42

Pia L.1,2, Ricci R.1, Gindri P.3, Vallar G.4

- 1. Dipartimento di Psicologia, Università degli Studi di Torino, Torino
- 2. Centro di Scienza Cognitiva, Università degli studi di Torino
- 3. Presidio Sanitario San Camillo, Torino
- 4. Facoltà di Psicologia, Università degli Studi di Milano-Bicocca, Milano

Drawing perseveration in neglect: Modulation by target distribution

Thirteen right-brain-damaged patients showing left spatial neglect and drawing perseveration behavior in a circle cancellation task were tested. We investigated whether different horizontal distributions of targets modulated omissions and perseveration errors. The target density affected the spatial distribution of errors, but not their extent (i.e., the absolute number of omission and perseveration did not change). When density increased rightwards, the "omission" area became wider, the "perseveration" area narrower; an opposite pattern was found with an increasing left density. Perseveration reflects a pathological release of motor behavior, co-occuring with, though independent of, the defective component of neglect, as indexed by omissions.

43 Piccardi L.¹, Nico D.^{1,2} and Guariglia C.^{1,2}

- 1. Dept. of Psychology, University of Rome "La Sapienza"-Rome Italy
- 2. Fondazione Santa Lucia IRCCS- Rome Italy

Navigation in a virtual maze: evidence from neglect patients

Previous studies found a double dissociation in neglect when orientation depends on geometric shape or visual cues.

We assessed the ability of neglect patients to orient themselves in a virtual maze with and without landmarks. They were disoriented and unable to create a mental map of the environment. Surprisingly with landmarks some patients were more impaired. This discrepancy does not relate to the presence or severity of neglect and suggests the existence of separate processes in spatial cognition. We suggest that navigation with or without landmarks involves partially overlapping neural systems.