Supplementary Information

Introspection dynamics in asymmetric multiplayers games

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The general model for introspection dynamics

We consider an asymmetric normal form game with $N(>2)$ players. Each player, i, has access to their action set, $\mathbf{A}^i$, in which there are m_i possible actions that they can play, $\mathbf{A}^i = \{a_i^i, a_2^i, ..., a_{m_i}^i\}$. The payoff for an individual i depends on what everyone plays and is represented by $\pi^i(a^1, a^2, ..., a^N)$, where $(a^1, a^2, ..., a^N) \in \mathbf{A}^1 \times \mathbf{A}^2 \times ... \times \mathbf{A}^N$. In this model we only consider pure strategies for players. So, player i has only m_i possible strategies.
The players update their strategies over time using the introspection dynamics[1].

Examples of multiplayer games and results

Supplementary References

References

[1] Marta Couto, Stefano Giaimo, and Christian Hilbe. Introspection dynamics: A simple model of counterfactual learning in asymmetric games. *New Journal of Physics*, 2022.