

COLLECTIVE WISDOM: PRINCIPLES AND MECHANISMS

Colloquium—May 22 and 23, 2008

ABSTRACTS AND BIOGRAPHIES OF THE PARTICIPANTS

Daniel ANDLER

What does Collective Wisdom have to do with Wisdom?

Nothing at all, it might seem at first, for wisdom implies sovereignty over what depends on one, while collective wisdom (in the sense under consideration) implies renouncement. Yet wisdom also calls for a higher form of surrender: the wise person abdicates certain privileges of rationality, of ordinary reason. However he does so while maintaining self-dominion, a higher form of knowledge or awareness. So the question becomes: Does collective wisdom go together with some form of dominion, knowledge or awareness? In one sense it does. The individual participant can hold both a first-degree judgment and a second-degree judgment that his first-degree judgment may well be superseded by the group's better judgment. Likewise, the group at large can make a conscious decision to abide by the outcome of an exercise of collective wisdom. But isn't a stronger sense required? Is it not that very entity which is the bearer of collective wisdom which must also retain mastery? What sort of *self*, then, grants collective wisdom self-dominion?

Trained in Paris and at UC Berkeley, Daniel Andler taught mathematics before moving to positions in philosophy. He holds the chair of philosophy of science and epistemology at Université Paris-Sorbonne (Paris IV) and is currently a member of the Institut universitaire de France. His central interest lies in the foundations of cognitive science. He works on specific issues concerning models of the mind, the role of context, and reasoning. He defends a minimal version of naturalism, with the aim of articulating cognitive science with the social sciences.

Bryan CAPLAN

Majorities Against Utility : Implications of the Failure of the Miracle of Aggregation

A surprising conclusion of modern political economy is that democracies with highly ignorant voters can still deliver very good results as long as voters' errors balance each other out. This result is known as the Miracle of Aggregation. This paper begins by reviewing a large body of evidence against this Miracle. Empirically, voters' errors tend to be systematic; they compound rather than cancel. Furthermore, since most citizens vote for the policies they believe are best for

society, systematic errors lead voters to support socially suboptimal policies. The paper then considers the case for "paternalistically" vetoing popular but misguided democratic decisions, presenting several arguments that overruling democratic decisions is much less objectionable than overruling individual decisions. In fact, since democracies routinely adopt paternalistic policies, the opponent of paternalism for individual decisions should embrace paternalism for democratic decisions. The paper concludes by considering several different mechanisms for improving upon majority rule.

*Bryan Caplan is an Associate Professor of Economics at George Mason University. He received his B.A. in economics (with a minor in philosophy) from UC Berkeley, and his Ph.D. in economics from Princeton. His articles have been published in the American Economic Review, the Economic Journal, the Journal of Law and Economics, Rationality and Society, Social Science Quarterly, and many other outlets. Caplan is the author of *The Myth of the Rational Voter: Why Democracies Choose Bad Policies*, published in 2007 by Princeton University Press. The book has been widely discussed in the media, including *The Economist* and *The New York Times*. His next major project is another book, *The Selfish Reason to Have More Kids*.*

Ariel COLONOMOS

Wise International Decisions: The Bigger, the Wiser?

When he makes strategic choices, the Prince favors *prudence*. This is one of the basic conclusions of the realist school of international relations. Although this is highly debatable, classical realists consider that state leaders are prudent to the extent that they do not inadvertently attack bigger states likely to defeat them (i.e. they maximize their interest). Realists are also normative at least implicitly: states *ought* not to be imprudent.

This line of thought has its origins in Thucydides, who also quotes Pericles saying "*we love wisdom without becoming soft*". Wisdom is therefore not only positively associated to prudence, it is also negatively associated to the dangers of passivity. Yet, who is prudent or imprudent, wise or unwise? Wisdom appears to be a matter of scale. Realists show a great tolerance vis-à-vis autocratic or dictatorial regimes, precisely because they consider that individual decisions are more reliable, i.e. they are more prudent than collective ones. The Prince tries to maximize his interest and is therefore rational, predictable and wise (prudent without being soft), whereas democracy is the realm of passions leading to imprudent behavior. Of course, idealism or liberalism share a different approach (see also the debate about unilateralism vs. multilateralism). This paper will discuss the different models of wise international behavior, depending on the size of the agent, the paradigm its members use when making their decision and the analytical framework that prevails in the assessment of their policy.

*Ariel Colonomos is research fellow at the Centre National de la Recherche Scientifique, Centre d'Études et de Recherches Internationales in Paris and lecturer at SciencesPo where he teaches international ethics. He has been Associate Adjunct Professor at Columbia (SIPA, School of International and Public Affairs) from 2005 to 2007. He has published in the field of international norms and international political theory. Among his publications: *Moralizing International Relations: Called to Account*, New York, Palgrave, 2008; *Le pari de la guerre: la frappe préventive*, Paris, Odile Jacob, forthcoming.*

Jon ELSTER

The Optimal Design of a Constitution-making Process

There are two normative questions one might ask about constitutions: What is a good constitution? What is a good constitution-making process? In the paper I mainly focus on the second issue, but also discuss the relation between the two. Important desiderata of a constituent assembly include having a number of delegates that is both large enough to prevent bargaining and small enough to allow for a genuine exchange of views; a mode of election of delegates that will generate sufficient diversity both of preferences and of information; a focus on issues on which interest has a minimal purchase; and an organization of the proceedings that minimizes the scope of passion. I also argue that the process ought to be hourglass-shaped, with wide public deliberation before the assembly meets and deliberation followed by a referendum after it has produced its proposal.

*Jon Elster is a philosopher, sociologist, and political theorist, author of numerous books on the philosophy of social sciences and rational choice theory (e.g., *Nuts and Bolts for the Social Sciences*: Cambridge, Cambridge University Press, 1989, and *Ulysses Unbound*, Cambridge, Cambridge University Press, 2000). His work can be read as an investigation of the question of individual and collective decisions. He currently teaches at the Collège de France in Paris, where he holds the Chaire of Rationality and Social Sciences.*

David ESTLUND

Democratic Authority: A Philosophical Framework

"In this talk, I give an overview of the argument of my new book of the same title. Democracy is not naturally plausible. Why turn such important matters over to masses of people who have no special expertise? Theories of the value of democracy often try to answer this question by appeal to the intrinsic value of the procedure itself, without relying on any tendency toward good decisions. In this book I argue that those approaches fail, and I develop a new approach, "epistemic proceduralism." The authority and legitimacy of political decisions is partly owed to the fact that they were produced by procedures that could be generally accepted as having some tendency to make good decisions. Just as with verdicts in jury trials, the authority and legitimacy of a decision in a given case does not depend on the decision being good or correct in that case, but the epistemic value of the procedure is nevertheless crucial. If epistemic value were what mattered, you might wonder why those who know best shouldn't simply rule. Epistocracy, or rule of the knowers, is avoided on my theory, however. I argue that while some few probably do know best, this cannot be used in political justification unless their special expertise is acceptable to all reasonable (or "qualified") points of view. If we seek the epistemically best arrangement, so far as can be established to the wide range of qualified points of view, it will be recognizably democratic, with laws and policies actually authorized by the people subject to them".

David Estlund is Professor and Department Chair in the Department of Philosophy at Brown University. He has been teaching moral and political philosophy at Brown University since 1991. He previously taught at University of California, Irvine, and has spent fellowship years at the Program in

Ethics at Harvard, and at Australian National University. He has received fellowships from the American Council of Learned Societies, and the National Endowment for the Humanities. Estlund's research focuses on ethics and social/political philosophy, particularly the areas of liberalism, justice, and democracy. He has served as editor for the collection, Democracy (Blackwell, 2002) and author of Democratic Authority: A Philosophical Framework (Princeton University Press, 2008). His papers include: "Democracy Without Preference," The Philosophical Review, July 1990, pp. 397-423. "Beyond Fairness and Deliberation: The Epistemic Dimension of Democratic Authority," in Deliberative Democracy, James Bohman and William Rehg, eds., MIT Press, 1997. "Political Quality," Social Philosophy and Policy, vol. 17, no. 1, Winter 2000, pp. 127-60, and "Political Authority and The Tyranny of Non-Consent," Philosophical Issues, 15, 2005. Estlund received his B.S. in art, and M.A. and Ph.D. in philosophy from University of Wisconsin, Madison.

Hélène LANDEMORE

Democratic Reason : The Mechanisms of Collective Intelligence in Politics

In this paper, Landemore argues that democratic institutions can be seen as ways to channel "democratic reason," or the distributed intelligence of the many—a concept that she builds in part on the insights of the cognitive sciences. She argues that two main democratic mechanisms—the practice of inclusive deliberation (in its direct and indirect versions) and the institution of majority rule (aggregation of judgments through voting)—combine their epistemic properties to maximize the chances that the group picks the better political answer within a given a context and a set of values. Under the conditions of a liberal society, characterized among other things by sufficient cognitive diversity, these two mechanisms give the rule of the many an epistemic edge over any variant of the rule of the few.

Hélène Landemore is Jon Elster's research assistant at the Collège de France. A graduate of the Ecole Normale Supérieure and Sciences-Po, she recently completed a dissertation on collective intelligence applied to the justification of democracy (Harvard University 2007). She is the author of a monography in French on David Hume (Hume: Probabilité et Choix Raisonnable, Paris, PUF, 2004) and two articles in English (on rational choice theory and on animal rights). She will be a post-doctoral fellow at Brown University in the Fall of 2008.

Christian LIST

Group Deliberation and the Revision of Individual Judgments: A Social-Choice-Theoretic Perspective

While a large social-choice-theoretic literature discusses the aggregation of individual judgments into collective ones, there is relatively little formal work on the revision of individual judgments in group deliberation. I develop a model of judgment revision and prove a baseline impossibility result: any judgment revision function satisfying some initially plausible conditions is the identity function, under which no opinion change occurs. I identify escape routes from this impossibility and argue that successful group deliberation must be holistic.: it cannot generally be restricted to one proposition at a time but must focus on larger webs of interconnected propositions. This echoes the Duhem-Quine .holism thesis.on scienti.c theory testing. My approach opens up a new way of analyzing deliberative processes axiomatically.

*Christian List is Professor of Political Science and Philosophy at the London School of Economics. He received degrees in mathematics and philosophy (BA) and politics (MPhil and DPhil) from the University of Oxford and held research and visiting positions at Oxford (Nuffield College), the Australian National University (RSSH), Harvard University (CBRSS), MIT (Philosophy), the University of Konstanz (PPM Group) and Princeton University (Center for Human Values). He works in political theory, social choice theory and the philosophy of the social sciences. His current research focuses on judgment aggregation, group deliberation, democracy and group agency. His publications include "Aggregating Sets of Judgments: An Impossibility Result" (with P. Pettit, *Economics & Philosophy* 2002); "Social Choice Theory and Deliberative Democracy: A Reconciliation" (with J. Dryzek, *BJPS* 2003); "The Discursive Dilemma and Public Reason" (*Ethics* 2006); "A Conditional Defense of Plurality Rule" (with R. E. Goodin, *AJPS* 2006) and "Arrow's theorem in judgment aggregation" (with F. Dietrich, *Social Choice and Welfare* 2007). Christian List is currently an editor of *Economics and Philosophy*.*

Gerry MACKIE

Rational Ignorance and Beyond

Economic theories declare that voters in a democracy are rationally ignorant (or worse, irrational) about politics, but that consumers possess perfect information about decisions in the market. Citizens lack competence because an individual voter almost never is pivotal to the outcome of an election (Downs, Brennan), or because of a lowered sense of responsibility in crowds (LeBon, Schumpeter), or because humans intrinsically prefer irrationality in politics (Pareto, Caplan). I challenge each of these analyses as conceptually faulty, empirically unfounded, or both.

The economic theories also characteristically model modern political democracy as if it were direct, rather than representative, in nature. This error raises citizen competence requirements to a superhuman level. Standard arguments about specialist division of labor, principal-agent delegation, and competitive elections account for campaign discourse, parties, legislatures, and bureaucracies as information-improving devices. In conclusion, the citizen-ignorance argument for the minimization of democracy is not supported.

*Gerry Mackie is in the Political Science Department at the University of California, San Diego. His Ph.D. is from the University of Chicago, and he has held positions at the University of Oxford, Australian National University, and University of Notre Dame. His main interest is democratic theory and thought, including contemporary accounts of voting and deliberation. His book, *Democracy Defended* (2003), defends democratic voting from skeptical attacks by certain interpretations of social choice theory. He also studies social norms and conventions, conceptually and empirically, and advises on the abandonment of harmful social practices such as female genital cutting.*

Hugo MERCIER and Dan SPERBER

Reasoning as a Social Activity

Some forms of collective opinion fixing or decision making – through polling or voting for instance – require little use of higher cognitive capacities on the part of most of the agents involved. Others forms, those involving debating in particular, require much more: agents have to reason in order to produce arguments and evaluate the arguments of others. Reasoning is generally viewed as primarily a means to enhance individual cognition. Much work in the psychology of reasoning focuses on its flaws and biases and suggests that these may have cumulative adverse effects when

reasoning is involved in collective processes, for instance in jury deliberations. We, on the contrary, argue, in an evolutionary and cognitive perspective, that the main function of reasoning is social: it is to evaluate the consistency of other people's claims and to try and convince them of the inconsistency of not accepting one's own claims. This argumentative theory of reasoning makes predictions regarding the contexts in which reasoning will be more felicitously used, which are argumentative contexts as opposed to individual reasoning or to conversations among people in agreement with one another. It also predicts what particular biases should emerge when reasoning is used outside of an argumentative context. These predictions are supported by many recent findings, in particular in work done on dual process models in social cognition, reasoning and decision making.

Dan Sperber is Directeur de Recherche at the CNRS and Institut Jean Nicod, working at the interface of the social and the cognitive sciences. He is the author of Rethinking Symbolism (1975), On Anthropological Knowledge (1985), Explaining Culture (1996), the co-author, with Deirdre Wilson, of Relevance: Communication and Cognition (1986; Revised Edition 1995), the editor of Metarepresentations: A multidisciplinary perspective. (2000), the co-editor with David and Ann Premack of Causal cognition (1995), and, with Ira Noveck of Experimental Pragmatics (2004).

Hugo Mercier is a PhD student working with Dan Sperber at the Institut Jean Nicod in Paris. He is developing an interdisciplinary and evolutionary approach to human reasoning stressing its social function.

Gloria ORIGGI

Collaborative Filtering: The Wisdom of the Internet

“Internet not only provides the hugest information storage ever, but also the most sophisticated system of information retrieval people have dealt with in the history of culture. Information is evaluated and filtered before reaching its final destination. On Internet, people access content via the evaluations that other people have already left on that content. From search engines to reputational systems such as eBay, Internet is developing as a giant ranking system in which people's advices and preferences leave tracks that orients other people's advices and preferences: in many cases evaluation precedes or even replaces information: all that people look at on the Internet is tracks of opinions of others that will modify their judgement on a subject matter. In this paper, I provide an epistemological analysis of how the various techniques of collaborative evaluation work in Internet, to what extent are they reliable cues of quality and how the collective wisdom produced by the interaction of human preferences and search algorithms is achieved.

I will also try to argue that accessing evaluations and rankings is becoming a primary epistemological aim in knowledge search: I'll conclude by presenting a sketch of a “second-order” epistemology in which evaluative and ranking measures become the core ingredient in the extraction of information from a corpus of knowledge”.

Gloria Origgi is a philosopher at CNRS, Institut Nicod, Paris. Her main focus of research is social epistemology, in particular, the role of trust and reputation in the construction of knowledge. She has participated into many projects on the application of IT to the design of knowledge and is the founder of the www.interdisciplines.org project. Her last book is Qu'est-ce que la confiance? VRIN, Paris, 2008.

Scott PAGE

Microfoundations of Collective Wisdom

In this paper, I demonstrate the microfoundations of collective wisdom. I show the benefits and limits of diverse categorizations and show the power of predictive models based on diverse perspectives. The model demonstrates both the potential for the wisdom of crowds and the possibility that the crowd may make systematic mistakes.

Scott E Page is professor of political science, complex systems, and economics at The University of Michigan, senior research scientist at the Institute for Social Research, senior fellow in the Michigan Society of Fellows, and external faculty member of the Santa Fe Institute. He is the author of two recent books, "The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies" and of "Complex Adaptive Systems: An Introduction to Computational Models of Social Life."

James SUROWIECKI

TBA

James Surowiecki is a staff writer at The New Yorker, where he writes a regular column on business and finance called "The Financial Page". Surowiecki's writing has appeared in a wide range of publications, including The New York Times, the Wall Street Journal, Foreign Affairs, Artforum, Wired, and Slate. In 2004, he published The Wisdom of Crowds, in which he argued that small groups exhibit more intelligence than isolated individuals and that collective intelligence shapes business, economies, societies and nations. Surowiecki pursued PhD studies in American History on a Mellon Fellowship at Yale University before becoming a financial journalist.

Philippe URFALINO

The Optimal Rule of Decision-making for Areopagus: Public Voting or Apparent Consensus?

Areopagus, as are constitutional courts and committees of experts, are expected to reach decisions which must be justified by reasons. Their members are not elected but appointed with a reference to their specific competence. With regard to the nature of the decisions they make and the intellectual quality of their members, areopagus are strongly associated with an idea of a certain kind of wisdom.

One of the questions areopagus are regularly confronted with, is : "what rules of collective decision-making warrant that a gathering of wise persons will indeed result in a wise collective decision" ? It appears that the answer is not always the same: in some cases, they opt for public voting with the rule of majority, and in other cases for what I call decision by apparent consensus (when a proposition receives no more objection).

Using mainly the examples from, advice committees at the FDA for pharmaceutical drugs and of their equivalent committees at the French Agency for Medical Drugs, the paper will raise three main questions:

How has the problem of the quality of the collective decisions been conceived and thought in the history of these committees?

What kind of rules and what justifications of these rules have been adopted?

What evidence we can collect about the quality of the decisions made with these rules?

Director of research at Centre National de la Recherche Scientifique (CNRS) and Professor at the Ecole des Hautes Etudes en Sciences Sociales, Philippe Urfalino dedicated several years to the study of cultural policies. His research is currently concentrated on two topics, collective decision-making, and the politics of pharmaceutical drugs. Professor Urfalino's recent publications include : L'invention de la politique culturelle, Hachette-Pluriel, 2004 ; Le grand méchant loup pharmaceutique. Angoisse ou vigilance ? Textuel, 2005 ; « La délibération n'est pas une conversation », Négociations, 2005, n°2 ; « La décision par consensus apparent. Nature et propriétés », Revue Européenne des Sciences Sociales, Tome XLV, 2007, n° 136.

Adrian VERMEULE

Many-Minds Arguments in Legal Theory

Many-minds arguments are flooding into legal theory. Such arguments claim that in some way or another, many heads are better than one; the genus includes many species, such as arguments about how legal and political institutions aggregate information, evolutionary analyses of those institutions, claims about the benefits of tradition as a source of law, and analyses of the virtues and vices of deliberation. This essay offers grounds for skepticism about many-minds arguments. I provide an intellectual zoology of such arguments and suggest that they are of low utility for legal theory. Four general and recurring problems with many-minds arguments are as follows:

(1) *Whose minds?*: The group or population whose minds are at issue is often equivocal or ill-defined.

(2) *Many minds, worse minds*: The quality of minds is not independent of their number; rather, number endogenously influences quality, often for the worse. More minds can be systematically worse than fewer because of selection effects, incentives for epistemic free-riding, and emotional and social influences.

(3) *Epistemic bottlenecks*: In the legal system, the epistemic benefits of many minds are often diluted or eliminated because the structure of institutions funnels decisions through an individual decisionmaker, or a small group of decisionmakers, who occupy a kind of epistemic bottleneck or chokepoint.

(4) *Many minds vs. many minds*: The insight that many heads can be better than one gets little purchase on the institutional comparisons that pervade legal theory, which are typically many-to-many comparisons rather than one-to-many.

Adrian Vermeule is Professor of Law at Harvard Law School. He graduated from Harvard College in 1990 and from Harvard Law School in 1993. From 1998 to 2006, he was a law professor at the University of Chicago. His books include Judging Under Uncertainty: An Institutional Theory of Legal Interpretation (2006), Terror in the Balance: Security, Liberty and the Courts (with Eric A. Posner) (2007); and, most recently, Mechanisms of Democracy: Institutional Design Writ Small (2007).

BIOGRAPHIES OF THE DISCUSSANTS

Karen CROXSON

Karen Croxson is an economist at Oxford University. She currently holds the Rank-Manning Junior Research Fellowship in Economics at New College, and has recently been elected to membership of the Oxford-Man Institute for Quantitative Finance. Karen's core training is in applied micro-economics and applied game theory. Her research interests include: teamwork and leadership; political extremism; the microstructure of betting and financial markets; prediction markets and alternative information aggregation mechanisms; and digital piracy. Last year she formed part of an interdisciplinary research team, led by the Oxford Internet Institute and funded by McKinsey & Company, which studied the performance of distributed problem-solving networks.

Arnaud LE PILLOUER

Arnaud Le Pillouer is Maître de conférences in public law at the University of Cergy-Pontoise. He is the author of « Les pouvoirs non-constituants des assemblées constituantes – Essai sur le pouvoir instituant » (2005), and has published several articles on legal theory and constitutional law, mainly on french constitutional history.

Stéphanie NOVAK

Stéphanie Novak is a doctoral student in political theory at the Institut d'Études Politiques de Paris. Her PhD dissertation focuses on decision-making in the EU Council of Ministers. She studied philosophy and political science at the École Normale Supérieure and at the Université Paris-1, Panthéon-Sorbonne. She taught political theory at the I.E.P. In 2006-2007, she was a visiting fellow at Harvard University, GSAS, department of Government.

Pasquale PASQUINO

Global Distinguished Professor in Law and Politics, NYU, Directeur de recherche – CNRS, Pasquale Pasquino is a specialist of comparative constitutional justice, he published a book on the origins of constitutionalism in France and numerous articles on Courts and judicial power in theory and history. Most recently he co-edited with O. Beaud a book on Kelsen and Schmitt.

Pierre ROSANVALLON

*Born in 1948, Pierre Rosanvallon has held the chair of Early Modern and Modern Political History at the Collège de France since 2001. He is also professor at the École des Hautes Études en Sciences Sociales as well as the President of the international intellectual workshop La République des idées. His work on political history and philosophy has mainly focused on the intellectual history of democracy in the longue durée, starting with the history of universal suffrage in France in *Le Sacre du citoyen. Histoire du suffrage universel en France*, 1992; the history of representation in *Le Peuple introuvable. Histoire de la représentation démocratique en France*, 1998; and the history of popular sovereignty in *La Démocratie inachevée. Histoire de peuple en France*, 2000. He is presently working on the transformations in contemporary democracies from a comparative perspective with non-western areas. The first volume, *La Contre-démocratie : la politique à l'âge de la défiance*, to be translated by Cambridge University Press. A volume of his articles and contributions*

has recently been edited by Sam Moyn, *Democracy Past And Future*, Columbia University Press, 2006. A book on the transformation of democratic legitimacy will be published in September 2008.

Elen RIOT

Elen Riot is a Ph.D. student in Strategy at the Haute Ecole de Commerce of Paris School of Management. She previously studied literature and anthropology at the Ecole Normale Supérieure of Lyon. She has translated a number of books, including James Surowiecki's The Wisdom of Crowds. She is the art columnist of the French edition of the MIT's Technology Review . She has been working on issues such as international strategy, entrepreneurship, innovation, art and digital technology for years.

Yves SINTOMER

Yves Sintomer is Professor of Sociology in the Department of Political Sciences at the University of Paris 8. He is also Head Assistant of the Centre March Bloch (Berlin). He holds a doctorate in Political and Social Sciences from the European University Institute (1996, published under the title "Impossible Democracy? Politics and Modernity in Weber and Habermas, Paris, La Découverte, 1999). He also holds a Habilitation à diriger les recherches en sociologie (University of Paris V, 2001, on the theme : « Délibérer, participer, représenter. Vers une sociologie de la délibération politique »). He studied at the Universities of Besançon, Paris 8 and Paris 10, at the European University Institute, the European University Institute of Florence, the University of Frankfurt and the University of Harvard. He taught at the University of Paris 8, the Institutes of Political Sciences of Paris and Lille, the University Humboldt in Berlin, the University of Catania (Italy), Louvain-La-Neuve (Belgien), Madrid-Complutense and Bilbao (Spain). He has published many books and articles on German sociology, democratic theory, participatory democracy and liberal democracy at the local scale, as well as on the problems of the French "banlieues" and on the "headscarf issue." He collaborates to several reviews, including "Mouvements" (La Découverte, Paris) and "Constellations" (New York). He co-directs the collection « Politique et société » at La Découverte. His work has been translated in a dozen languages.