

Cause Area Guide: Improving Institutional Decision-making

During the last century, many people who wanted to make life better for the least well-off in their countries thought the most effective way to do so was by promoting communism in some form or other. A life-time spent trying to do good can result in largely negative consequences if actions flow from flawed practical reasoning. Therefore, it is worthwhile to spend a fair deal of time thinking about how best to do good, and to make sure the thinking is likely to yield the right conclusions.

Many of the world's most pressing problems can only be solved by coordinated efforts requiring action on the part of institutions, and people involved in institutions.¹ To ensure that important institutions actually do what is best, and facilitate the best thinking of individuals, it is essential that there are effective and robust decision-making procedures within institutions too, and that the relevant people taking part in these procedures employ the best thinking tools, and avoid fallacies of reasoning. It is worth stressing that good decision-making procedures ought to be robust in the sense of minimizing the risk of some demagogue taking control of central institutions and potentially incurring some global catastrophe, as well as effective in the sense of being likely to yield good decisions in a short amount of time.

The study of institutional decision-making is old, but there has been a surge of **studies** and interesting findings in the field recently, yielding insights that can be implemented to improve individual and institutional decision-making procedures significantly. This suggests that there is probably more insights to be found by redoubling research efforts.

It might be very difficult to apply the findings from the study of reasoning to education in general, but there are potentially very high returns to the application of different measures aimed at institutional decision-makers in particular. Some studies suggest that interventions show significant quantifiable benefits to both individual and group decision-making

Sources to learn more

Introductory	Intermediate	Advanced
Video: Superforecasting: How to Predict the Future - Philip Tetlock - Animated Book Review (Practical Psychology)	Article: Improving institutional decision-making (80 000 Hours, Jess Whittlestone, pp. 14, 2017)	Book: Expert Political Judgment (Philip Tetlock, 368, 2005) In this book Philip Tetlock presents his findings

¹ Definition of institution here is a collaborative enterprise by two or more individuals sharing a goal and engaging in coordinated activity to reach that goal.

<p>Youtube Channel, 5 min., 2016) Brief video explaining the core insights from the Good Judgment Project about how to make accurate predictions.</p>	<p>The 80 000 Hours problem profile on improving institutional decision-making. Lays out the case for why work in this space makes sense from an EA perspective, evaluating it from the scale, neglectedness and tractability framework.</p>	<p>from experiments evaluating expert opinion in the political domain through forecasting tournaments. This book is more theoretical and concerned with philosophy of science and methodology than the later book, 'Superforecasters'.</p>
<p>Article: Philip Tetlock's 10 Commandments of Superforecasting (Good Judgment.com, pp. 2) Presents the main findings from the Good Judgment Project about how to make accurate predictions.</p>	<p>Article: Efforts to Improve the Accuracy of Our Judgments and Forecasts (Open Philanthropy, Luke Muehlhouser, pp. 7, 2017) Research report on the science of forecasting</p>	<p>Book: Nudge (Cass Sunstein, Richard Thaler, 312, 2008) In this book Sunstein and Thaler presents findings from the behavioural sciences and gives suggestions for how to improve decision-making at different levels by making small adjustments, "nudging" actors to make the right choice.</p>
<p>Video: A Brief History of Nudge (BVA group, 6 mins., 2015) Short video giving an animated introduction to behavioural science and the idea of 'nudging'.</p>	<p>Book: Superforecasters: the art and science of prediction (Philip Tetlock, Dan Gardner, 340, 2015) In this book, Tetlock and Gardner present the main findings from the good judgment project. Written in an accessible and engaging style, this is the best introduction for non-specialists to Tetlock's work on accurate prediction and good judgment.</p>	<p>Article: Psychological Strategies for Winning a Geopolitical Forecasting Tournament (Mellers, et. al. pp. 9, 2014) In this article, Philip Tetlock and others present the main findings from the good judgment project, and some of the evidence that supports it. It includes the effects of parameters like group-deliberation, probability training and scenario training.</p>
<p>Book/Movie: Moneyball (Michael Lewis, pp. 336, 2004). Engaging story about the use of analytics in baseball.</p>	<p>Webpage: FiveThirtyEight (Nate Silver et al.) Newpage using statistical techniques and a data driven approach to predict politics, sports and other news. Although they do not always tackle the most interesting questions, the methods the team at FiveThirtyEight brings to bear</p>	<p>Blog Post: Better political systems and policy making (Samuel Hilton, p. 8, 2016) Article about the potential for improving institutional decision-making procedures, based on experiences from UK government. Includes a list of 14 features of good political and policy systems.</p>

	are sound, and a lot can be learned from them.	
<p>Website: Clearer Thinking (2018) At this website, accesible tools and mini-courses introduce important concepts and guide thinking about important issues.</p>	<p>Podcast: First 80K interview with professor Philip Tetlock (80 000 Hours, Philip Tetlock, 94mins, 2017) In this interview, professor Tetlock gives a brief explanation of some core ideas from his research on forecasting, including his assessment of the trainability of forecasting acumen.</p>	<p>Article: Analysis of the Future: The Delphi Method (RAND, Olaf Helmer, pp. 13, 1967). A method for building consensus in groups, by using multiple iterations of questions to collect data from different group members.</p>
<p>Article/Video: Approval Voting (The Center for Election Science, pp. 5) Brief, accessible written summary of approval voting, with a supplementary 2 min. Video explanation.</p>	<p>Podcast: Second 80k Interview with Philip Tetlock (80 000 Hours, Philip Tetlock, 131 mins, 2019) In this interview, the focus is more on the relevance and importance of forecasting skills, and how best to train for it.</p>	<p>Blogpost: Idea Futures (Robin Hanson, p. 1), This is a blog post from Robin Hanson’s personal webpage with links to various resources on the idea of idea futures, also known as prediction markets.</p>
<p>Article: Voting Methods: An Open Target for Effective Altruism (The Center for Election Science, pp. 9, 2017). Article in which center director Aaron Hamlin gives the case for voting reform according to EA principles.</p>	<p>Podcast: Aaron Hamlin on Voting Systems (80 000 Hours, Aaron Hamlin, 138 mins, 2018) Podcast episode in which Aaron Hamlin explains the relative strengths and weaknesses of an essential</p>	<p>Podcast: Interview with Claire Walsh from J-Pal (80 000 Hours, J-Pal, Claire Walsh, 52 mins, 2017) In this interview, Claire Walsh from J-Pal explains her thinking about scientific methods and government responsiveness to scientific evidence.</p>
<p>Blog post: Quadratic Voting (Eric Posner, p. 1, 2014) Brief note about the nature and importance of the idea of quadratic voting.</p>	<p>Podcast: Interview with Spencer Greenberg (80 000 Hours, Spencer Greenberg, 129 mins, 2017) In this interview, Spencer Greenberg explains how he thinks social science can be brought to bear on improving the decision making of individuals, and institutions through training and new institutional designs.</p>	<p>Book: The Enigma of Reason (Hugo Mercier, Dan Sperber, 384pp, 2017) A book by two acclaimed, but controversial cognitive scientists about the nature of rationality. Their theory is an alternative to the popular dual-process view of reasoning, and is anchored in evolutionary theory. Details cases where reasoning is</p>

		likely and unlikely to yield desired results.
<p>Article: A Call for Cooperation Against Fake News (Jeff Jarvis, pp. 6, 2016) Blog post in which two professors offer 15 concrete suggestions for how social media platforms can minimize the problem of fake news and improve the debate climate in the public sphere.</p>	<p>Podcast: Dr Mark Lutter and Tamara Winter on Charter Cities (80 000 Hours, Mark Lutter, Tamara Winter, mins. 150, 2019) In this podcast episode, two members of the Charter Cities Institute explain why charter cities are a force for good in the world, and how they promote the idea.</p>	<p>Report: MindSpace: Influencing behaviour through public policy (UK institute for government, pp. 96, 2009) This report shows how behavioural theory can be applied across the public sector to improve the choices of individuals and institutions.</p>
<p>Video: Why the World Needs Charter Cities (Paul Romer, 20 mins, 2009) In this Ted Talk, Paul Romer introduce the concept of the charter city, and explain why they are good for the world.</p>	<p>Report: EAST: Four Simple Ways to Apply Behavioural Insights (The Behavioural Insights Team, pp. 52, 2012). Simplified report presenting the most robust findings from the behavioural sciences that are relevant in influencing behaviour as an easy-to-use checklist.</p>	<p>Book: Misbehaving: The making of Behavioural Economics (Richard Thaler, pp. 432, 2016) In this book, Richard Thaler chronicles the development of the field now known as 'behavioural economics'.</p>

Main actors

- **[Hubbard Decision Research \(HDR\)](#)**
 Hubbard Decision Research is a consulting firm that helps organizations make measurably better decisions through the use of quantitative methods.
- **[The behavioural Insights Team \(BI-Team\)](#)**
 The Behavioural Insights Team apply insights from the behavioural sciences to inform policy, improve public services and deliver positive results for people and communities.
- **[The Intelligence Advanced Research Projects Activity \(IARPA\)](#)**
 The Intelligence Advanced Research Projects Activity (IARPA) is a US government intelligence institution that invests in
- **[Good Judgment Inc.](#)**
 Good Judgment Inc. provides consulting and training services related to forecasting and good judgment in general.
- **[Clearer Thinking](#)**
 Clearer Thinking is a website with many free tools to improve individual and collective decision-making.
- **[EA Geneva Policy](#)**
 A working group of EA Geneva is announced to launch a research institution concerned with improving institutional decision-making late 2020.
- **[The Centre for Applied Rationality \(CFAR\)](#)**

high-risk/high-payoff intelligence research programs.

- **RadicalxChange**

RadicalxChange is a global movement dedicated to reimagining the building blocks of democracy and markets in order to uphold fairness, plurality, and meaningful participation in a rapidly changing world. The RadicalxChange Foundation is a non-profit organization dedicated to advancing that cause.

- **Charter Cities Institute**

Founded in 2017, the Charter Cities Institute is a nonprofit dedicated to creating the ecosystem for charter cities. We believe charter cities are the future of development in emerging economies.

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- **Ideas 42**

Nonprofit that research and apply theory from behavioral science to improve lives, build better systems and policies, and drive social change.

- **The Center for Election Science**

Founded in 2011, The Center for Election Science is a national, nonpartisan nonprofit dedicated to helping the world use better election systems.

General career advice

Decision-making is a very exciting cross-disciplinary scientific field of study, encompassing various social, cognitive and analytical sciences. To do effective work at improving institutional decision-making, it is generally a necessary precondition to be comfortable with a range of relevant subjects, and be familiar with the relevant research. Measures aimed at improving institutional decision-making must have a documented scientific grounding in order to be implemented, which means that actors who want to make a change in this space must generally be able to justify their proposed improvements by referencing the research literature. It is therefore generally a good idea to either get some policy experience or a PhD in order to do effective work at improving institutional decision-making.

Research so far indicates multiple paths of high-leverage work. Behavioural researchers studying decision-making have isolated many best-practices which it might be very valuable to implement at the individual and group-level. At an institutional level, there are interesting ideas about how existing institutions can be changed to better facilitate improved judgments, and designs for new institutions that could improve the preconditions for good choices of individuals, and key institutions. Another potentially high-impact work path is to do more research, especially concerning the actionable measures below.

Improving individual and group decision-making, training and best-practices of

A robust finding across many different fields is that the most important factors that are relevant to good judgment has to do with cognitive style, meaning thought processes and methods, rather than adherence to substantial theories or particular beliefs (see e.g., Tetlock's [Expert Political Judgment](#) for a presentation of evidence backing this proposition). A surge of studies about reasoning, rationality and forecasting in later years has been directed towards isolating the methods, techniques and practices that reliably facilitates better judgment both at an individual and group level. This is a vast area of study, so I shall not attempt to give even a naive literature review, but I want to give some examples of practices to illustrate what this is about.

- In the field of epistemology, a dominant theory of epistemic rationality revolves around ideas of graded beliefs and Bayesian Updating. Graded beliefs are subjective quantifiable probability estimates, rather than all or nothing beliefs, and Bayesian updating is a formal procedure for updating these quantified estimates in the light of new evidence. Recent studies, most prominently Tetlock's forecasting research, indicates that quantifying estimates, [among other things](#), even in cases of great uncertainty, improves predictive success. Furthermore, there is evidence suggesting that [calibration training](#) at the individual level has been shown to improve the predictive success of participants' quantified probability judgments.
- Sperber and Mercier [argue](#)² that people reason better dialogically, for example by collective reasoning through group discussions, rather than individual efforts, or mere aggregation of individual beliefs. In [one study](#), participants solved analytical problems 15% of the time when alone, and 80% of the time when tackling the problem as a group.

If these, or other well-proven practices for good decision-making are implemented in important institutions, these improvements might be very high leverage. Here are some career paths that 80 000 Hours recommend, which might lead to institutional change for the better.

- Perhaps the most straightforward and intuitive way to change the institutional decision-making of some institution is from within that institution itself, by suggesting change at local strategic meetings. Important institutions can be large public institutions such as the ministry of defence in some country, organizations moving a lot of money, or large corporations responsible for essential social functions.
- Another path is to influence public institutions through policy, either by party politics, work at think-tanks like [Civita](#) or [Agenda](#), non-profits like [CFAR](#) or through media channels, like [FiveThirtyEight](#).
- Yet another path is through work at [consulting firms](#) offering services to important institutions. For institutions with clear, quantifiable ends, like a big revenue stream, better

² See their *The Enigma of Reason*, pp. 264-273.

decision-making practices can yield clear results, which incentivise companies to bring in consultants to change their ways for the better.

Epistemic improvement and innovation at the institutional level

Another approach to improving institutional decision-making is to design and/or create new institutions to replace or complement existing ones. There are many interesting ideas that are well worth presenting, but I will restrict this presentation to three ideas that exemplify what this field is about.

- **Prediction markets**

It is reasonable to believe that the collective intelligence of markets, expressed in market prices, is a more reliable guide to the future success of companies, and the demand for products, than the opinions of individuals. Prediction markets apply the institutional structure of markets to future events, and let people bet real money on different predictions of these events. Similarly to the way sports-fans bet real money on different outfalls of matches, prediction markets lets people bet money on the outcomes of real world events. If institutions of this sort are successfully set up, and attract sufficiently many speculators, the prices on different future events would give reliable information about the future that could guide policy and decision-making of various sorts. A prediction platform that is used by many EA's is Meticulous. In Norway, the team behind [Empiricast](#) has created an analogous service.

- **Voting reform**

In modern democracies, the most important decisions are collective, and decided by a vote. There are multiple voting mechanisms, and some mechanisms are better at promoting certain ends than others. It is generally agreed upon that votes are supposed to express the interests and convictions of the group that throw the vote. For this end, [approval voting](#) and [quadratic voting](#) are promising alternatives to popular existing voting mechanisms. Even if people are rational, and tend to vote for the candidate and policies that are best, it doesn't help if the aggregate of individual voting yields candidates that no-one think is any good. Therefore, voting reform might be a very effective cause area to do work in.

- **Software tools and platforms**

In a sense, software tools and social media platforms are institutions too, designed to promote certain ends for its users, with the architecture of the platform laying restrictions on action, and guiding action by implicit norms inherent in the design and algorithms expressed by the sourcecode. Action aimed at changing the structure of social science platforms could have immense impact, read [this note](#) for some ideas about how social media giants can be improved to better facilitate the decision-making of its users. Developing new software tools and platforms can also be a high-impact measure to improve decision-making. Some of the prediction market-platforms mentioned above are good examples of this. Other good examples of platforms that directly help decision-makers think clearer are [Guesstimate](#) and [Clearer Thinking](#).

Research

Above we have touched on several ideas, the promotion of which might improve institutional decision-making. However, it should be noted that it is particularly hard to estimate the impact of measures in this field. Some measures even have the peculiar property of potentially causing more harm than good. To work in this field, it is therefore very important to be comfortable with uncertainty. It is also important to be comfortable with keeping a critical reflective attitude towards one's own beliefs and actions, because it is too easy to do harm if bad ideas are implemented or acted on. At last, it should also be said that more research is needed on all of the ideas above, and that it is wise to remain passive until one is confident that some measure has a significant positive impact. In fact, many successful advocates of the above mentioned measures have experience as a researcher in some way or other. Going into research is therefore generally a good idea if you want to make a contribution.

Other Cause Area Guides:

- [Global Catastrophic Biological Risk](#)
- [Nuclear Security](#)
- [Global Priorities Research](#)