Coordination Dynamics and The Metastable Mind

J.A Scott Kelso^{1,2} (1) Center for Complex Systems & Brain Sciences, Florida Atlantic University, Boca Raton, USA, <u>ikelso@fau.edu.</u> (2) Intelligent Systems Research Centre, Derry~Londonderry, N. Ireland

The Market Mind Hypothesis (MMH) raises a provocative question: what kind of mind are we talking about? One view, stemming from cognitive neuroscience, is that mental operations and emotion regulation engage a small number of widely separated brain areas that are "orchestrated" to perform cognitive tasks. The nature of the orchestration has yet to be specified. This talk will introduce some of the main concepts of an empirically based theory of coordination called Coordination Dynamics (CD) that spans brains, bodies and environments, both natural and artificial. Among those potentially relevant to MMH are: (i) CD's grounding in the physical concepts of open, self-organizing dynamical systems (not the usual physics) and synergistic selection (not the usual Darwinian view); (ii) CD's inherently *metastable* nature in which coexisting tendencies and dispositions (hearkening to Hayek) replace "states"; (iii) metastable CD's dwell~escape dynamic characteristic of a flexible, adaptive, creative and anticipatory mind that mirrors, as William James said, the perchings and flights of a bird; (iv) CD's inherently relational and transitional nature in which transcends dualistic either/or mindsets (even as it includes them). In short, CD's metastable brain~mind is the proposed (evolving?) mind of that rare creature *homo sapiens*, which, if we can realize it may hold the key to our survival.