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## Editorial

# Behavioural Neurology, a new section in cortex



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We are launching a new section of *Cortex*, dedicated to Cognitive and Behavioural Neurology (BN). BN has always been one of the key components of *Cortex*. [Cubelli and Della Sala \(2010\)](#) in their editorial conceptualized BN as the “descriptive” component of the term “neuro” in neuropsychology (as contrasted with the “object” of cognitive neuroscience and the “method” of cognitive neuropsychology). A definition of the “ingredients” characterizing BN which I, as former co-Editor in Chief of the journal *Behavioural Neurology*, particularly like, was provided in the editorial that appeared in the first issue of the journal in 1988:

“In addition to the conventional foundation stones of the neurosciences: neuroanatomy, neurophysiology and neurochemistry, ... (BN) is dependent on the practical skills of neuropsychology and social anthropology. It insists on the detailed history traditional to the psychiatric examination combined with the stringent methodical neurological examination beloved of the neurologist. The major advances in neuro-imaging now permit precise localization of structural lesions within the cerebral cortex without the need for post-mortem which has greatly facilitated the growth of interest in this area. In addition to acquiring these skills the behavioural neurologist must be, first and foremost, a compassionate physician who will be involved in the care and rehabilitation of patients with severe brain damage” ([Anonymous, 1988](#))

It's hard to improve on that description three decades later. Probably currently one would like to add molecular genomics (and a few other “omics”), and also develop the label into “cognitive and behavioral neurology”, but the spirit of this subdiscipline of clinical neurology is the same. While everybody would agree that neuropsychology started with clinical observations in neurological patients, nowadays perhaps it is less known that the renaissance of the study of brain and behavior in the sixties took largely place in neurological and neurosurgical departments in Italy (Ennio De Renzi), France

(Henry Hecaen, François Lhermitte), Germany (Klaus Poeck), UK (Macdonald Critchley) and the USA (Norman Geschwind), just to mention a few ([Della Sala & Grafman, 2014](#)). All these neurologists were involved in the creation of the International Neuropsychological Symposium, a unique forum of interdisciplinary collaboration and discussion ([Boller, 1998](#)).

While continuing to be a source of fundamental (some would say the most important) data for research in neuropsychology and cognitive neuroscience, BN remains primarily a clinical discipline, concerned with the diagnosis and management of patients with developmental, sporadic and inherited neurological and psychiatric disorders involving cognition, emotion and social behavior. The ambition of this new section of *Cortex* is to attract the best research papers in this area. The borders of this discipline are fuzzy, considering that *Cortex* is “devoted to the study of cognition and the relationship between the nervous system and mental processes, particularly as these are reflected in the behaviour of patients ...”. In particular, there will be some topic overlap with the Clinical Neuroanatomy section ([Catani & ffytche, 2010a, 2010b](#)). The focus of the latter section, however, is on the role of novel techniques in developing advanced anatomical inferences.

As a rule of thumb, authors considering a submission to the BN section will be subject to the same kinds of reviews that they would receive had they submitted their paper to any other section of the journal, but ideally the submission should have some relevance for diagnosis and/or care of patients affected by cognitive and behavioral disorders. This criterion will be applied to all submissions which will be considered if they provide information that is not only relevant for cognitive models, but also for clinical practice. A cursory browsing of recent papers published in *Cortex* indicates that several articles would satisfy this criterion ([Duffau, 2014](#); [Fountain et al., 2014](#); [Fraser et al., 2014](#); [Iidaka, 2015](#); [Li et al., 2014](#); [Marino et al., 2014](#); [Rao et al., 2014](#); [Schroeter et al., 2014](#); [Wrobel, Wiech, Forkmann, Ritter, & Bingel, 2014](#); [Yong et al., 2014](#)).

There is another consideration relevant to the decision to launch this new section of *Cortex*, i.e. that it is not always easy to find an adequate outlet to publish papers in this area. I myself had the experience of a paper that was considered “more appropriate for a clinical audience” by a cognitive neuroscience journal and “perhaps more suitable for a specialized neuropsychology audience” by a neurological one (of course I am open to the possibility that the paper itself may not have been very exciting). The large and increasing number of journals devoted to neurology and neuroscience could suggest that there is actually no dearth of possible choices for seeking publication. Unfortunately, many of these journals actually belong to the “dark side” (Butler, 2013) of the commendable open access movement, verging on the predatory and capitalizing on the ever inflated ego of authors. We hope to offer an opportunity that will be appreciated by the community of cognitive/behavioural neurologists. Interested authors should indicate their intention to submit to “**Cortex Behavioral Neurology**” in their cover letter.

## REFERENCES

- Anonymous. (1988). Editorial. *Behavioural neurology* (Vol. 1, pp. 1–2).
- Boller, F. (1998). History of the International Neuropsychological Symposium: a reflection of the evolution of a discipline. *Neuropsychologia*, 37, 17–26.
- Butler, D. (2013). The dark side of publishing. *Nature*, 495, 433–435.
- Catani, M., & ffytche, D. H. (2010a). New section: cortex clinical neuroanatomy. *Cortex*, 46, 1.
- Catani, M., & ffytche, D. H. (2010b). On ‘the study of the nervous system and behaviour’. *Cortex*, 46, 106–109.
- Cubelli, R., & Della Sala, S. (2010). The multiple meanings of “neuro” in neuropsychology. *Cortex*, 46(5), 703–711.
- Della Sala, S., & Grafman, J. (2014). Happy 50th anniversary cortex! *Cortex*, 50, 1–6.
- Duffau, H. (2014). The huge plastic potential of adult brain and the role of connectomics: new insights provided by serial mappings in glioma surgery. *Cortex*, 58, 325–337.
- Fountain, D. M., Schaer, M., Mutlu, A. K., Schneider, M., Debbané, M., & Eliez, S. (2014). Congenital heart disease is associated with reduced cortical and hippocampal volume in patients with 22q11.2 deletion syndrome. *Cortex*, 57, 128–142.
- Fraser, K. C., Meltzer, J. A., Graham, N. L., Leonard, C., Hirst, G., Black, S. E., et al. (2014). Automated classification of primary progressive aphasia subtypes from narrative speech transcripts. *Cortex*, 55, 43–60.
- Iidaka, T. (2015). Resting state functional magnetic resonance imaging and neural network classified autism and control. *Cortex*, 63, 55–67.
- Li, W., Antuono, P. G., Xie, C., Chen, G., Jones, J. L., Ward, B. D., et al. (2014). Aberrant functional connectivity in Papez circuit correlates with memory performance in cognitively intact middle-aged APOE4 carriers. *Cortex*, 57, 167–176.
- Marino, C., Scifo, P., Della Rosa, P. A., Mascheretti, S., Facoetti, A., Lorusso, M. L., et al. (2014). The DCDC2/intron 2 deletion and white matter disorganization: focus on developmental dyslexia. *Cortex*, 57, 227–243.
- Rao, J. A., Harrington, D. L., Durgerian, S., Reece, C., Mourany, L., Koenig, K., et al. (2014). Disruption of response inhibition circuits in prodromal Huntington disease. *Cortex*, 58, 72–85.
- Schroeter, M. L., Laird, A. R., Chwiesko, C., Deuschl, C., Schneider, E., Bzdok, D., et al. (2014). Conceptualizing neuropsychiatric diseases with multimodal data-driven meta-analyses – the case of behavioral variant frontotemporal dementia. *Cortex*, 57, 22–37.
- Wrobel, N., Wiech, K., Forkmann, K., Ritter, C., & Bingel, U. (2014). Haloperidol blocks dorsal striatum activity but not analgesia in a placebo paradigm. *Cortex*, 57, 60–73.
- Yong, K. X. X., Shakespeare, T. J., Cash, D., Henley, S. M. D., Warren, J. D., & Crutch, S. J. (2014). (Con)text-specific effects of visual dysfunction on reading in posterior cortical atrophy. *Cortex*, 57, 92–106.