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Agency and Incentives – what happens to them?

If we move towards models of agents as behavioural and socially influenced entities rather than rational calculators then what kinds of theory, if any, can be developed for agency in general? Where is agency? Specifically can group level agency emerge from collectives based on simpler behavioural and social processes? Can agency be ascribed to viral flows of information (memes)? How does the concept of "incentives" need to be reformulated in the light of such kinds of agents? Is it useful anymore without a general model of agency? Can we say anything in general about agency and incentives in a NESS based approach?

Commons Based Peer Production – are the hackers right?

Young Turks and hackers have been promoting the idea that information systems – particularly peer-to-peer systems – offer new ways for agents to coordinate and cooperate in the process of production. Open source, Wikipedia and even peer-to-peer lending and currencies appear to offer new ways of performing economic activities. Conventional economic models do not seem to map well onto these phenomena – what can NESS and complexity science offer?

Evolutionary models – crude metaphor or new paradigm?

Many complexity and NESS-like models import evolutionary mechanisms into agent behaviour e.g. agents evolve their behavioural traits or some other informational content (such as their network of connections). Mutation is often randomised. Often it is claimed that this represents some form of social learning or cultural evolution. Is this more than a crude biological metaphor? What actually gets replicated and mutated within human systems? How can we apply evolution in a principled and valid way in NESS like models?