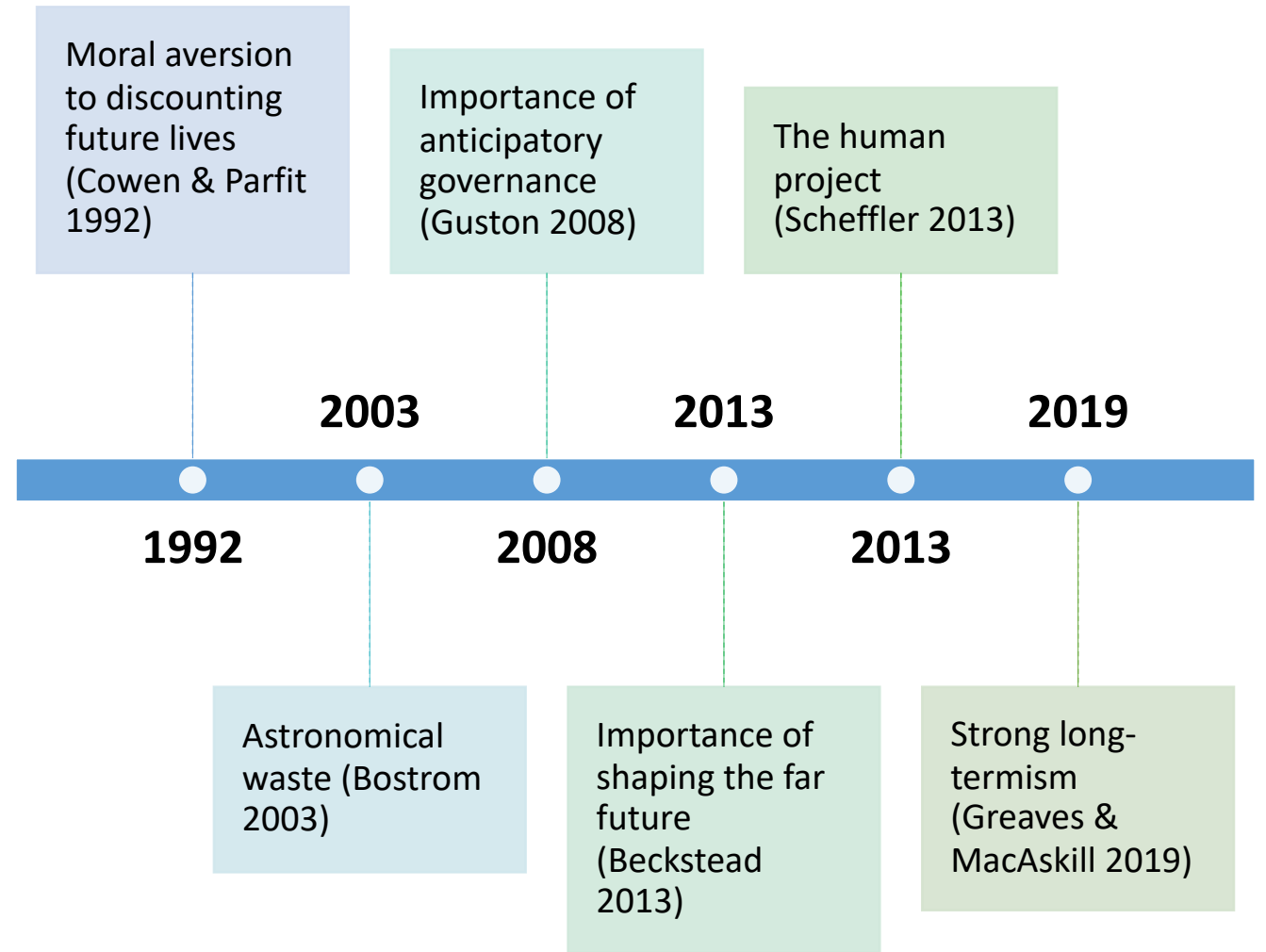


Step 1 in solving existential risks: include them in national risk assessments

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Arguments generally thought to favour the prioritisation of existential risk reduction



Rejecting all
the preceding
still favours
the solution of
including
existential risk
reduction in
NRAs

Risk	Prob 100 yr (extinction)	p_annual* (extinction)	deaths	annualised
Unaligned artificial intelligence	0.1	0.001	8 billion	8,000,000
Engineered pandemic	0.033	0.000333	8 billion	2,666,667
Unforeseen anthropogenic	0.033	0.000333	8 billion	2,666,667
Other anthropogenic	0.02	0.0002	8 billion	1,600,000
Nuclear war	0.001	0.00001	8 billion	80,000
Climate change	0.001	0.00001	8 billion	80,000
Environmental damage	0.001	0.00001	8 billion	80,000
All natural disasters (not x-risks)	1	1	60,000	60,000
Supervolcano	0.0001	0.000001	8 billion	8,000
Natural pandemic	0.0001	0.000001	8 billion	8,000
Large asteroid impact	0.000001	0.00000001	8 billion	80
Stellar explosion	0.000000001	1E-11	8 billion	0

* Annual probability may be lower/higher at t = 0, and rising/falling by risk

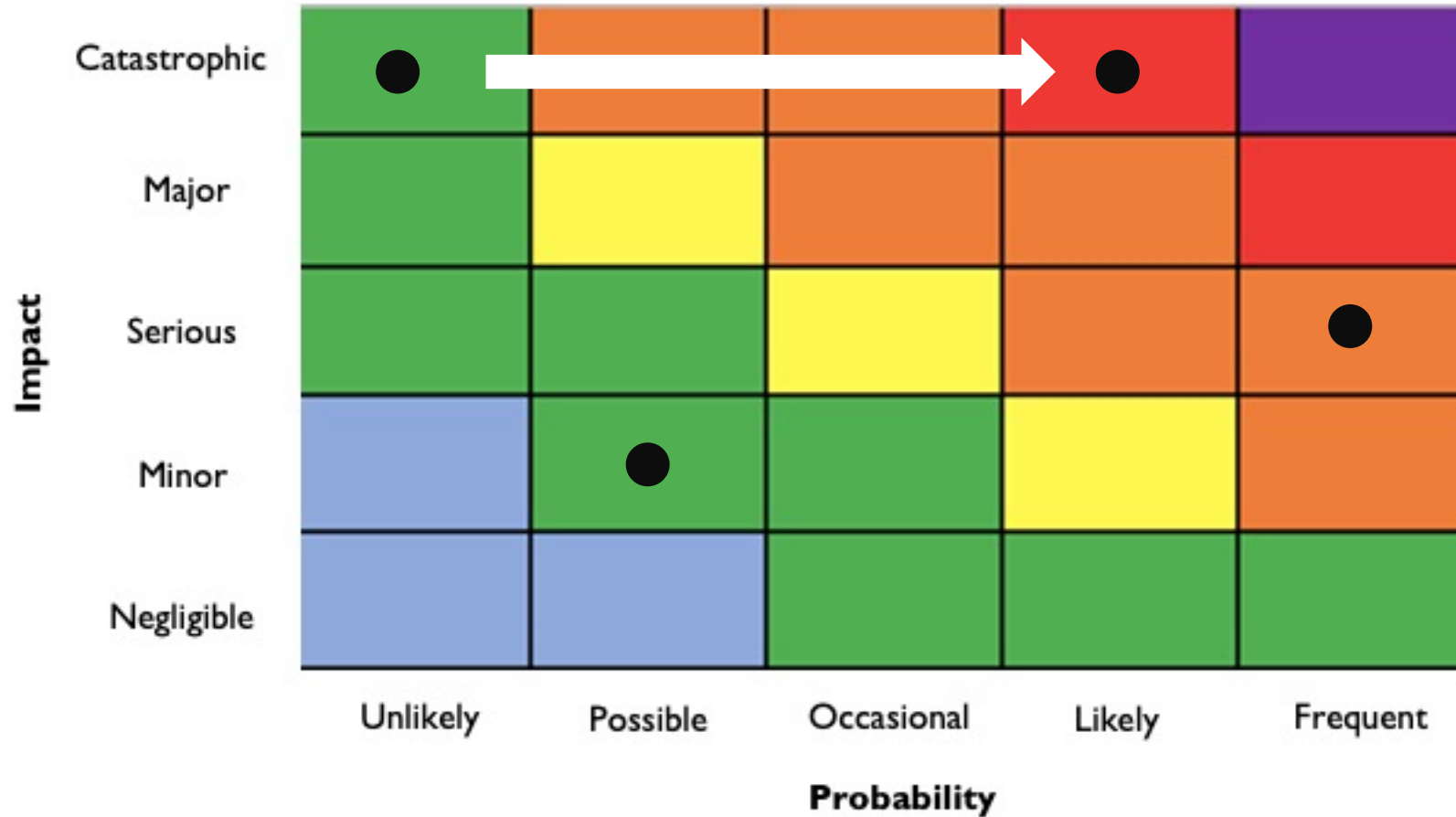
Example: biothreats & pandemic disease

The argument is stronger once you include the non-extinction and non-existential manifestations of existential risks



Type of pandemic	Annualised deaths in expectation	Source
Influenza (natural)	700,000	Fan (2016), and derived from Marani (2021)
Influenza (laboratory escape)	20,000 (minimum)	Derived from Lipsitch & Inglesby, (2014)
Non-influenza (natural)	50,000 (minimum)	Derived from Marani (2021)
Engineered pandemic	2,700,000	Derived from Ord (2020) – existential component only
Total	3,470,000 per annum (minimum)	

Risk Matrices & National Risk Registers



Two-way
interactive
communication
tool: Risk
Register < >
Citizens

Who is it for?

- Public sector staff
- Domain experts
- Businesses
- Stakeholders
- Interested public
- Journalists

What would it foster?

- Scrutiny of uncertainty/assumptions
- Identify omissions
- Sharing knowledge
- Peer review
- Monitor change
- Citizen feedback
- Crowdsourced solutions
- Aggregated opinion data

Key Messages

National risk registers should include existential risks (with consequences in expectation often outweighing 'all natural disasters')

Existential risks can be considered in conjunction with non-existential risks (eg infectious diseases)

Governments should make National Risk Registers into two-way interactive communication tools with citizen engagement