

# Chapter 4

## From Neuropsychiatry to Social Cognition: A Journey with Berrios



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In 1999, thanks to Filiberto Fuentenebro and under the auspices of Tiburcio Angosto (Head of the Psychiatric Department in Vigo), we met Professor Berrios. During our initial conversations, Berrios suggested that we collaborate with Matilde Blanco, a young psychiatrist from Seville who had been working on the concept of alexithymia (Blanco 2003). Alongside Berrios, she had been developing an instrument to evaluate alexithymia and to compare this with the Toronto Alexithymia Scale [TAS] (Bagby et al. 1994), which was the gold standard at that time. We were happy to take on this project and received some of the materials from Matilde before setting off for England in September 2000.

At the beginning of the course, and in order to build connections and relationships within the community, Berrios organized a welcome party for his students together with colleagues from the University and hospital. At this party and in the weeks that followed, we got to know the small community of expatriates that, in one way or another, were working with Berrios. These included the Chilean Álvaro Barrera who was starting his doctoral thesis on language and schizophrenia (Barrera et al. 2008, 2009) and with whom we shared hours of clinics and learning

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experiences, Jose Villagran (Berrios et al. 2003) who lived in the same building as us by the riverbanks, Edith Pomarol- Clotet (Lorente-Rovira et al. 2007), Peter McKenna (Barrera et al. 2009), Mauricio Sierra (Sierra and Berrios 2000), Robert Dudas (Dudas et al. 2005), Areti Spyropoulou, Lazslo Antonio Avila, as well as AC and Suvarna Wagle (Berrios et al. 2001) who supervised us in the memory clinic. At this welcome party we also were introduced to John Hodges, professor of behavioural neurology, the nowadays-famous neuroscientist Facundo Manes, and Thomas Bak, the world expert in bilingualism and dementia. Through this meeting, we became close friends, people from different countries, with diverse backgrounds, and with different specialisms and academic interests.

After sorting permits and logistical issues, we began working with Matilde's research on alexithymia. We evaluated her instrument together with the TAS in a clinic for patients with inflammatory bowel diseases. We compared patients with Crohn's disease and ulcerative colitis with patients with irritable bowel syndrome with the aim of determining if alexithymia was a language problem or if it was a problem relating to awareness and sensations.

In addition to our research work, we also participated in the memory clinic that took place 1 day a week from 9 am to 5 pm. This was a multidisciplinary clinic where patients with memory complaints were assessed in turn by neurologists, neuropsychologists, and psychiatrists. At the end of the clinic, there would be the multidisciplinary team meeting chaired by Prof. Berrios. This meeting became a true 'master class' in that patients were discussed in depth from a variety of perspectives. Prof. Berrios would analyse the cases, drawing on historical and contemporary references alike and bringing things together in a scholarly fashion. An immense amount of neuropsychiatric knowledge was covered by the team including Huntington's disease (Berrios et al. 2001), Alzheimer's disease, Lewy body dementia, frontal dementias including at the time recently differentiated semantic dementia (Hodges et al. 1992), the differential diagnosis of transient amnesias, and Korsakov's syndrome and its history (Berrios 1998). In addition, the non-organic factors were explored in depth, and psychiatric and psychological contributors to patients' presentations were discussed such as mnesic hypochondria and functional cognitive disorganization (Berrios et al. 2000). In these multidisciplinary team meetings, discussions thus covered many topics and specialities. Berrios was an expert in statistics and able to guide discussions in this area as well as in linguistic pragmatics and the epistemology of science. We recall in particular his critical and premonitory appraisal of the non-selective use of fMRI as a research technique (Berrios 1999; Marková and Berrios 2009). His deep knowledge in all these areas, going back to the original concepts, the history behind them, and the individuals and societies associated with them, gave a rich uniqueness to the clinical meetings.

In addition to expanding our knowledge in psychiatry and learning about the usefulness of the Addenbrooke's Cognitive Examination (ACE), the memory clinic in Cambridge had at least two further important consequences.

First, it had significant international and cultural effects. One of us (García-Caballero) asked Prof. Berrios about the possibility of adapting and validating the ACE for the Galician population, in particular for those with a low level of schooling and a bilingual culture (García-Caballero et al. 2006a, b). The problem with adapting these neuropsychological tests is highly complex because it requires maintaining comparability across different cultures and languages. Problems that may appear trivial, such as the choice of a letter in order to explore phonemic fluency or the placement of the pentagons in the Mini-Mental State Examination [MMSE] (different in the original version in English with respect to its most widely used counterpart), could be considerable when tested in different languages; the results also depend on the educational level of the patient. During this phase of my thesis, Berrios also proposed, we translate, ‘Memory Disorders in Psychiatric Practice’ (Berrios and Hodges 2000). Published in English in 2000, our Spanish translation was released in 2003 (Berrios and Hodges 2003). The text was extremely challenging, especially the chapters written by Berrios himself or the ones for which he was a co-author. It was difficult to translate not only stylistically but also on account of the extensive searching for the canonical translations of classics in Spanish at a time when the Internet was not developed as it is now.

The second consequence of our Cambridge experience concerned our transition from neuropsychiatry to a broad and historically based study of social cognition in schizophrenia. Throughout the following years, we continued our work in the neuropsychiatric and neuropsychological domains (García-Caballero et al. 2006c, 2007), but it proved impossible to run a memory clinic as in Cambridge, where psychiatrists were able to work together with neurologists and neuropsychologists. Instead we had to return to psychiatry. Nevertheless, we were able to benefit from the experience in Cambridge. Through the study of emotional recognition and social cognition, drawing on the wider approaches we had learnt from neuropsychiatry and neuropsychology to understand such concepts, we have been able to advance in the field of social cognition (SC). We have since created an online rehabilitation program devised for severe mental disorders that comprises the main subdomains of SC, i.e. face, body language and prosodic emotional recognition, theory of mind, and attributional biases. The complete program [www.e-motionaltraining.com](http://www.e-motionaltraining.com) reached an agreement with Janssen in 2015 to be distributed free of charge throughout Spain, surpassing 1000 users in more than 60 therapeutic centres. In 2018, the program won the prestigious Albert Jovell award for Humanization in Medicine (Vázquez-Campo et al. 2016; Maroño Souto et al. 2018; Lado-Codesido et al. 2019).

Apart therefore from the advances that the Cambridge school has made at the psychopathological and epistemological levels, another part of its contribution has been at the neuropsychiatric and neuropsychological levels. In our case, this has borne fruit in domains such as rehabilitation in schizophrenia and other severe mental disorders. For this, and for his extreme generosity in supporting us, advising us, and welcoming us to the international and interdisciplinary community in Cambridge, we owe Prof. Berrios a gratitude beyond words.

## References

- Bagby, R. M., Parker, J. D. A., & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia scale—I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research, 38*, 23–32.
- Barrera, Á., McKenna, P. J., & Berrios, G. E. (2008). Two new scales of formal thought disorder in schizophrenia. *Psychiatry Research, 157*, 225–234.
- Barrera, Á., McKenna, P. J., & Berrios, G. E. (2009). Formal thought disorder, neuropsychology and insight in schizophrenia. *Psychopathology, 42*, 264–269.
- Berrios, G. E. (1998). Confabulations: A conceptual history. *Journal of the History of the Neurosciences, 7*, 225–241.
- Berrios, G. E. (1999). Towards a new descriptive psychopathology: A sine qua non for neurobiological research in psychiatry. *Brain Research Bulletin, 50*, 457–458.
- Berrios, G. E., & Hodges, J. (Eds.). (2000). *Memory disorders in psychiatric practice*. Cambridge: Cambridge University Press.
- Berrios, G. E., & Hodges, J. R. (Eds.). (2003). *Trastornos de memoria en la práctica psiquiátrica*. Masson: Barcelona.
- Berrios, G. E., Marková, I. S., & Giralá, N. (2000). Functional memory complaints: Hypochondria and disorganization. In G. E. Berrios & J. R. Hodges (Eds.), *Memory disorders in psychiatric practice* (pp. 384–399). Cambridge: Cambridge University Press.
- Berrios, G. E., Wagle, A. C., Marková, I. S., Wagle, S. A., Ho, L. W., Rubinsztein, D. C., Whittaker, J., Ffrench-Constant, C., Kershaw, A., Rosser, A., Bak, T., & Hodges, J. R. (2001). Psychiatric symptoms and CAG repeats in neurologically asymptomatic Huntington's disease gene carriers. *Psychiatry Research, 102*, 217–225.
- Berrios, G. E., Luque, R., & Villagrán, J. (2003). Schizophrenia: A conceptual history. *International Journal of Psychology and Psychological Therapy, 3*, 111–140.
- Blanco, M. (2003). Alexithymia: A literary case. *Archivos de Psiquiatría (Madrid), 66*, 77–88.
- Dudas, R. B., Berrios, G. E., & Hodges, J. R. (2005). The Addenbrooke's Cognitive Examination (ACE) in the differential diagnosis of early dementias versus affective disorder. *The American Journal of Geriatric Psychiatry, 13*, 218–226.
- García-Caballero, A., García-Lado, I., González-Hermida, J., Recimil, M., Area, R., Manes, F., Lamas, S., & Berrios, G. E. (2006a). Validation of the Spanish version of the Addenbrooke's Cognitive Examination in a rural community in Spain. *International Journal of Geriatric Psychiatry, 21*, 239–245.
- García-Caballero, A., Recimil, M. J., García-Lado, I., Gayoso, P., Cadarso-Suárez, C., González-Hermida, J., Area, R., & Lamas, S. (2006b). ACE clock scoring: A comparison with eight standard correction methods in a population of low educational level. *Journal of Geriatric Psychiatry and Neurology, 19*, 216–219.
- García-Caballero, A., González-Hermida, J., García-Lado, I., & Recimil, M. (2006c). Impaired facial emotion recognition in a case of right frontotemporal dementia. *Actas Españolas de Psiquiatría, 34*, 416–419.
- García-Caballero, A., García-Lado, I., González-Hermida, J., Area, R., Recimil, M. J., Juncos Rabadán, O., Lamas, S., Ozaita, G., & Jorge, F. J. (2007). Paradoxical recovery in a bilingual patient with aphasia after right capsuloputamina infarction. *Journal of Neurology, Neurosurgery, and Psychiatry, 78*, 89–91.
- Hodges, J., Patterson, K., Oxbury, S., & Funnell, E. (1992). Semantic dementia. Progressive fluent aphasia with temporal lobe atrophy. *Brain: A Journal of Neurology, 115*, 1783–1806.
- Lado-Codesido, M., Mendez, C., Mateos, R., Olivares, J. M., & García-Caballero, A. (2019). Improving emotion recognition in schizophrenia with “VOICES”: An on-line prosodic self-training. *PLoS One, 1*, 1–19.
- Lorente-Rovira, E., Pomarol-Clotet, E., McCarthy, R., Berrios, G. E., & McKenna, P. (2007). Confabulation in schizophrenia and its relationship to clinical and neuropsychological features of the disorder. *Psychological Medicine, 37*, 1403–1412.

- Marková, I. S., & Berrios, G. E. (2009). Epistemology of mental symptoms. *Psychopathology, 42*, 343–349.
- Maroño Souto, Y., Vázquez Campo, M., Díaz Llenderozas, F., Rodríguez Álvarez, M., Mateos, R., & García Caballero, A. (2018). Randomized clinical trial with e-Motional Training® 1.0 for social cognition rehabilitation in Schizophrenia. *Frontiers in Psychiatry, 9*, 1–9.
- Sierra, M., & Berrios, G. E. (2000). The Cambridge depersonalisation scale: A new instrument for the measurement of depersonalisation. *Psychiatry Research, 93*, 153–164.
- Vázquez-Campo, M., Maroño, Y., Lahera, G., Mateos, R., & García-Caballero, A. (2016). E-Motional Training®: Pilot study on a novel online training program on social cognition for patients with schizophrenia. *Schizophrenia Research: Cognition, 4*, 10–17.