

Title: Understanding intolerance, conviction and extremism: interpreting an evolutionary model

Task: BPP6.1

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Scope: A demonstration of key findings using the tool of a model produced by Project 6 surrounding the coevolution of identity fusion, social networks and the devoted actor. In doing so, the usefulness for the tool for both model development and sense-making will also be seen.

This demo introduces work spanning multiple subtasks within Project 6, Task 1. Firstly, it involves the demonstration of a tool designed to visualise and assist in exploring and interpreting evolutionary and dynamic models relevant to DAIS-ITA Scenarios. As well as serving as the basis for the demo in this AFM, we intend to extend and use the tool in future human experiments surrounding model interpretation and sense-making. Secondly, we use the tool to demonstrate models under development and displayed in other short and long papers. In particular, we use the tool to examine how they function under simulation, giving insights into dynamic issues such as stability, jitter, convergence and the emergence of polarisation among the agents. Overall, this intends to demonstrate the benefit of evolutionary and dynamic models in contributing to an in-depth understanding of theory from sociology and psychology.

As future work, we anticipate applying motif-based analysis techniques to automatically assess complexity in the simulations beyond the human eye. Such metrics can potentially be used to further empower the expert user and draw attention to important features.