



The Odyssean Process: a system for generating effective policy for complex issues under uncertainty

Highlights

Complexity and uncertainty are increasingly the defining features of policy challenges.

Effective policy making must account for global challenges that are highly interconnected and have the potential to cause cascading disasters.

Failing to account for complexity and uncertainty can lead to ineffective policy, prolonging crises and missing opportunities.

Successful policy making to address such challenges requires systems that can:

- Aggregate expert opinion across disciplines
- Build in foresight and long-term planning
- Find optimal interventions that incorporate stakeholder preferences
- Give the public, especially underrepresented and vulnerable groups, a voice in decision making.

The Odyssean Process, based on a growing body of scientific and academic work, provides such a mechanism.

Combines cutting-edge **modelling, decision making, and deliberative methods**.

Applicable to a broad range of policy areas, it has the potential to identify new opportunities for policy interventions that **unlock productivity and support flourishing communities**.

Enables **long term planning** across many **systemic challenges** and risks, such as climate change, infrastructural renewal, and industrial policy.

Improves trust in institutions and mitigates polarisation through its deliberative components.

Each of its components has a **proven track record** - and they complement each other effectively.

Introduction

Complex issues are those composed of **many interconnected components**. Policy makers today often face such issues, especially given the pace of globalisation and technological developments.

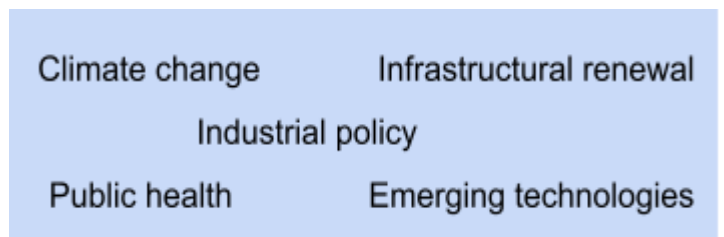
In a complex issue, it is extremely difficult to accurately predict the impact of any given change or intervention. This creates **'deep uncertainty'** - when stakeholders do not know, or cannot agree on, what outcomes are probable for any action they take.

A second problem is that complex issues cannot be grasped by any single academic field or group of experts. **They require diverse, interdisciplinary, and innovative thinking** to tackle effectively.

The recent COVID-19 pandemic provides an excellent [case study](#): designing effective pandemic mitigation measures proved exceptionally challenging, as it required careful consideration of epidemiology, economics, supply chains, and countless other factors.

Diverse perspectives and insights into the experience of vulnerable groups **were crucial, yet often neglected**.

This is not confined to pandemics; it is applicable to long term planning across many systemic challenges and risks, such as:



All of these challenges have two characteristics in common: complexity and uncertainty.

How can we overcome complexity and uncertainty?

The Odyssean Process

Designed as a comprehensive system for effective and robust decision making, it is comprised of the following components:

1. Expert Elicitation of Judgement (EEJ) - a structured, iterative method for aggregating expert insights.

Essentially, it is a series of discussion seminars with an expert facilitator who follows set procedures to ensure discussions are productive and effective, and a scoring system is used to determine the extent to which experts agree with a point.

- Clarifies areas of uncertainty
- Offers a comprehensive picture of scientific evidence.
- Addresses blindspots, avoids groupthink, and minimises the impact of cognitive biases.
- 'Desilos' academic disciplines through facilitating productive interdisciplinary work.

The findings from EEJ are then used to inform complexity modelling based on Decision Making under Deep Uncertainty (DMDU).

2. DMDU is a modelling toolkit developed by the RAND Corporation to handle problems where stakeholders [cannot know or agree how likely future problems are](#).

By using computer simulations of many scenarios, DMDU identifies interventions that are very likely to be popular and actionable, as preferences from a broad range of stakeholders are used to discover where they are most likely to agree.

Robust solutions across many scenarios are then generated, **which would not be found using traditional modelling**. This gives policy makers formal means for transformative leverage on complex problems.

DMDU is designed to generate solutions robust across many scenarios, which often challenges traditional policy modelling

3. Democratic Deliberation

This can take many forms, such as Citizens' Assemblies or Citizens' Juries. Much like in a parliamentary system, it involves a large group of people discussing an issue. Participants would be selected to be a representative sample of the population.

They would be briefed on the results of the previous DMDU and EEJ processes, making them well informed to discuss issues in depth.

This facilitates the 'Coproduction' of policy that reflects public values, ensuring recommendations are popular and recognised as legitimate. Further, it improves the quality of the recommendations, as they are derived from more perspectives, inputs, and data.

The combination of these three highly effective methods forms the Odyssean Process

The Odyssean Process is intended to be iterative, meaning that every subsequent round of the process is informed by the insights gained from the previous one - allowing it to continuously adapt to changing circumstances.

The time-frame for running this process would be approximately 6 months. It would cost about £330,000, which is cost-effective in comparison to other policy development approaches, and much more affordable than using e.g. many private [consulting](#) firms. For example, the UK government awarded more than [£250 million](#) to Deloitte in COVID-19 related contracts alone.

Potential Impact

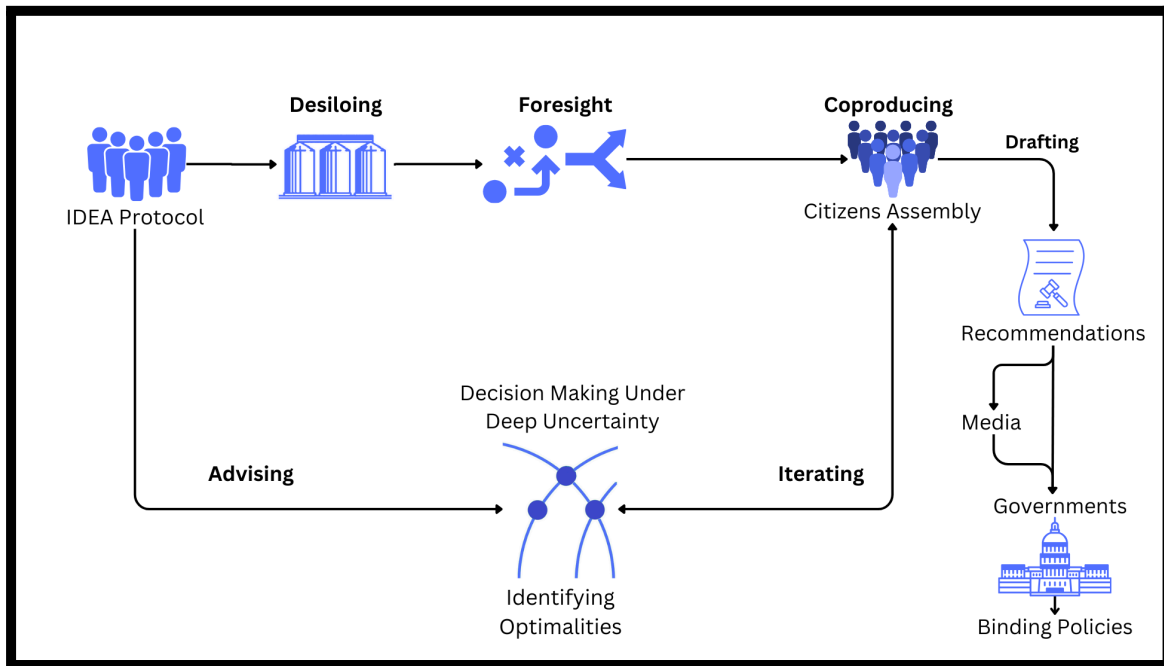
By promoting inclusivity, diversity of perspectives, and forward-looking approaches, the Odyssean Process can [mitigate polarisation](#) and [prevent deadlock](#) on key issues.

Through the inclusion of vulnerable groups, it overcomes underrepresentation, reducing inequality in exposure to risks.

By engaging a broad sample of public opinion, diverse perspectives are recognised, [policies gain legitimacy](#), and public trust can be revitalised.

This process can be used as part of a forward-looking approach to anticipate and address future problems, and also to find innovative solutions to long standing problems.

A visual representation of the Odyssean Process



Success Stories

Expert Elicitation of Judgement has produced novel insights in conservation and [public health](#), long before other academia and the media have, such as identifying microplastics years before they were mainstream.

The Delta Commissioner in Holland used [DMDU to plan 30+ years](#) into the future with a comprehensive and publicly derived [strategy](#).

vTaiwan helped the public design effective and [popular pandemic measures](#). vTaiwan was implemented in 2014 [following serious instability](#), and was able to restore public trust in institutions.

Key Takeaways

- Effective methods for solving complex policy challenges exist.
- We combine them in the cost-effective Odyssean Process.
- Such systems are necessary to address systemic risk and plan for long-term challenges



Read our full Odyssean Process White Paper and other publications by scanning the QR Code:

About Us

The Odyssean Institute works to address civilisational risks, using the best means identified from the deliberative democratic, complexity science, and expert elicitation fields.

We are a diverse, multidisciplinary team based in London, with collaborators from around the world and academic backgrounds ranging from Oxford, Cambridge, King's College London, the Massachusetts Institute of Technology, and more. Our combined academic and industry experiences span disciplines from history and politics to earth sciences and complex systems modelling.

The Odyssean Institute is a Charitable Incorporated Organisation - Charity Number 1204794

