Chiara Fini's CV

Name: Chiara Fini E-mail: chiara.fini@uniroma1.it

Research experience

Education

April 2012 Licensed psychologist, University of Chieti, Italy

2011-2014 PhD Program Student School in "Functional Neuroimaging: from the molecular biology to the cognitive science. "Università degli studi G. D'Annunzio, Dipartimento di Psicologia, Chieti, Italy. Supervisor: Prof Giorgia Committeri Awarded PhD (Psychobiology) in April 2014 Thesis title: *"The body in the extrapersonal space"*.

Awarded MSc (Neuropsychology and functional recover over the life) in July 2009, at University of Bologna, Italy. Thesis title: *"Individual differences in the self-other relation: an experiment of cognitive neuroscience"*. Supervisor: Prof Andrea Serino. Final grade: 110/110 cum laude.

Awarded BSc (Clinical Psychology) in December 2006. University of Florence, Italy.

Academic Positions

May 2018-present Post Doc at the Department of Dynamic and Clinical Psychology, University of Rome, LaSapienza, Italy. Research project: "*Abstract concepts, language and sociality from an embodied perspective*". Advisor: Prof Anna Borghi

January 2015-January 2018 Post Doc at the Department of Experimental Clinical and Health Psychology, Ghent University, Belgium. Research project: "*The influence of control on emotional action tendencies*". Advisor: Prof Agnes Moors

April 2014 – December 2014 Post-doc research fellowship, Department of Experimental Psychology, Ghent University, Belgium. Research project: *"The body in the extrapersonal space"*. Advisors: Prof Giorgia Committeri/Prof Marcel Brass

Other Research Experiences

November 2012- April 2014: PhD visiting student at the Department of Experimental Psychology Ghent University, Belgium Research projects: "*The body in the extrapersonal space*". Advisor: Prof Marcel Brass

January 2012 – February 2012 Visiting PhD student at the Royal Holloway, London, England Research projects: "*The role of racial bias and the effect of multisensory processing in somatosensory remapping*".

Advisor: Prof Manos Tsakiris September 2009 - December 2010. Internship at the Centro di Neuroscience Cognitive University of

Bologna, Italy

Main activities: Data collection and analysis for research projects on visuo-tactile integration. Supervisor: Prof Andrea Serino

Journal Papers

- 1. Moors A., **Fini C.**, Everaert T., Bardi L., Brass M., Kuppens P. (2019) "The role of appraisal versus goal- directed processes in fight and flight tendencies measured with Motor Evoked Potentials after Transcranial Magnetic Stimulation" *PloS one*, *14*(5), e0217266.
- 2. Borghi A.M, **Fini, C.**, "Theories and explanations in psychology" Specialty Grand Challenge, *Front. Psychol. Theoretical and Philosophical Psychology*
- 3. Fini, C., Borghi A.M "Sociality to reach objects and to catch meaning" Frontiers in psychology
- 4. Fini, C., Verbeke, P., Sieber, S., Moors, A., Brass, M., & Genschow, O. (2018). The influence of threat on perceived spatial distance to out-group members. *Psychological research*, 1-8.
- 5. Fini, C., Bardi, L., Troje, N. F., Committeri, G., & Brass, M. (2017). Priming biological motion changes extrapersonal space categorization. *Acta psychologica*, *172*, 77-83.
- 6. **Fini, C**., Bardi, L., Epifanio, A., Committeri, G., Moors, A., & Brass, M. (2017). Transcranial direct current stimulation (tDCS) of the inferior frontal cortex affects the "social scaling" of extrapersonal space depending on perspective-taking ability. *Experimental brain research*, 235(3), 673-679.
- Fini, C., Committeri, G., Müller, B. C., Deschrijver, E., & Brass, M. (2015). How watching Pinocchio movies changes our subjective experience of extrapersonal space. *PloS one*, 10(3), e0120306.
- 8. **Fini**, C., Brass, M., & Committeri, G. (2015). "Social scaling of extrapersonal space: Target objects are judged as closer when the reference frame is a human agent with available movement potentialities." *Cognition*, 134, 50-56.
- 9. Fini, C., Costantini, M., & Committeri, G. (2014). Sharing space: the presence of other bodies extends the space judged as near. *PloS one*, *9*(12), e114719
- 10. Fini, C., Cardini, F., Tajadura-Jiménez, A., Serino, A., & Tsakiris, M. (2013). "Embodying an outgroup: the role of racial bias and the effect of multisensory processing in somatosensory remapping." *Frontiers in behavioral neuroscience*, 7.

Papers submitted/in preparation

- 11. Committeri G., Sebastiani V., De Pasquale F., Stocchi M., **Fini C**. "The more old people are active the more they perceive body-centered space as accessible" (*submitted*).
- 12. Fisher M., Fini C., Brass M., Moors A., Early Approach and Avoidance Tendencies can be Goaldirected: Support from a Transcranial Magnetic Stimulation study (*submitted*).
- 13. Fini, C., Bardi L., Brass, M., Moors, A. "Support from a TMS/MEP study for a direct link between positive/negative stimuli and approach/avoidance tendencies" (*in preparation*).
- 14. Zannino G., Fini C., Benassi M., Carlesimo A., Borghi A.M. "Articulatory Suppression slows down the processing of abstract but not concrete concepts" (*in preparation*).
- 15. Fini C., Da Rold F., Liorni G., Borghi A.M, Tummolini L. "The sense of ownership and the extrapersonal space categorization" (manuscript in preparation).
- 16. Ghandhari M., **Fini C**., Federico Darold, Anna M. Borghi "Concrete and abstract action sentences: a crosscultural study" (*manuscript in preparation*).

Short Articles

1. C. Fini (2016) "Lo spazio vicino al proprio e all'altrui corpo" InMind

Book chapters

Committeri G. & **Fini C**. (2016) "Body presence and space perception" in "Theatre and Cognitive Neuroscience" (pp 23-34) London, Bloomsbury academic book

Borghi A.M., **Fini C.**, Tummolini L. (in preparation) "Concepts and social metacognition: sociality from the inside Embodied Psychology: Thinking, Feeling, and Acting Springer

Selected Abstracts from International Conferences

- 1. Fini C., Cardini C., Tajadura Imenez A., Serino A. Tsakiris M. "Implicit and explicit prejudice is remapped in the somatosensory cortex". Congresso Italiano di Psicologia (AIP), Catania, 09/2011.
- Fini C., Costantini M., Committeri G. "Near space is extended by the presence of another individual" 18th Conference of the European Society for Cognitive Psychology, (ESCOP), Budapest, Hungary 29/08 - 1/09 2013.
- **3.** Fini, C., Bardi L., Troje, N., Committeri, G., Brass, M. "Simulation of walking re-shapes extrapersonal space categorization."(European Conference of Visual Perception (ECVP), Belgrade, Serbia" 24-28/09 2014.
- 4. Fini C., Bardi L., Epifanio A, Committeri G., Moors A., Brass M., "tDCS of the Inferior Frontal Cortex affects the social scaling of extrapersonal space depending on perspective taking ability" 19th Conference of the European Society for Cognitive Psychology, (ESCOP), Paphos, Cyprus 17/09 -20/09 2015.
- 5. Fini C., C Spaccasassi, G Committeri, The "Near extrapersonal space"(NES): A subjective space affected by the individual's physical and personality characteristics *COGNITIVE PROCESSING* 16 (2015): S88-S88, (ICSC) 07/09-11/09 Rome, Italy.
- 6. Fini, C., Everaert T., Bardi, L., Brass M., Moors, A., "Do we always approach positive and avoid negative stimuli?" Society for Neuroscience (SFN), San Diego, CA, 12/11-16/112016.
- 7. Fini, C., Bardi, L., Brass M., Moors "Support from a TMS/MEP study for a direct link between positive/negative stimuli and approach/avoidance tendencies" International conference for cognitive neuroscience (ICON), Amsterdam, Netherland, 5/08-8/08 2017
- 8. Fini, C., Zannino G., Benassi M., Carlesimo A., Borghi A.M "Articulatory Suppression slows down the processing of abstract but not concrete concepts" (ICSP) Paris, France 07/03-09/03

Talks

- 1. "Perception and Action Potentialities: Evidences in the extrapersonal space", Congresso Italiano di Psicologia, Chieti, Italy 09/2012.
- 2. "Inferring the other's action influences our space perception" Summer school in Cognitive and Affective Neuroscience ScoNe, Sissa, Trieste, Italy 15-26 /07 2013
- 3. "The NES, a subjective, motor space" 22/01/2013 Department of Experimental Psychology, Ghent, Belgium.
- 4. "If you run with me, does my performance improve?" 14/11/2014 Universitair Sportcentrum Ghent, Belgium (GUSB)
- 5. "The role of control and stimulus valence on action tendencies: TMS/MEP evidences" KULeuven, 13/04/2016 Belgium
- 6. "The other and the spatial distance" 14/07/2017 Istituto Italiano di Tecnologia, Genova, Italy
- 7. "The body in the extrapersonal space" 24/10/2019 Dipartimento di Psicologica Dinamica e Clinica, La Sapienza, Roma
- 8. "Mechanisms implicated in their processing and the effect of the abstract concept of ownership on the environment representation." Workshop Abstract concepts differ: numbers, emotions and dangerous things 29/03/2019 Dipartimento di Psicologica Dinamica e Clinica, La Sapienza, Rome
- 9. "Sociality: from affordances to abstract concepts" Human Brain Mapping Conference, Rome 11/06/19

Teaching activity

2011-2017. Training and supervision of 12 undergraduate students (Filomena Ettorre, Monica Di Paola, Angela Diario, Alessandra Epifanio, Chiara Spaccasassi, Elien Ryan, Giulia Liorni, Flaminio Arena, Giovanna Massari, Emilia D'abundo, Ilenia Falcinelli, Pasquale Romano) and 1 internship student (Angela Moncelli).

Lecture in Psychology of Intercultural Communication at Unicollege Firenze (2/12/19-31/1/20)

Technical skills

Expert utilization of Transcranial Magnetic Stimulation (TMS) (single pulse technique, repetitive technique, neuro-navigation) (TMS) and Transcranial Direct Current Stimulation (tDCS). Expert utilization of software relevant for research in psychology: Matlab, EEGLAB, Statistica, SPSS, R, E- prime, Presentation, Affect, SuperLab.

Courses

Summer school in Social and Affective Neuroscience ScoNe Sissa, 15/26- 07 2013, Trieste, Italy. Training to use a Kinarm robot 27/28 -04 KULeuven, Belgium

Diploma in Coursera: "Principles of fMRI"

Editorial board: Assistant Specialty Chief Editor of Theoretical and Philosophical Psychology

Peer-Review Activity: Cognition, Plos ONE, Frontiers in Human Psychology, Developmental Cognitive Neuroscience, Psychological Research, Neuroimage

References

Prof. Anna Borghi

Department of Dynamic and Clinical Psychology at Sapienza University of Rome and associate researcher at ISTC-CNR Rome, anna.borghi@uniroma1.it

Prof. Agnes Moors

Research Unit for Quantitative psychology and Individual differences; Centre for Social and Cultural Psychology, University of Leuven, Belgium agnes.moors@kuleuven.be

Prof. Marcel Brass

Department of Experimental Psychology, Ghent University, Ghent, Belgium marcel.brass@ugent.be

Prof. Giorgia Committeri

Laboratory of Neuropsychology and Cognitive Neuroscience, Department of Neuroscience, Imaging and Clinical Sciences, University G. d'Annunzio, and ITAB, Foundation G. d'Annunzio, Chieti, Italy gcommitteri@unich.it

Research interests

My main research interests ranges from multisensory integration, spatial cognition and action tendencies. In the field of multisensory integration, I studied a phenomena called Visual Remapping of Touch (VRT, Serino et al., 2008), that consists in an increased accuracy in the detection of subthreshold tactile stimuli delivered on the checks during the observation of the same touch on another face. We took advantage of this multimodal effect to study the proprioceptive resonance towards outgroup vs ingroup faces. Moreover we implemented the Interpersonal Multisensory Stimulation (see Cardini et al., 2013) in order to manipulate the tendency to remap less the observed touch on the outgroup face (Fini, et al., 2013).

During my 3-years PhD program at the University of Chieti (Italy), I developed a line of research that can be situated between the spatial cognition and embodied cognition, that aims to investigate the contribution of the bodily resources, action planning, motor simulation to the perception of the extrapersonal space (beyond the reaching distance). Under the supervision of Professor Giorgia Committeri, I exploited a new psychophysical method to define a portion of extrapersonal space that subjects perceive as "Near/accessible" as function of our own and other's bodily resources. Specifically, I was focused in studying how our own motor resources affect the extrapersonal space categorization and also the social counterpart of this phenomena: how a human body vs an object, adopted or not as allocentric reference frame, can affect our spatial categorization in a large environment (Fini et al. 2014, 2015a, 2015b, 2016a, 2016b, 2017).

After my PhD, I moved to the University of Leuven (Belgium) where I have been appointed as a post-doc fellow.

In collaboration with Professors Agnes Moors and Prof. Marcel Brass (Gent University, Belgium), I had the opportunity to extend my research interests to the study of the neural mechanisms of action tendencies, i.e. approach/avoid response tendencies. In this context, I had the chance to gather advanced skills in the use of brain stimulation, and specifically transcranial Direct Current Stimulation (tDCS) and Transcranial Magnetic Stimulation (TMS). Recently, through the combination of TMS and Electro-physiological measures (Motor-Evoked Potentials-MEPs), I investigated the link between approach/avoid response tendencies and positive/negative stimuli. Our purpose was to obtain implicit measures of emotional actions, thus to directly relate the motoric readiness with the contextual variables (Fini et al., in preparation).

At the moment, I am working as PostDoctoral Researcher at the University of Rome, LaSapienza under the supervision of Professor Anna Borghi. I am now collecting kinematic and neurophysiological (EEG technique) evidences about the acquisition and processing of abstract concepts.

Overall, my theoretical interests concentrate within the Field of the Embodied Cognition, ranging from the perceptual processing of space/objects to the language acquisition, with a particular attention to the philosophical perspective of the Theory of the Words as Social Tools WAT (Borghi et al., 2017, 2018). Such theory sustains that abstract concepts would need to be processed through the inner language. Inner language could help participants to re-explain to themselves the meaning of the word, to keep information active in working memory, and to prepare themselves to ask information to more competent people.