to three eye fields. *NeuroImage*, 13, 794-800.
- MILNER, T. E., FRANKLIN, D. W., IMAMIZU, H. & KAWATO, M. 2007. Central control of grasp: Manipulation of objects with complex and simple dynamics. *NeuroImage*, 36, 388-395.
- MOSTOFSKY, S. H., POWELL, S. K., SIMMONDS, D. J., GOLDBERG, M. C., CAFFO, B. & PEKAR, J. J. 2009. Decreased connectivity and cerebellar activity in autism during motor task performance. *Brain : a journal of neurology*, 132, 2413-2425.
- MOSTOFSKY, S. H., RIMRODT, S. L., SCHAFFER, J. G. B., BOYCE, A., GOLDBERG, M. C., PEKAR, J. J. & DENCKLA, M. B. 2006. Atypical motor and sensory cortex activation in attention-deficit/hyperactivity disorder: A functional magnetic resonance imaging study of simple sequential finger tapping. *Biological psychiatry*, 59, 48-56.



- MÜLLER, R. A., KLEINHANS, N., KEMMOTSU, N., PIERCE, K. & COURCHESNE, E. 2003. Abnormal variability and distribution of functional maps in autism: An fMRI study of visuomotor learning. *American Journal of Psychiatry*, 160, 1847-1862.
- NELLES, G., DE GREIFF, A., PSCHERER, A. & ESSER, J. 2009. Age-related differences of saccade induced cortical activation. *Neuroscience letters*, 458, 15-18.
- NITSCHKE, M. F., BINKOFSKI, F., BUCCINO, G., POSSE, S., ERDMANN, C., KOMPFF, D., SEITZ, R. J. & HEIDE, W. 2004. Activation of cerebellar hemispheres in spatial memorization of saccadic eye movements: An fMRI study. *Human brain mapping*, 22, 155-164.
- OGURA, E., MATSUYAMA, M., GOTO, T. K., NAKAMURA, Y. & KOYANO, K. 2012. Brain activation during oral exercises used for dysphagia rehabilitation in healthy human subjects: A functional magnetic resonance imaging study. *Dysphagia*, 0, 0-0.
- PERRY, R. J. & ZEKI, S. 2000. The neurology of saccades and covert shifts in spatial attention: An event-related fMRI study. *Brain : a journal of neurology*, 123, 2273-2288.
- POSTLE, B. R. & HAMIDI, M. 2007. Nonvisual codes and nonvisual brain areas support visual working memory. *Cerebral cortex*, 17, 2151-2162.
- RIECKER, A., ACKERMANN, H., WILDGRUBER, D., MEYER, J., DOGIL, G., HAIDER, H. & GRODD, W. 2000. Articulatory/phonetic sequencing at the level of the anterior perisylvian cortex: A functional magnetic resonance imaging (fMRI) study. *Brain and Language*, 75, 259-276.
- RIECKER, A., GROSCHEL, K., ACKERMANN, H., STEINBRINK, C., WITTE, O. & KASTRUP, A. 2006. Functional significance of age-related differences in motor activation patterns. *NeuroImage*, 32, 1345-1354.
- ROTTE, M., KANOWSKI, M. & HEINZE, H. J. 2002. Functional magnetic resonance imaging for the evaluation of the motor system: Primary and secondary brain areas in different motor tasks. *Stereotactic and functional neurosurgery*, 78, 3-16.
- SAHYOUN, C., FLOYER-LEA, A., JOHANSEN-BERG, H. & MATTHEWS, P. M. 2004. Towards an understanding of gait control: brain activation during the anticipation, preparation and execution of foot movements. *NeuroImage*, 21, 568-575.
- SIMON, O., KHERIF, F., FLANDIN, G., POLINE, J. B., RIVIERE, D., MANGIN, J. F., LE BIHAN, D. & DEHAENE, S. 2004. Automatized clustering and functional geometry of human parietofrontal networks for language, space, and number. *NeuroImage*, 23, 1192-1202.
- SIMON, O., MANGIN, J. F., COHEN, L. G., LE BIHAN, D. & DEHAENE, S. 2002. Topographical layout of hand, eye, calculation, and language-related areas in the human parietal lobe. *Neuron*, 33, 475-487.
- STIPPICH, C., BLATOW, M., DURST, A., DREYHAUPT, J. & SARTOR, K. 2007. Global activation of primary motor cortex during voluntary movements in man. *NeuroImage*, 34, 1227-1237.
- SUZUKI, M., ASADA, Y., ITO, J., HAYASHI, K., INOUE, H. & KITANO, H. 2003. Activation of cerebellum and basal ganglia on volitional swallowing detected by functional magnetic resonance imaging. *Dysphagia*, 18, 71-77.
- VAN DUINEN, H., RENKEN, R., MAURITS, N. M. & ZIJDEWIND, I. 2008. Relation between muscle and brain activity during isometric contractions of the first dorsal interosseus muscle. *Human brain mapping*, 29, 281-299.
- VILLIGER, M., ESTEVEZ, N., HEPP-REYMOND, M. C., KIPER, D., KOLLIAS, S. S., ENG, K. & HOTZ-BOENDERMAKER, S. 2013. Enhanced Activation of Motor Execution Networks Using Action Observation Combined with Imagination of Lower Limb Movements. *PLoS one*, 8.
- WATANABE, J., SUGIURA, M., MIURA, N., WATANABE, Y., MAEDA, Y., MATSUE, Y. & KAWASHIMA, R. 2004. The human parietal cortex is involved in spatial processing of tongue movement -- an fMRI study. *NeuroImage*, 21, 1289-1299.
- WILSON, S. M., SAYGIN, A. P., SERENO, M. I. & IACOBONI, M. 2004. Listening to speech activates motor areas involved in speech production. *Nature Neuroscience*, 7, 701-702.

YOO, S. S., WEI, X., DICKEY, C. C., GUTTMANN, C. R. G. & PANYCH, L. P. 2005. Long-term reproducibility analysis of fMRI using hand motor task. *International Journal of Neuroscience*, 115, 55-77.