Computational Social Science and Social Computer Science: Two Sides of the Same Coin

23 – 24 June 2014 University of Surrey, Guildford, UK

This workshop brought together experts from the social sciences, humanities and behavioural sciences with social simulation specialists and computational model builders. It aimed to find solutions to some of the issues raised at last year's <u>social.path workshop</u>. It focused on artificial sociality rather than intelligence and tried to address the following two points in particular:

- 1. The operationalisation of human behaviour in realistic settings (where perfect rationality is not applicable anymore), as well as
- 2. The Investigation of the interplay of bottom-up and top-down approaches to study complex systems.

The workshop aimed to lead the way to a research agenda that can harness the power of social science theories for the modelling community in a more thorough way than was hereto possible, aided by advances in computer technology and modelling experience.

Event themes

Computational Models of Habits and Sociality of Context: Routines, habits, work patterns and social practices are all concepts that to some extent try to encapsulate the idea of behaviour that is repeated regularly and tends to occur unconsciously. These patterns of behaviour often go unnoticed by the persons exhibiting it, because they do not need to engage in self-analysis when undertaking routine tasks. Though well studied in the social science, computational models of such behavior are still missing. As a consequence, several papers focused on the question of how to model entities that do not explicitly make decisions about their behaviour. This lead to a discussion on modelling architectures for representing decision entities in computational model with special focus on the question when deliberative and when cognitive agents might be more suitable.

A second theme which emerged from the papers was *the question of the influence of social structure for shaping society*. The structures and concepts discussed included hierarchy and affiliation as well as collectives reasoning approaches.

Next steps

Beside ideas for several joint papers, the workshop had two main research outcomes: the submission of the workshop ideas to the <u>Horizon 2020 FET consultation</u> and the organisation of a follow-up workshop that focuses on the first theme of routines in particular at Manchester University in November 2014. In the FET consultation, the workshop-based proposal had very good feedback by receiving the largest number of endorsements among all in 'knowing, doing and being' proposals. See the workshop <u>website</u>

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Organisers:

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