



Title	Chaotic itinerancy and its roles in cognitive neurodynamics
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Figure Caption

Figure 1 Schematic drawing of quasi-attractors and dynamical trajectories in chaotic itinerancy

The dynamics develops on a smooth m -dimensional manifold M or an m -dimensional Euclidean space R^m ($m \geq 4$). Different types of quasi-attractors are denoted by symbols, A , B , C , D , and E as one possible realization of ordered motion. Each quasi-attractor possesses the inlet and the outlet chaotic trajectories, which connect such a quasi-attractor with other quasi-attractors, thereby realizing a critical state of such a quasi-attractor. Here, a narrow bundle of trajectories such as $L1$ indicates a low-dimensional chaotic trajectory, and a broad bundle such as $L2$ indicates a high-dimensional chaotic trajectory. Arrows show the directions of dynamical development of trajectories. Transitions between quasi-attractors are chaotic and history-dependent. In particular, when quasi-attractors represent various synchronization states, chaotic itinerancy describes intermittent transitions between synchronization and desynchronization.