



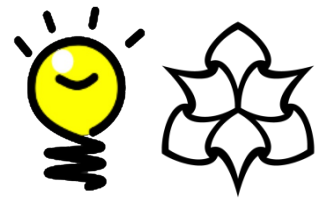
***The grand challenge of helping
people agree ... and how we might
go about collectively tackling it***

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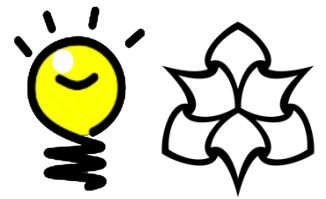
The Challenge



- Even when a group of people wants to agree they can find this hard to do
- We urgently need to agree (at many levels) on lots of collective action to mitigate and adapt to environmental crises
- We need an “*Agreement Accelerator*”: a set of techniques, tools, guides to help people do this

Can social simulation inform us as how to manage situations to facilitate agreement between parties when this is desired or necessary?

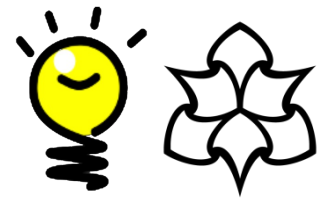
There are already streams of social simulation work...



...that touch on different aspects of such processes, *for example* models of:

- Opinion Dynamics
- Negotiation
- Social Identity
- Collective Intelligence
- Voting
- Social Norms

But these streams...

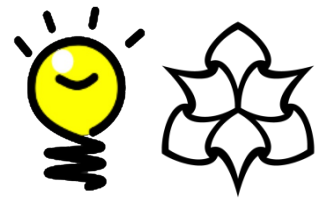


- ...each of the above sub-fields has its own history, norms and goals
- so models rarely cross their boundaries by including more than one approach.

Maybe as a result, many of these...

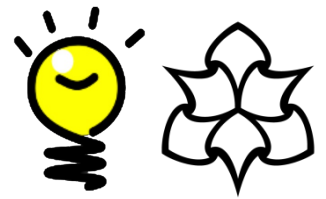
- have difficulties in establishing strong empirical links with observed cases....
- and tend to remain more at the level of an helpful analogy.

There seem to be different kinds (or “phases”) of interaction (I)



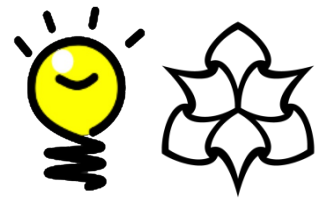
1. **Apathy** – most actors are not motivated to discuss, but might vaguely listen to opinion leaders and might occasionally vote
2. **Polarised groups** – when there are distinct groups in opposition to each other with no meaningful dialogue between groups
3. **Negotiation** – when different parties try to reach a negotiated solution, involving give-and-take, issue framing, mapping goals or areas of agreement etc.

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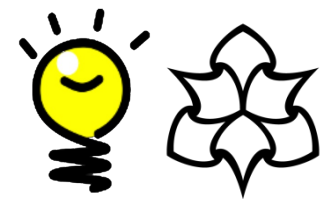
4. **Connected influence** – where the issues/opinions are not so much evidentially rooted but are actively spread to people one knows in a decentralised process.
5. **Additive collective intelligence** – when there is a constructive process of adding knowledge together to reach better solutions than any of the individuals could.

Key questions about “phases”



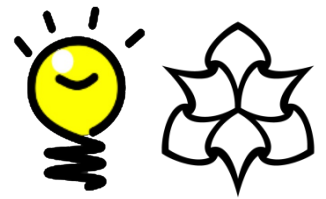
- Are they distinct? Or do they overlap?
- *Need models that include more than one set of mechanisms so we can see how they may interact!*
- When and why do transitions between these phases occur?
- *Need more models that can help us understand transitions between phases!*

Some specific research steps to tackle this challenge (understanding)



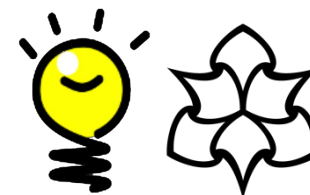
- Assess the evidential basis for each kind of model
 - Map the conditions of application of each kind of model to the different kinds of observed situations
- Identify the “gaps” where there seem to be a lack of models
- Understand when transitions between different kinds of interaction occur and why

Some specific research steps to tackle this challenge (Interventions)



- Suggest and test:
 - ways of supporting movement towards agreement for each kind of interaction
 - ways of encouraging transitions to different “phases” where agreement is more likely

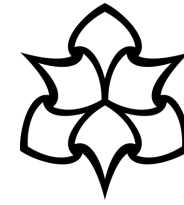
General community efforts to tackle this challenge



- Interaction between different fields
- The development of a common language and common abstractions
- Data inclusion
- More robustness tests
- Encouraging more complicated modelling



Thanks!



Manchester
Metropolitan
University

These slides are at: <http://cfpm.org/slides>
as “SSC2023 Grand Challenge.pdf”
(or use this QR code)

