

'Guided' or 'Self' Synchronisation? Modelling the role of 'staff' in complex organisations.

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In most complex organisations, including those in the military, a command hierarchy is embellished by 'staff' who facilitate the 'line' functions in achieving their goals in a timely and coordinated manner. Such 'staff' can range from a single individual to a mini-hierarchy in its own right under a 'Chief of Staff'. Organisational theorists, a category of social scientist, have proposed sophisticated qualitative models for how such staff structures work within classical hierarchies to enhance effectiveness and efficiency. In recent years, I have proposed adapting the Kuramoto model of synchronising coupled oscillators on a network to represent such organisations. I will present some of this work and pose the question: when viewed simply as a dynamical system on a network how can one distinguish whether the achievement of coordinated activity by the whole organisation is 'guided' or 'self' synchronisation?