Revised plan for teaching Sapienza April – May 2018

Visiting professor Randi Starrfelt, University of Copenhagen

Thursday April 26th 14 – 16. Introduction to cognitive neuropsychology: From patient studies to cognitive models.

<u>Task in class</u>: Be prepared to talk for one minute about the cognitive function you find most interesting at the moment.

Suggested readings:

- Caramazza, A., & Coltheart, M. (2006) Cognitive neuropsychology twenty years on. *Cognitive Neuropsychology*, *23*; 3-12.
- Laws, K.R. (2005). Illusions of normality: A methodological critique of category specific naming. *Cortex: 41,* 842-851.
- Leff & Starrfelt (2014) *Alexia: Diagnosis, treatment, and theory.* Chap 5. Alexia theory and therapies: A heuristic.

Thursday May 3rd 12 – 14: The evolution of cognitive neuropsychology. Examples from patient studies of reading disorders.

Suggested readings:

- Starrfelt, R. (2007). Selective alexia and agraphia sparing numbers-a case study. *Brain and Language*, *102*, 52-63.
- Starrfelt, R., Habekost, T., & Gerlach, C. (2010). Visual processing in pure alexia: A case study. *Cortex, 46*, 242-255.
- Starrfelt, R., Habekost, T., & Leff, A. P. (2009). Too little, too late: reduced visual span and speed characterize pure alexia. *Cerebral Cortex, 19*, 2880-2890.
- Starrfelt, R., & Behrmann, M. (2011). Number reading in pure alexia—A review. *Neuropsychologia*, *49*(9), 2283-2298.

Also read the papers from April 26th

Monday May 7th 10.30-13-30: Workshop on methodology: Experimental design and control, control groups, and single case statistics.

- 1) Revisit discussion points missed on previous seminars (day 1 and 2)
- <u>2)</u> <u>Task in class group assignment:</u> Select a cognitive function that may be affected following brain injury. Find a research question that can be addressed using a single case approach. Discuss possible ways to address this question (experimental setup). Brief group presentation during class.

Please consider point 2 before this class

Monday 14th 10.30-13.30: Case studies and case series: Examples from the study of developmental prosopagnosia. (Hereunder group comparisons vs single case data; interpreting data from both sources).

Suggested readings:

- Schwartz, M. & Dell, G.S. (2010. Case series investigations in cognitive neuropsychology. *Cognitive Neuropsychology, 6;* 477-494.
- Gerlach, Klargaard & Starrfelt (2016). On the Relation between Face and Object Recognition in Developmental Prosopagnosia: No Dissociation but a Systematic Association. *PLOS One*, 11(10):e0165561
- Klargaard, Starrfelt, Petersen, & Gerlach (2016). Topographic processing in developmental prosopagnosia: Preserved perception but impaired memory of scenes. *Cognitive Neuropsychology (7-8):* 405-413.
- Starrfelt, Klargaard, Petersen, & Gerlach (2018). Reading in Developmental Prosopagnosia: Evidence for a Dissociation Between Word and Face Recognition. *Neuropsychology*, *32*; *138-147*.

Thursday May 17th 12 - 14: Cognitive neuropsychology in 2018.

Suggested readings:

- Price, C. (2018, in press). The evolution of cognitive models: From neuropsychology to neuroimaging and back. *Cortex.*
- Fischer Baum & Campana (2017). Neuroplasticity and the logic of cognitive neuropsychology. *Cognitive Neuropsychology, 34 (7-8).*
- Mahon, B. & Costa (2017). Theoretical and methodological issues for twenty-first century cognitive neuropsychology. *Cognitive Neuropsychology, 34 (7-8).* 395-396.
- <u>Closing discussion</u>: Is cognitive neuropsychology still important? Prepare at least one argument for or against, and prepare to enter discussion about why / why not.