The 2018 Informal “Mammoth” Reading Group

Our ambitious reading group (started in 2017) will continue this year, with a new set of books and topics. We will also look at single scholars who have given us a new way of thinking about the world. For those who have not seen the 2017 program¹, here is the motivation behind launching such an informal mammoth reading group (including the organizational details for this year):

A reading group is an important part of the information exchange process, provoking essential dialogue designed to promote, exercise, and expand the powers of the mind. Usually, a reading group discusses (great) academic papers or a book chapter on a weekly basis, allocating 45-50-60 minutes to each piece of work. This reading group is different! The goal is to “Read for Honours” but without the examination... We will only meet once per month, namely on the last Friday of the month (except December), to unplug from day-to-day activities. We will meet for a period of 4 hours (5-9PM, Z808). Why do we want to meet for four hours? There was a time when scholars sat for hours (sometimes daily…) in coffee houses to discuss problems (see, e.g., Stanislav Ulam’s experience as a student in Poland (Adventure of a Mathematician)). Ulam was surprised by what he experienced as a Harvard Junior Fellow: “I had my meals at Adams House, and the lunches there were particularly agreeable. We sat at a long table – young men and sometimes great professors; the conversations were very pleasant. But often, towards the end of a meal, one after the other would gulp his coffee and suddenly announce: “Excuse me, I’ve got to go to work!” Young as I was I could not understand why people wanted to show themselves to be such hard workers. I

was surprised at this lack of self-assurance, even on the part of some famous scholars. Later I learned about the Puritan belief in hard work – or at least in appearing to be doing hard work. Students had to show that they were conscientious; the older professors did the same. This lack of self-confidence was strange to me, although it was less objectionable than the European arrogance. In Poland, people would also pretend and fabricate stories, but in the opposite sense. They might have been working frantically all night, but they pretended they never worked at all. This respect for work appeared to me as part of the Puritan emphasis on action versus thought, so different from the aristocratic traditions of Cambridge, England, for example” (pp. 87-88).

The goals of this reading group are to provide not only a critical discussion of the content of the books but also to discuss open research questions, scientific puzzles, big picture questions, and perhaps even potential collaborative attempts. There are quite a large number of books listed per session. If you are keen to participate just read what you can and what you are interested in: try to see the reading list as a potential roadmap (the reading group should not be a stressful experience…). Regular attendance would be great to keep developing a “common language” over time but if you just show up for a particular topic that is okay too. If you need assistance in obtaining books, please note that Naomi Moy (n.moy@qut.edu.au) will help to coordinate the lending/borrowing process (please cooperate to help that flow smoothly, as there are a large number of books). It would be wonderful to see students attending. As was the case last year, I will organize pizzas, drinks, fruits, and sweets. Thus, for each month please let Naomi know whether you are going to attend. The selection (or perhaps better the elimination) process of the books is quite time consuming…It reminds me of Hugh Lofting (Doctor Dolittle’s Zoo): “What to leave out and what to put in? That’s the problem”. We will start in April. It would be helpful if you would give us an idea what you are reading and whether you are interested in giving a short presentation, précis, or sharing your thoughts on a particular book. If you have further questions feel free to send me an email: benno.torgler@qut.edu.au. Thanks.
Amartya Sen on Albert Hirschman (Foreword in *The Passions and the Interests*): “Albert Hirschman is one of the great intellectuals of our time. His writings have transformed our understanding of economic development, social institutions, human behaviour, and the nature and implications of our identities, loyalties, and commitments” (ix). In one of his lectures, Jeremy Adelman points out that Hirschman was a pioneer in thinking about the micro-foundations of the social sciences and a theorist of reforms and social change. He was a brilliant concept builder, able to see things differently (for example, turning theories in development economics on their head), and as Sen pointed out, he brought freshness to ideas that are more than two-hundred-years old.
We will also look at his extremely fascinating transnational life: he grew up during the fragile Weimar Republic; was a very active member of social democratic party (radical wing); was forced to go underground and fled Germany when the Nazis seized power; went to France, England and Italy; fought for the French army against the Nazis; volunteered to fight against the fascists in Spain; helped many of Europe’s leading artists and intellectuals escape to the US after France fell to Hitler; moved to Berkeley (funded by the Rockefeller Foundation) and as soon as the US declared war he joined the US army (age 27); and was sent to North Africa and Italy as a private to translate for captured German soldiers (he did some work for the British as well). The image below is of Hirschman next to General Anton Dostler; he translated for Dostler in Italy 1945 (war crimes tribunal, the first trial against a German officer). He worked for the Federal Reserve Board (1946-1952) on the Marshall Plan but was picked up by a security review during the McCarthy Communist infiltration paranoia and was driven out of federal government. Afraid that something was going to happen to him, he visited a friend at the World Bank (Alexander “Sandy” Stevenson) to let him know that he is no longer able to work in the US. Hirschman asked Stevenson whether he could help. The World Bank offered him the opportunity to go to Colombia, which allowed him to discover the field of development economics (stayed there almost 5 years). In Colombia he served as a financial advisor to the National Planning Board of Colombia and as a private economic counsellor.

I recommend you also check out the Princeton gathering at the Institute for Advanced Study to remember Albert O. Hirschman. His family members share particularly beautiful recollections (video).

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2 Spoke French without accent.
One of Hirschman’s core strengths was his ability to be truly an eclectic social scientist, going beyond disciplinary boundaries. Several of the books listed are splendid short pieces.


In his lecture at the Princeton Institute for International and Regional Studies, Jeremy Adelman noted that book made Hirschman a “global intellectual celebrity in the late 1960s”. It is Hirschman’s most cited contribution (more than 22,000 citations on Google Scholar), and is his most well-known book among economists. When reflecting on his contribution, Hirschman stated that the book “owes much to the excitement of discovering against the axiom that competition (exit) is the unfailing and exclusive remedy against all ills of economic organization”.


In the Preface to the book, Hirschman writes: “[c]oncern, stubborn, and exasperating otherness of others is at the core of the present book”; this is a “cool” historical and analytical examination of surface phenomena such as discourse, arguments, or rhetoric.


A reconstruction of the intellectual climate of the seventeenth and eighteen century offering a new interpretation for the rise of capitalism. Hirschman: “This book was not written against anyone or against any intellectual tradition in particular. Neither espousing nor opposing any existing body of thought, it has the special quality of standing free and of evolving freely and independently”.


Hirschman (Preface): I am not sure that this book qualifies as a work of social science. It is so directly concerned with change and upheaval, both individual and social, that at times I had the feeling that I was writing the conceptual outline of a Bildungsroman (with, as always in novels, a number of autobiographical touches mixed in here and there). The journey which I undertook permitted a number of elaborate side trips which yielded, among many other observations, a critique of conventional consumption theory, a better understanding of collective action, and a new
interpretation of the universal suffrage”. Robert Frank emphasizes Hirschman’s basic observation that societies seemed to oscillate on a roughly twenty-year cycle, between modes of private acquisitiveness and public spiritedness.


The core element of this book is as follows: “Tradition seems to require that economists argue forever about the question whether, in any disequilibrium situation, market forces acting alone are likely to restore equilibrium. Now this is certainly an interesting question. But as social scientists we surely must address ourselves also to the broader question: is the disequilibrium situation likely to be corrected at all, by market or nonmarket forces, or by both acting jointly? It is our contention that nonmarket forces are not necessarily less “automatic” than market forces” (see p. 63).


Complementary reading to the books: according to Hirschman, these essays have “a strong intellectual bond” with the books.


This short book consists of three parts:

1) Melding the Public and Private Spheres: Taking Commensality Seriously (Ian Patocka Memorial Lecture at the Institute for Human Sciences in Vienna in 1996)
2) Fifty Years After the Marshall Plan: Two Posthumous Memories and Some Personal Recollections
3) Trespassing: Places and Ideas in the Course of a Life (very fascinating and long interview with Hirschman)


Twenty essays self-reflecting on his previous work, new forays, and his life.


A tour de force of Hirschman’s life journey (more than 700 pages). I recommend you also take a look at two of his presentations (video 1; video 2)
Jon Elster makes a good point when talking about the dangers of excessive ambitions within the social sciences: in economics (and in political science), formal methods are at the top of the prestige hierarchy. However, economists would benefit from more training in history! Tom Schelling once told Elster that he read a lot on military history before doing his work on bargaining theory. This reading allowed Schelling to come across various rationales for commitment/binding devices that introduce constraints - or in the words of Schelling: “voluntary but irreversible sacrifice of freedom of choice” (The Strategy of Conflict, p. 22) - to gain strategic advantage. King Anathocles of Syracuse, William the Conqueror, and Hernán Cortés deployed strategies such as burning one’s ships or one’s bridges to deny the possibility of retreat or giving in to fear (also credible threat). We will need to dig deeper into the history of civilizations to understand this month’s topic.

Jared Diamond has been one of the most prolific “big picture” scholars. We will thus take a look at two of his books, both New York Times Bestsellers; one of which led him to win the Pulitzer Prize.

**Jared Diamond (2005). Collapse: How Societies Choose to Fail or Succeed.**

* A look at past and modern societies and practical lessons.

**Jared Diamond (1999). Guns, Germs, and Steel: The Fate of Human Societies.**

Diamond starts the Preface with: “The book attempts to provide a short history of everybody for the last 13,000 years” – and the result is a discussion of the reasons why history unfolds differently on different continents. Edward O. Wilson’s praise reads: “No scientist brings more experience from the laboratory and field, none thinks more deeply about social issues or addresses them with greater clarity, than Jared Diamond as illustrated by Guns, Germs, and Steel”.


* A widely discussed book. Kenneth Arrow notes: “Acemoglu and Robinson have made an important contribution to the debate as to why similar-looking nations differ so greatly in their economic and political development. Through a broad multiplicity of historical examples, they show how institutional developments, sometimes based on very accidental circumstances, have had enormous consequences. The openness of a society, its willingness to permit creative destruction, and the rule of law appear to be decisive for economic development”.


* The name Mancur Olson is no longer that well-known among young scholars (he has somehow been forgotten, along with many other economists or public choice scholars from the previous generation). His most famous book is The

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4 A good addition would be Pillars of Prosperity: The Political Economics of Development Clusters by Timothy Besley and Torsten Persson.

5 He was president of the Public Choice Society between 1972 and 1974. I have asked young scholars on several occasions whether they know James Buchanan (Nobel laureate in economics) and many respond with a no.
Logic of Collective Action: Public Goods and the Theory of Groups (e.g., almost 40,000 citations on Google Scholar). The book for discussion this month has been cited more than 10,000 times. Failing to anticipate economic realities has been a problem in economics. Olson refers to the 1970s and 1980s in his Preface but as we know we can also find more recent examples. He offers a potential explanation for this failure: “Perhaps it is because, wearing professional blinders, they have looked only straight ahead at phenomena economists have habitually examined” (x). In this book he tries to look to the side, and in the process, looks at other disciplines to get a better insight into the entire landscape.

We will look at two books by Peter Turchin, a scientist interested in the dynamics of human societies (he founded the field of “cliodynamics”). The second one is a little bit more technical.


Three books by the Harvard historian Niall Ferguson may also be interesting.


A warning that the United States relies too much on East Asian capital to fund its unbalanced current and fiscal accounts - or as Moritz Schularick calls it - “Chimerica”.


In this short book he tries to demonstrate that Western institutions have degenerated, by looking at four key components of our civilization: democracy, capitalism, rule of law, and civic society.


In this book he focuses on six complexes of institutions, ideas, and behaviours that help to understand how societies evolve: competition, science, property rights, medicine, consumer society, and work ethic.

“In some respect this is intended to be a revolutionary book, but in other respects it is very traditional indeed. It is revolutionary in that we have developed a comprehensive analytical framework to examine and explain the rise of the Western world; a framework consistent with a complementary to standard neo-classical economic theory”…. “This book is traditional in that we have built upon the pioneering studies of a host of predecessors. Scholars in the field will readily recognize our debt to Marc Bloch, Carlo Cipolla, Maurice Dobb, John U. Nef, M. M. Postan, Joseph Schumpeter, as well as the classic legal and constitutional studies of Pollock and Maitland and Stubbs” (Preface, vii).


It is worth taking a look at the work of the famous American sociologist Talcott Parsons. Neil Smelser on Talcott Parsons?: “One of the maxims that my teacher and friend Talcott Parsons was fond of repeating was this: in dealing with any theoretical topic, it never fails to repay one’s efforts to go first to the great classical thinkers on that topic. Parsons himself observed that principle repeatedly, revisiting and recasting the original insights of Durkheim, Weber, or Freud as he continued his lifelong struggle to conquer the mountainous obstacles to systematic sociological theory”.


We are going to look at another Pinker book (his most recent one). His key message: The bleak assessment of the state of the world is wrong, flat-earth wrong. He covers many aspects: progressophobia, life, health, sustenance, wealth, inequality, the environment, peace, safety, terrorism, democracy, equal rights, knowledge, quality of life, happiness, or existential threats.

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6 See his contribution Biography, the Structure of Explanation, and the Evaluation of Research in Sociology.
7 Perhaps less well-known is that the economist Edgar Salin (1892-1974) supervised the young American Talcott Parsons’ PhD thesis in Heidelberg. Salin did his PhD in Heidelberg under Alfred Weber, the younger brother of Max Weber. Later he moved to the University of Basel and encouraged an interdisciplinary and open perspective of economics (“alle ökonomische Wissenschaft ist Sozialwissenschaft”, see his book Politische Ökonomie: Geschichte der wirtschaftspolitischen Ideen. He founded the academic journal Kyklos in 1947 and influenced in Basel scholars such as Bruno and René Frey who took over Kyklos as editors in 1970 and conducted its editorial service for 45 years.
Yuval Noah Harari (2016). Homo Deus: A Brief History of Tomorrow\textsuperscript{8}.

* A look at future challenges, and where we are or might be going with respect to tackling the big questions.

\textsuperscript{8} Check out also his book Sapiens: *A Brief History of Humankind.*
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Creative Environments\(^9\)

We continue the discussion that we started last year on creativity, trying to better understand how creative environments and individuals work and interact. Surprisingly, universities often fail to carefully explore (or even acknowledge) interesting historical case studies of innovative and creative scientific environments. The daily business activities and incentive structures (e.g., getting accreditations) have taken their toll on universities’ time and knowledge, and even the ability to understand how innovation or creativity emerges.

Karl Sigmund. Exact Thinking in Demented Times: The Vienna Circle and the Epic Quest for the Foundations of Science.

We came across the name Karl Sigmund when reading Martin Nowak’s SuperCooperators: Altruism, Evolution, and Why We Need Each Other to Succeed\(^{10}\). It is important to take a closer look at the Vienna Circle. As

\(^9\) It is worth taking another look at Jonathan S. Feinstein (2006). The Nature of Creative Development. He will be visiting us in Australia in the future. We discussed Tim Harford’s Messy: How to Be Creative and Resilient in a Tidy-Minded World, and this is also a useful source to consider if you haven’t read the book yet.

\(^{10}\) Here are a couple examples: “En route, I have had the honor to cooperate with many brilliant scientists and mathematicians. Two of them proved particularly inspirational: Karl Sigmund and Robert May (xviii). “Before long, I was doing a PhD with him at the Institute for Mathematics in Vienna. Students who had studied there before me include the great physicist Ludwig Boltzmann, the logician Kurt Gödel, and the father of genetics, Gregor Mendel. As I pursued my doctorate, Karl and I would often meet in local coffeehouses, the genius loci of past glory. In these inspiring surroundings Gödel had announced his incompleteness theorem, Boltzmann had worked on entropy, and Wittgenstein had challenged the Vienna Circle, a group of intellectuals who would gather to discuss mathematics and philosophy” (p. 9). “I first came to appreciate the power of indirect reciprocity on a walk with Karl Sigmund in the summer of 1996. We were hiking around the Kahlenberg, a forested hill north of Vienna. The ridge is blessed with breathtaking views of the great city, being part of the Wienerwald, the Vienna woods. We were negotiating a chain of tree-covered hills northeast of the city, bounded by rivers, including the Danube. There are villages here and there, such as one where Beethoven lived (Nussdorf), and taverns (Heurige) are dotted all about, where we could sit down to sip the local wines. Although this does not sound a likely birthplace for a scientific breakthrough, there is plenty of evidence that the networks of paths that crisscross the forested hills of the Wienerwald are steeped in creative magic. Mahler would walk from the Kahlenberg into the city to conduct opera. Johann Strauss the Younger composed his
Douglas Hofstadter points out in the Preface: "There is no doubt that the Vienna Circle was an assemblage of some of the most impressive human beings who have ever walked the planet".


Taking a closer look at Bell Labs is a must, and we will do this by discussing Gertner’s book. Walter Isaacson praises the book as being filled with colourful characters and inspiring lessons while exploring what causes innovation. Many intellectual powerhouses were at Bell Labs, such as Claude Shannon\(^\text{11}\) or John Tukey. On the Cinematics Night we looked at the life of Alan Turing – he actually spent some time there. Richard Hamming\(^\text{12}\), a famous mathematician and computer scientists at Bell Laboratories\(^\text{13}\), discusses some of his experiences at Bell Labs in his wonderful article *You and Your Research*\(^\text{14}\).

\[^{11}\] See also Jimmy Soni and Rob Goodman’s *A Mind at Play: How Claude Shannon Invented the Information Age*.

\[^{12}\] He is very fun to read and very outspoken: “In fact I will give you my favorite quotation of many years. The Institute for Advanced Study in Princeton, in my opinion, has ruined more good scientists than any institution has created, judged by what they did before they came and judged by what they did after. Not that they weren’t good afterwards, but they were superb before they got there and were only good afterwards”.

\[^{13}\] When he came to Bell Labs he shared an office for a while with Claude Shannon.

\[^{14}\] “Now Alan Chynoweth mentioned that I used to eat at the physics table. I had been eating with the mathematicians and I found out that I already knew a fair amount of mathematics; in fact, I wasn’t learning much. The physics table was, as he said, an exciting place, but I think he exaggerated on how much I contributed. It was very interesting to listen to Shockley, Brattain, Bardeen, J.B. Johnson, Ken McKay and other people, and I was learning a lot. But unfortunately a Nobel Prize came, and a promotion came, and what was left was the dregs. Nobody wanted what was left. Well, there was no use eating with them! Over the other side of the dining hall was a chemistry table. I had worked with one of the fellows, Dave McCall; furthermore he was courting our secretary at the time. I went over and said, ‘Do you mind if I join you?’ They can’t say no, so I started eating with them for a while. And I started asking, ‘What are the important problems of your field?’ and after a week or so, ‘What important problems are you working on?’ And after some more time I came in one day and said, ‘If what you are doing is not important, and if you don’t think it is going to lead to something important, why are you at Bell Labs working on it?’ I wasn’t welcomed after that; I had to find somebody else to eat with!”.

“Tales from the Vienna Woods” in waltz time. Franz Schubert and Beethoven were also moved by its rolling Arcadian landscape. A green meadow on a plateau high above the city where the skies open wide is called Himmel (Heaven). There, the young Sigmund Freud managed to convince himself that he had understood the nature of dreams\(^\text{11}\) (p. 57).

Founded by James Clerk Maxwell, the Cambridge Cavendish Lab was once described by Egon Larsen as “The Nursery of Genius”. If you think that scholars were pushed to keep “workin’ day and night”, you are wrong! Under Rutherford’s leadership people were discouraged from working late. The department was closed from about 6PM onwards. People recall Rutherford often saying: “Do not stay here in the laboratory until late, thinking that you are working hard. Go home and clear your mind and be ready for fresh action the following day.”

Longair was in charge of the department between 1997 and 2005. In this book he is interested in the “content of the physics and how it came about, rather than a history of personalities, politics, administrative structure and so on” and to “set the scientific achievement in the context of the development of physics as a whole”.

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15In an interview, Lewis Wolpert challenges Jared Diamond with: “I think it was Rutherford who somewhat contemptuously said that biologists like yourself are simply stamp collectors. How do you respond to that view?” Diamond’s response: “Rutherford exemplifies a wilful and, to me, despicable and destructive ignorance on the part of many scientists about the field sciences and the historical sciences. It’s not only Rutherford and other physicists, but many biologists. I would say most biologists, who are experimental laboratory biologists, do not understand the importance of the field sciences and do not appreciate our methods. Their belief is that if you cannot do it in the laboratory by controlled experiments, then the other science is inferior. They believe that observational science, descriptive science, as Rutherford said, is postage stamp collection. To that I would say several things. Science is a matter of obtaining knowledge by whatever methods work for obtaining that knowledge. The questions of ecology and evolution and historical sciences generally can be answered only by observational comparative methods, not by experiments”. That’s one thing. And a second thing is that if you want to talk about descriptive non-intellectual science most of modern molecular biology and experimental science is just that; it is descriptive, often devoid of intellectually interesting questions, like simply describing the ten-thousandth cloned gene. They’re in it to clone the gene rather than to ask interesting questions, just as nineteenth-century butterfly collectors were in it to collect the butterfly rather than to ask the interesting questions. The gene cloners are defended today by saying that having cloned the gene, someone, perhaps not them, can then ask interesting questions. Similarly with the butterflies. The final that I would add when I said that Rutherford’s attitude and that of many modern biologists is not only ignorant but despicable and destructive is that, as far as society is concerned, the most important questions in science today, the most important biological questions, the ones that have the greatest importance for society, are not questions that are going to be answered by experimental biology. They are instead questions of the biological environment on the one hand, and of human environmentally triggered diseases on the other hand. The thing that really risks making our world not worth living in, or viable for humans fifty years from now, is the progressive collapse of our biological environment” (pp. 31-32).


Isaacson has written a number of fascinating books about interesting personalities such as Leonardo da Vinci, Einstein (Einstein: His Life and Universe), Benjamin Franklin (Benjamin Franklin: An American Life), Steve Jobs, or Kissinger (Kissinger: A Biography). Here he offers an understanding of the people who created the computer and the Internet, who they were, how their minds worked, and what made them so creative.


George Dyson, son of Freeman Dyson, has written this fascinating book on the origin of the computer. He examines the von Neumann project that gathered a creative group of scientists to realize Alan Turing’s Universal Machine. It is a story of how the race to build the hydrogen bomb was accelerated by von Neumann’s desire to build a computer and the push to build von Neumann’s computer was accelerated by the race to build a hydrogen bomb: computers were essential for initiating the nuclear explosions and to understanding what happens afterwards.


We came across Simonton in last year’s reading group. He is an excellent scholar in the area of human intelligence, creativity, and greatness.

David W. Galenson (2001). Painting Outside the Lines: Patterns of Creativity in Modern Art\(^\text{17}\).

The Chicago economist Galenson aims to understand innovation and creativity to formulate new interpretation of modern art. He has analysed the careers of more than 100 modern painters, revealing insights about the methods used to innovate (conceptual versus experimental innovators).

\(^{17}\) See also his books Conceptual Revolutions in Twentieth-Century Art and Old Masters and Young Geniuses.
John D. Gartner (2005). The Hypomanic Edge: The Link Between (a Little) Craziness and (a Lot of) Success in America. Last year we talked about the relationship between “craziness” and creativity or success. Here we take a look at a “softer version” of craziness, namely hypomania. The psychiatrist Gartner provides a passionate view of people such as Columbus, Winthrop, Williams, Penn, Alexander Hamilton, Andrew Carnegie, the Selznicks and Mayers, and Craig Venter.


Scott E. Page (2017). The Diversity Bonus: How Great Teams Pay Off in the Knowledge Economy. Page, Professor of Complex Systems, Political Science, and Economics and external faculty member of the Santa Fe Institute has written a lot on diversity (e.g., Diversity and Complexity, The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies). Here he asks the questions, “What if workforce diversity is more than simply the right thing to do in order to make society more integrated and just? What if diversity can also improve the bottom line of businesses and other organizations facing complex challenges in the knowledge economy? It can. And The Diversity Bonus shows how and why”.

Allan Snyder (2014). What Makes a Champion!: Over Fifty Extraordinary Individuals Share their Insights. Snyder, director of the Centre of the Mind at the University of Sydney and a recipient of the 2001 Clifford Paterson Prize for “contributions which benefit mankind” gives voice to 50 individuals in this attempt to understand what makes a champion.

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18 I recommend you also check out Kay Redfield Jamison’s Touched with Fire: Manic-Depressive Illness and the Artistic Temperament.
19 See also Perkins’ book King Arthur’s Round Table: How Collaborative Conversations Create Smart Organizations.
20 For more of his work, see also the book that was listed in last year’s reading group.
21 Tim Ferriss has dedicated his famous Podcast to trying to figure out or “deconstruct” the tactics, tools, and routines of successful individuals. The following books have emerged out of his discussions: Tools of Titans: The Tactics, Routines, and Habits of Billionaires, Icons, and World-Class Performers and Tribe of Mentors: Short Life Advice from the Best in the World.

*All aboard?*
Robert M. Solow (2004, p. 153) in Lives of the Laureates: “To be honest, I should warn you that I am going to tell you as little about myself as I can get away with in a lecture about ‘My Evolution as an Economist.’ My reason is not that I have anything to hide. I wish I had more to hide; that would at least suggest an exciting life. My problem is that I think the ‘cult of personality’ is slowly swamping our culture. You can see it at its most dangerous in presidential elections, where eyebrows seem to be more important than ideas. I tend to blame that on television, which is a better medium for eyebrows than for economic theory. But that sort of technological determinism won’t quite do: it leaves us with the task of explaining the psychologization of almost everything, the success of pop books on character, the fact that seven out of ten nonfiction best sellers are biographies, the importance attached to the ‘personal relationship’ between Mr. Reagan and Mrs. Thatcher. Something pretty deep is going on there. (I don’t mean between Mr. Reagan and Mrs. Thatcher)… Anyway, what I have called the cult of personality has to be a sign of cultural decay.”

We will look at a set of interesting but heterogeneous scholars and great minds.


Herbert Simon is one of the most fascinating scholars in the history of science. How is it possible to be on top of so many different fields? He might be the first and perhaps even the last scholar who was (among other things22) able

22 … such as, for example, the APA Award for Distinguished Scientific Contributions to Psychology and the APA Award for Lifetime Contributions to Psychology.
to win the Nobel Prize in Economics and the Turing Award (“Nobel Prize in computing”). In his wonderful autobiography we will get insights about his entire academic journey and his life in general.\(^\text{23}\)


We cover a lot of ground with Ulam’s book (e.g., Princeton Days, Harvard Years, Los Alamos). Von Neumann once told Ulam’s wife that he had never met anyone with as much self-confidence, adding that perhaps it was somewhat justified. His book is fun to read and insightful: “Little has been written about the lives of the people responsible for so much in science and in the birth of the nuclear age and space age: von Neumann, Fermi, and numerous other mathematicians and physicists. But here I want to recount also the more abstract and philosophically decisive influences which came from mathematics itself. Names like Stefan Banach, G. D. Birkhoff, and David

\(^{23}\) Here are a couple of examples. From Part 2: The Scientist as a Young Man (Friends from the Cowles Years), a discussion about Jascha Marschak and Tjalling Koopmans: “They were Europeans. Like my father, they pursued their professions with intense seriousness, but without neglecting other parts of life. They were intellectually curious about all things. The health of the body politic was important to them. Their quiet humor floated above a deep pool of serious concern for the human condition. There was a great gentleness in both of them. In the early 1950s, when I was on a faculty recruiting trip from Pittsburgh, I had dinner with Marschak one evening in the Quadrangle Club at the University of Chicago. The conversation turned to the selection of faculty. As he had assembled a spectacular group of stars in the Cowles Commission, I asked him what qualities he looked for in selecting staff. ‘Oh,’ said he, ‘I pick people with good eyes.’ I stared at him. Good eyes – what could he mean? I told him he was joking, but he insisted: He looked at their eyes. And then I began thinking of the clear dark Armenian eyes of Arrow, the cool blue Frisian eyes of Modigliani. It was certainly true that they all had remarkable eyes. Ever since, I think I have included that among my own selection criteria; intelligence shines through the eyes” (pp. 104-105). “The record makes clear that I have been, and am, a competitive person, and in addition to the intrinsic satisfactions of academic work, I have never been insensitive to the implicit competition with others that pursuit of a career entails. A highly competitive person has a hard row to hoe. There is no satisfaction in winning a competition unless it is a stiff and fair one. Stiff is easy to define; it is stiff if one’s own realistic assessment of one’s abilities make the odds long – the longer the odds, the greater satisfaction on winning. Fair is harder to define, for if one wins a contest against long odds, there must be a reason… Fairness means at least an honest deal (no hidden cards) and no intentional concealment of one’s abilities. How do these criteria apply to the life of science? I advise my graduate students to pick a research problem that is important (so that it will matter if it is solved), but one for which they have a secret weapon that gives some prospect of success. Why a secret weapon? Because if the problem is important, other researchers as intelligent as my students will be trying to solve it; my students are likely to come in first only by having access to some knowledge or research methods the others do not have” (pp. 110-111). “My nose was clearly sensitive to where the action was” (p. 114). “I was neither a name-dropper nor a celebrity seeker. I generally had little contact with the Great Men, but absorbed their influence indirectly through my contemporaries who were their students” (p. 115). “There is a Russian folktale about the peasant from a distant village who encounters a friend on Red Square, just outside the Kremlin in Moscow, and asks, ‘Why, Ivan Ivanovich, what are you doing here?’ ‘Oh,’ he replies, ‘I came to see and to be seen.’ For centrality to the postwar quantitative social sciences, the Cowles Commission and the RAND Corporation were definitely the places to see and to be seen” (p. 116). Personal Threads in the Warp: “Time is the tyrant. One cannot be loyal to two occupations any more than one can to two lovers. Whenever I found that one of my hobbies was seriously taking attention from my research, I dropped it. That happened to chess, and then painting, in the late 1950s. In both cases, I found that I was aspiring to professional competence, which obviously would have required an unlimited commitment. It was time to call a halt. It probably says something about my competitiveness that I often found myself getting serious about activities that were begun as diversions” (p. 241). I recommend to check out Carl F. Christ’s paper The Cowles Commission’s Contributions to Econometrics at Chicago, 1939-1955, Journal of Economic Literature (1994, Vol. XXXII).
Hilbert are virtually unknown to the general public, and yet it is these men, along with Einstein, Fermi and a few others equally famous, who were indispensable to what twentieth-century science has accomplished.24


Young Samuelson was once challenged by Ulam to state one proposition in social science that is both true and nontrivial. Samuelson’s answer several years later was: comparative advantage. “That it is logically true need not be argued before a mathematician; that it is not trivial is attested by the thousands of important and intelligent men who have never been able to grasp the doctrine for themselves or to believe it after it was explained to them.” Samuelson’s witty remarks have a timely component which most mathematical economists fail to implement in their work: “I can claim that in talking about modern economics I am talking about me. My finger has been in every pie. I once claimed to be the last generalist in economics, writing about and teaching such diverse subjects as international trade and econometrics, economic theory and business cycles, demography and labor economics, finance and monopolistic competition, history of doctrines and locational economics. Kilroy, having been there, must share the guilt. (Goethe wrote that there was no crime he ever heard of that he didn’t feel capable of committing. Bob Solow’s reaction was that Goethe flattered himself. And perhaps what I called “crime” is a mistranslation of what Goethe meant only as “error’” (p. 52). Roger Backhouse, an excellent scholar in the history and philosophy of economics25 takes up the challenge of providing a biography of Paul Samuelson.

24 Ulam does not seem to mind a little bit of gossip (he points out that mathematicians love to gossip) but succeeds in making very good and important points that also show the “mental bugs” of great minds. Here again is the example of Norbert Wiener, the father of cybernetics, that I provided last year: “Wiener seemed childish in many ways. Being very ambitious about his place in the history of mathematics, he needed constant reassurance about his creative ability. I was almost stunned a few weeks after our first encounter when he asked me point blank: ‘Ulam! Do you think I am through in mathematics?’ Mathematicians tend to worry about their diminishing power of concentration much as some men do about their sexual potency. Imprudently, I felt a strong temptation to say ‘yes’ as a joke, but refrained; he would not have understood. Speaking of that remark, ‘Am I through, several years later at the first World Congress of Mathematicians held in Cambridge, I was walking on Massachusetts Avenue and saw Wiener in front of a bookstore. His face was flued to the window and when he saw me, he said, ‘Oh! Ulam! Look! There is my book!’ Then he added, ‘Ulam, the work we two have done in probability theory has not been noticed much before, but see! Now, it is in the center of everything.’ I found this disarmingly and blessedly naïve”. (pp. 93-94). Ulam on John von Neumann: “As a mathematician, von Neumann was quick, brilliant, efficient, and enormously broad in scientific interests beyond mathematics itself. He knew his technical abilities; his virtuosity in following complicated reasoning and his insights were supreme; yet he lacked absolute self-confidence. Perhaps he felt that he did not have the power to divine new truths intuitively at the highest levels or the gift for a seemingly irrational perception of proofs or formulation of new theorems. It is very hard for me to understand this. Perhaps it was because on a couple of occasions he had been anticipated, preceded, or even surpassed by others. For instance, he was disappointed that he had not first discovered Gödel’s undecidability theorems. He was more than capable of this, had he admitted to himself the possibility that Hilbert was wrong in his program. But it would have meant going against the prevailing thinking of the time” (p. 76).


This is not an autobiography of Gell-Mann’s life (he is a recipient of the Nobel Prize in Physics and a co-founder of the Santa Fe Institute), but a collection of his views on “an emerging synthesis at the cutting edge of inquiry into the character of the world around us – the study of the simple and the complex” (Preface).

James Gleick (1993). Genius: The Life and Science of Richard Feynman. Gell-Mann talks about Feynman, who was responsible for bringing Gell-Mann to Caltech. A very large compilation of videos about Feynman are available here. Freeman Dyson on Feynman: “What have Jonson and Shakespeare to do with Richard Feynman? Simply this. I can say as Jonson said: “I did love this man this side idolatry as much as any.” Fate gave me the tremendous luck to have Feynman as a mentor. I was the learned and scholarly student who came from England to Cornell University in 1947 and was immediately entranced by the slapdash genius of Feynman. With the arrogance of youth, I decided that I could play Jonson to Feynman’s Shakespeare. I had not expected to meet Shakespeare on American soil, but I had no difficulty in recognizing him when I saw him” (Foreword in The Pleasure of Finding Things Out).

Thomas Blass (2004). The Man Who Shocked the World: The Life and Legacy of Stanley Milgram. Milgram’s research on obedience is among the most famous work in psychology’s history. We will take a look at his creative experimental mind covering wide-ranging topics and problems (e.g., six degrees of separation, last-letter technique, or mental maps of cities). According to Blass, the book “is the product of my twenty-year immersion in Milgram’s eye-opening and sometimes troubling research”. Philip G. Zimbardo (see, e.g., Stanford Prison Experiment) calls the book “A tour de force”.

26 It is worth checking out Feynman’s thoughts and teaching in: The Pleasure of Finding Things Out, The Meaning of it All, Surely You’re Joking, Mr. Feynman! Six Easy Pieces: Essentials of Physics Explained by Its Most Brilliant Teacher, his letters in Perfectly Reasonable Deviations, or even the Feynman Lectures on Physics.

27 I recommend also reading his book The Individual in a Social World for an overview of his work.

A testament to individual intensity and passion by one of the most original evolutionary thinkers.


You can’t read biographies of great minds without including Leonardo da Vinci. Many scholars have written about Leonardo (e.g., Serge Bramly, Leonardo: The Artist and the Man; Edward McCurdy, The Mind of Leonardo da Vinci; Fritjof Capra, The Science of Leonardo and Learning from Leonardo: Decoding the Notebooks of a Genius). Even Freud wrote about Leonardo (Leonardo da Vinci: A Memoir of his Childhood), an attempt which Ernest Jones compares to an archaeological reconstruction of a mind that is not accessible to direct investigation, as it was based on detailed psycho-analytic knowledge of living persons. We will look at the most recent book on Leonardo by the acclaimed biographer Walter Isaacson.


Can you read it? “Raffiniert ist der Herrgott aber boshaft ist er nicht” (above the fireplace in the faculty lounge of the mathematics building in Princeton (Fine Hall))

A lot has also been written about Einstein. Gerald Holton (see last year’s list) provides many insights on Einstein throughout his own work. Roger Penrose on the Pais book: “This book was surely the biography that Einstein

herself would have most valued”. Being a theoretical physicist allows Pai to grasp and then communicate Einstein’s strength in handling ideas, providing a coherent account of his scientific significance.

David N. Schwartz (2017). The Last Man Who Knew Everything: The Life and Times of Enrico Fermi, Father of the Nuclear Age.

Schwartz, son of Nobel Laureate Melvin Schwartz: “What you will find in this book, I hope, is a narrative that brings the whole person into focus. It is tempting to say, as did many of his colleagues, that he was “all physics,

29 Ulam on Los Alamos: “The Los Alamos community was completely different from any where I had ever lived and worked. Even Łódź, which had a dense concentration of people and where the mathematicians and university people were in daily contact and spent much time together in restaurants and coffee houses, did not have the degree of togetherness of Los Alamos…It has been said that at lunch in Fuller Lodge one could see as many as eight or ten Nobel Prize-winners eating at the same time (Rabi, Lawrence, Fermi, Bloch, Bohr, Chadwick, and others)” (p. 161). Edward Teller’s recollection of an event involving Fermi (famous Fermi’s paradox): “I remember having walked over with Fermi and others to the Fuller Lodge for lunch. While we walked over, there was a conversation which I believe to have been quite brief and superficial on a subject only vaguely connected with space travel. I have a vague recollection, which may not be accurate, that we talked about flying saucers and the obvious statement that the flying saucers are not real. I also remember that Fermi explicitly raised the question, and I think he directed it at me, ‘Edward, what do you think? How probable is it that within the next ten years we shall have clear evidence of a material object moving faster than light? I remember that my answer was 10^{-6}.’ Fermi said, ‘This is much too low. The probability is more like ten percent’ (the well known figure for a Fermi miracle)… The conversation, according to my memory, was only vaguely connected with astronautics partly on account of flying saucers might be due to extraterrestrial people (here I believe the remarks were purely negative), partly because exceeding light velocity would make interstellar travel one degree more real. The discussion had nothing to do with astronomy or with extraterrestrial beings. I think it was some down-to-earth topic. Then, in the middle of his conversation, Fermi came out with the quite unexpected question ‘Where is everybody?’... The result of his question was general laughter because of the strange fact that in spite of Fermi’s question coming from the clear blue, everybody around the table seemed to understand at once that he was talking about extraterrestrial life”. Emil Konopinski: “It was after we were at the luncheon table that Fermi surprised us with the question ‘but where is everybody?’ It was his way of putting it that drew laughs from us” (see https://fas.org/sgp/otergov/doc/lanl/la-10311-ms.pdf). Ulam again on Los Alamos: “Their interests were wide because physics has more definite and obvious central problems than mathematics, which splits into many almost independent domains of thought. They considered not only the main problem – the construction of an atomic bomb and related physical questions about phenomena that would attend the explosion – the strictly project work – but also general questions about the nature of physics, the future of physics, the impact of nuclear experiments on the technology of the future, and contrasting its influence on the future development of theory. Beyond this, I remember very many after-dinner discussions about the philosophy of science, and of course on the world situation, from daily progress on the war fronts to prospects of victory in the months to come. The intellectual quality of so many interesting persons and their being constantly together was unique. In the entire history of science there had never been anything else remotely approaching such a concentration. The radar project in Cambridge, Massachusetts, proceeding at the same time, had some of these characteristics, but without the same intensity. It was more technological perhaps, and did not touch as many fundamental questions of physics... I had learned earlier that Fermi was referred to as “the pope” because of the infallibility of his pronouncements. So immediately I intoned: ‘Annuncio vobis gaudium maximum, papam habemus,’ which is the classical way cardinals announce the election of a pope on the balcony overlooking St. Peter’s Square, after the white smoke comes out of the chimney in the Vatican... Fermi was short, sturdily built, strong in arms and legs, and rather fast moving. His eyes, darting at times, would be fixed reflectively when he was considering some question. His fingers often nervously played with a pencil or a slide rule. He usually appeared in good humor, with a smile almost perpetually playing around his lips. He would look at a questioner in an inquiring way. His conversation included many questions, rather than expressions of opinion. His questions were formulated in such a way, however, that it was clear which way Fermi’s beliefs or guesses went. He would try to elucidate other persons’ thoughts by asking questions in a Socratic manner, yet more concretely than in Plato’s succession of problems. Sublimated common sense characterized his thoughts. He had will power and control; and not obstinacy but persistence in following a line, all the while looking very carefully at possible ramifications. He would not neglect the opportunities that presented themselves, often by chance, from random observations in scientific work” (pp. 162-163).
all the time,” and there is an element of truth to this. But he was also a husband, a father, a colleague, and a friend. He played a central role in some of the most important events of the twentieth century. The drama of his life can only be appreciated through an examination of all of these aspects”.


We all know - or have at least heard of - Asimov’s work in science fiction and popular science. He was brilliant at explaining scientific concepts effortlessly and with historical background. Marvin Minsky was keen to understand the secret of his prolific writing (he wrote or edited more than 500 books and around 90,000 letters and postcards) but he didn’t get a satisfactory answer from Asimov… Let’s take a short look at his life.

R. Buckminster Fuller (2003). Guinea Pig B: The 56 Year Experiment.

An honest description of Bucky’s life insights and his wisdom. Many regarded Bucky as the 20th Century Leonardo da Vinci. His daughter acknowledges that “it is important to recognize that it took him about thirty-two years to sort out his priorities and for him to understand himself well enough to really pursue the course of action that he then pursued. It was a course of action that demanded his full integrity in listening to himself, in challenging himself, and at the same time being deeply aware of all that surrounded him”.

30 Isaac Asimov: “The only people I ever met whose intellects surpassed my own were Carl Sagan and Marvin Minsky”.
31 For a more detailed autobiography see: I. Asimov: A Memoir.
Andrew Robinson (2007). The Last Man Who Knew Everything: Thomas Young, the Anonymous Genius Who Proved Newton Wrong and Deciphered the Rosetta Stone, Among Other Surprising Feats.

In the Preface of his book, Robinson (also author of Sudden Genius? The Gradual Path of Creativity) writes: “Versatile people have always fascinated me as a biographer. Most recently, there was Albert Einstein, who, as everyone knows, fathered diverse new fields of science, but who also influenced some crucial areas of international politics. Before Einstein, Michael Ventris, a professional architect who in his spare time deciphered Linear B, the earliest European writing system, and became revered by archaeologists. And before Ventris, two prodigious Indians, the writer Rabindranath Tagore and the filmmaker Satyajit Ray, both of whom were intensely creative in areas outside literature and cinema. But I must admit that Thomas Young (1773-1829), for sheer range of expertise, beats them all”.
August 31

Everyday Life: Part 1

We could fill an entire year of reading groups with this topic. A lot of material, but with a lot of fun stuff in it. Pick your winners!

Overall


Baumeister is one of those unique social scientists, able to “connect the dots”. This is his attempt to cover a broad set of topics around life’s meaning (e.g., self-identity, work, love, religion, happiness, death, or parenthood).


Durant is a Pulitzer Prize-winning historian and philosopher and author (together with his wife Ariel) of an incredible 11 volumes of The Story of Civilization. When he offers his wise reflections and life insights and recommendations, you had better listen!

32 Also valuable is James Q. Wilson’s book from last year entitled The Moral Sense. He looks at many aspects, such as sympathy, fairness, self-control, duty, families, gender, aspiration or human character. Columns such as Gary Becker’s in Business Week (see Gary Becker and Guity Nashat Becker, The Economics of Life) are also valuable in order to see how social scientists analyse a large variety of topics that affect our daily lives. Moreover, I have not covered important topics that were discussed last year, such as the origin of human communication and language, grooming, or gossip.


A reflection on reputation, pride, rank, honour, and fame. Alain de Botton (in The Consolations of Philosophy) gives a wonderful overview of Schopenhauer’s life. According to Schopenhauer, humans lacked gentleness and humility, and so he preferred a close relationship with his poodle. He was fond of polygamy: “Of the many advantages of polygamy, one is that the husband would not come into such close contact with his in-laws, the fear of which at present prevents innumerable marriages. Ten mothers-in-law instead of one!” He adopted a very rigid daily routine. In 1820 “he attempts to gain a university post in philosophy in Berlin. He offers lectures on ‘The whole of philosophy, i.e. the theory of the essence of the world and of the human mind.’ Five students attend. In a nearby building, his rival, Hegel, can be heard lecturing to an audience of 300. Schopenhauer’s assessment of Hegel’s philosophy: ‘[T]he fundamental ideas are the absurdist fancy, a world turned upside down, a philosophical buffoonery… its contents being the hollowest and most senseless display of words ever lapped up by blockheads, and its presentation…being the post repulsive and nonsensical gibberish, recalling the rantings of a bedlamite’” (p. 176).


A large variety of notes and digressions on ideas that came to Eco’s mind (mostly based on a regular column called “La bustina di Minerva”). His final book.


The book covers key elements of our discussion this month. Andrew Oswald praises the book as “the most remarkable book I have read in the last decade”. For a book review see here 😊.

34 I have never seen a private library like Eco’s, see here. You can also check out the following interesting interview.

Everyday life in its power, need, strangeness, and fragility.


According to Sapolsky, “Kenrick writes like a dream”, and Pinker names Kenrick as one of the most important scientists studying the evolutionary shaping of human drives and emotions. The titles of the book chapters are appealing: Standing in the Gutter; Why Playboy Is Bad for Your Mental Mechanism; Homicidal Fantasies; Outgroup Hatred in the Blink of an Eye; The Mind as a Coloring Book; Subselves; Reconstructing Maslow’s Pyramid; How the Mind Warps; Peacocks, Porsches, and Pablo Picasso; Sex and Religion; Deep Rationality and Evolutionary Economics; Bad Crowds, Chaotic Attractors, and Humans as Ants. Steve visited Kenrick recently in Arizona and can give you more insights into Kenrick’s mind and personality (below he attended his lecture).


Pulitzer Prize winner Steven Pearlstein says about the book: “Charles Darwin, Dan Kahneman and Malcolm Gladwell walk into a bar… It’s no joke!”. The book explores why we hide our motives and provides a large number of examples in our everyday life (consumption, art, charity, education, medicine, religion, politics, conversation, laughter, or body language).

Economists and experimentalists are just discovering small groups. It is therefore a must to dig into Homans’ classic analysis on human groups.

Love, Sex, and Mating


Anthropologist Fisher looks at being in love, love among animals, scanning the brain in love, lust, romance and attachment, who we choose, the evolution of romantic love, rejection, despair and rage, and very importantly making romance last. She is an outstanding public speaker and it is therefore worth checking out her TED talks: talk 1, talk 2


From “Now We Are One” to “Sleeping with the Devil”, from “Truly, Madly, Deeply” to “Love and Betrayal Online”. Love is not just about passion and pain but also survival.


Diamond: “Reading this book will not teach you new positions for enjoying intercourse”. Nevertheless, Diamond explores how human sexuality came to be. He explores interesting questions such as Why don’t men breast-feed their babies? Why are humans doing sex at the wrong time (recreational sex)? What are men good for? Using a comparative perspective he helps us to understand what it means to be a mammal and how different we are in

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35 Diamond (p. 50): “My favorite case is the chauvinist husband who kept complaining about his wife’s “miserable little breasts,” until he was shocked to find his own breasts growing. It turned out that his wife had been lavishly applying estrogen cream to her breasts to stimulate the growth craved by her husband, and the cream had been rubbing off on him”.

36 Diamond (p. 65): “Human sex does seem a monumental waste of effort from a “biological” point of view – if one follows Catholic dogma in equating sex’s biological function with fertilization. Why don’t women give clear ovulatory signals, like most other female animals, so that we can restrict sex to moments when it could do us some good?”.
relation to other animals or mammals. Several examples, including those from the world of birds, are very valuable and entertaining.


The human mind’s impressive abilities evolved, similar to a peacock’s tail, not just as survival machines but as courtship machines: “Every one of our ancestors managed not just to live for a while, but to convince at least one sexual partner to have enough sex to produce offspring. Those proto-humans that did not attract sexual interest did not become our ancestors, no matter how good they were at surviving” (p. 3).


“Although I am aware of the cliché that if you give someone a hammer everything looks like a nail, I’ve come to believe that human mating strategies permeate nearly every human endeavour. I see them everywhere. They shape status hierarchies among women and foster sexual treachery among men. They delay male puberty early in life while causing premature death at the other end – both products of mate competition. They unite people in love’s embrace and drive mates apart with jealous rages and sexual infidelity. Human sexual psychology is deeply embedded in the fabric of our social endeavors, in all of its glorious and disturbing manifestations” (p. ix).


A different book from the others: from micro to macro. What elements of the social system make some conflicts creative and fruitful and others destructive and damaging to all parties? The way in which things come to hold together and fall apart requires an understanding of the idea of a “grant”; a one-way transfer. Kenneth Boulding was one of the most eclectic social scientists of the 20th century. He came from a generation of English scholars that didn’t need a PhD, he was a John Bates Clark medallist who was also President of the American Economic

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37 “It is not obvious why our loss of body hair should have made recreational sex more appealing, nor why our command of fire should have favoured menopause. Instead, I shall argue the reverse: recreational sex and menopause were as important for our development of fire, language, art, and writing as were our upright posture and large brains” (p. 10).

38 In some bird species, such as phalaropes and Spotted Sandpipers, it’s the male that does the work of incubating the eggs and rearing the chicks, while the female goes in search of another male to inseminate her again and to rear her next clutch” (p. 16).

39 Darwin: “The sight of a feather in a peacock’s tail, whenever I gaze at it makes me sick!” … till he developed the theory of sexual selection.
Association fifty years ago, but he was more than just an economist. Last year, the American Economic Association Meeting organised a panel session entitled “Kenneth Boulding and Future Directions of Social Science”. The session raised questions about why Boulding is little known among economists, and why he had little influence on economics (or whether he had an influence but economists are unaware of the sources). You will find the abstract here. The most interesting question that the event asked is whether there are other directions in Boulding’s work that can serve as indicators as to where economics and social science will be heading in the future. This book could be one of those indicators and roadmaps!

Power, Networks, Influence, and Reputation

Two books on power:


Many scholars have written about power (e.g., Bertrand Russell, Max Weber, Robert Dahl, Harold D. Lasswell, Jürgen Habermas, Talcott Parson, or Michel Foucault) but Galbraith’s and Boulding’s structured analyses of power stand out.


Ferguson’s most recent book: “The book is about the uneven ebb and flow of history. It distinguishes the long epochs in which hierarchical structures dominated human life from the rarer but more dynamic eras when networks had the advantage, thanks in part to changes in technology. To put it simply: when hierarchy is the order of the day, you are only as powerful as your rung on the organizational ladder of a state, corporation or similar vertically ordered

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40 “As a young man I was a very pure economist. My purity was destroyed by going to Iowa State College in 1943 to become a labor economist. In this process I discovered the other social sciences, and though I later left the field of labor economics, I came to see the social system as a total pattern – of which economics is only a part” (Introduction, v).

41 See also the reading list provided in May.
institution. When networks gain an advantage, you can be as powerful as your position in one or more horizontally structured social groups” (xx).


Commitment in order to influence! According to Schelling maybe his most important idea that he had and the book *Strategy of Conflict* his most important scholarly contribution (see here an interview (Harvard Kennedy School Oral History), Chapter 22: Contributions to Scholarship and Public Policy, 1:06:06–1:09:27).


From *Influence* to *Pre-Suasion*, Cialdini’s new book on influence. His note: “Pre-Suasion seeks to add to the body of behavioural science information that general readers find both inherently interesting and applicable to their daily lives”.


Expanding from social network to reputation network, this is an exploration of the interconnected facets of reputation.


Even before the book was published, Gardner was surprised to receive a phone call from the office of Ralph Nader, who was launching his campaign for president… Next came invitations from an advertisement agency, an academic–corporate collective seeking to change the fast-food eating habits of obese Americans, and a high-level commission on national security, charged with altering the beliefs and work habits of their officers. Well, there is certainly a demand for *Changing Minds* 😊…


Schelling about Goffman: “He was the damn best observer of people I have ever known”. He recollects what Goffman once said to him: “A woman can be undressed in front of her sister; a woman can be undressed in front of her
husband; but a woman cannot be undressed in front her sister and husband” (see conversation here, min. 14:50-22:25). He is also one of most cited social science scholars (more than 250,000 citations on Google Scholar). The Presentation of Self in Everyday Life is his most cited one (more than 50,000 citations).
Sleep and Dreaming


*Why should you sleep? How and why do we dream? Why are Google and NASA doing it right? What is medicine and education doing wrong? Matthew Walker, Director of the UC Berkeley Sleep and Neuroimaging Lab provides answers.*


*This book argues that we have a very narrow definition of a good night's sleep. For most of our human history nobody slept the way we are sleeping today…*

Time


*Take home message as described in the Prologue:*

1) Become aware of your personal time-perspective profile.
2) Become more sensitive to the ways in which your decisions have been and are influenced by that profile.
3) Realize how your social and business relationships are affected unconsciously by it.
4) Appreciate the ideal profile for which we should all strive.

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42 Maybe useful to also discuss Freud’s (1955) *The Interpretation of Dreams*. So many years have passed and the psychology and interpretation of dreams has not experienced that much substantial progress.
Eating


The core aim of the book: to treat food history as a theme of world history. The book was written as a spin-off from the preparation for his previous book Civilizations.

Humour


A collection of essays written by Oring, an anthropologist, who (for a long time) has explored the jokes as cultural and psychological phenomena.

Spending


An exploration of how biology or evolutionary psychology helps us to understand consumer behaviour (consumerist treadmill).


I buy; I impress; I conquer. Your relative consumption levels affect your happiness. Is there a cure for wasteful consumption? Read Robert Frank. In the words of Alois Stutzer: “[T]he book offers the real luxury of infecting the reader with a reading fever” (see his book review in Kyklos).
Work, Stress, and Play


How do we decide what is of lasting value in ourselves when we live in an impatient society that focuses on the immediate moment? How can long-term goals be pursued in an economy devoted to the short term? How can mutual loyalties and commitments be sustained in institutions which are constantly breaking apart or continually being redesigned?


The great Sapolsky’s survival kit on how to deal with stress.


Play is to be alive in the world.

Things, Gadget, and Distractions


Bringing the human factors into design. The psychology of everyday things, everyday actions and beyond. In their book Nudge, Thaler and Sunstein discuss Norman’s basic lesson: “[D]esigners need to keep in mind that the users of their objects are Humans who are confronted every day with myriad choices and cues” (p. 85). The same holds for choice architecture!

Gardner and Davis: “Ultimately, however, it is the interaction between technology and individual and social values, practices, and norms that determines whether the outcomes are positive or problematic” (xiii).


Authors: “This book is the first of its kind to explore the daily challenges we face with highly engaging but extremely distracting high-tech world we now inhabit, from the dual points of view of a psychologist and a neuroscientist” (xiii).

Keep your Hands on the Wheel

Tom Vanderbilt 2008). Traffic: Why We Drive the Way We Do (and What It Says About Us)

The car as our Skinner box! Vanderbilt explores interesting questions: ‘Why does the other lane always seem faster? If driving is so easy, why is it so hard for a robot? How’s my driving? How the hell should I know? Why is it so hard to pay attention in traffic? Etc.

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43 See also Adam Alter’s Irresistible: Why We Can’t Stop Checking, Scrolling, Clicking and Watching.

Author: “I expect this book to be controversial. Of the six readers who reviewed it for the MIT Press, half hated it and half were enthusiastic”. We often take the hand for granted and therefore it worth to take a look at the multiple aspects of our hand (anatomically, functionally, emotionally, cognitively, artistically, and philosophically).

Risk, Luck, and Prospection


We are constantly faced with risk, ambiguity, and uncertainty. As Bernstein states, “[r]isk touches on the most profound aspects of psychology, mathematics, statistics, and history.


Frank’s most recent book. How important is luck? Chance events play a much larger role in our lives than we once imagined. Frank explores the implications of this and how best to think about the role of luck in life.


Prospection is the unique and defining ability of humans.
Overall

Neil J. Smelser\textsuperscript{44} and John S. Reed (2012). Usable Social Science.

The book is a collection of many ideas that populate the social science literature, as the authors point out, but is not an encyclopedia or a handbook. Chapters: Space and Time: Constraints and Opportunities; Some Dynamics of Cognition, Judgement, and Bias; Sanctions in Organizational and Social Life; Groups, Teams, Networks, Trust, and Social Capital; How Decisions Are Made; Organizations and Organizational Change; Economic Development and Social Change; Methods of Research and Their Usability; Social Change, Social Problems, and Demands for Knowledge; The Production of Knowledge in the Social Sciences.

\textsuperscript{44} Neil Smelser was also in charge of the impressive \textit{International Encyclopedia of the Social and Behavioural Sciences}. 

39
John Brockman is one of the most well connected people that you can find, being the literary agent of many famous scientists and scholars. He founded the Edge Foundation that brings together people who work at the edge (with broad range of scientific and technical skills) and Edge is full of fascinating content. Here are three books that provide a large number of ideas:

John Brockman (Ed.) (2010). This Will Change Everything: Ideas that Will Shape the Future.


Economics


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45 See also the interview with James Heckman How the Economics of the Economics Profession Resists New Thinking.

46 Interestingly, the book is a translated version by Steven Rendall (originally published as Économie du bien commun). It is worth mentioning that the great economist Frank H. Knight was the translator of Max Weber’s General Economic History (from German to English). For those few readers who do not remember Frank H. Knight, below are some telling statements about him made by several Nobel Laureates published in Torgler and Piatti, in A Century of American Economic Review: Knight on Critical Factors in Journal Publishing (p. 77) and derived mostly from the wonderful volume Lives of the Laureates: Eighteen Nobel Economists edited by William Breit and Barry T. Hirsch. Samuelson (p. 50) refers to “Frank Knight and Jacob Viner, my great neoclassical teachers in Chicago,” while Friedman (p. 70) recalls that “[o]ther faculty members at Chicago included Frank Knight, Henry Simons, Lloyd Mints, Paul Douglas, and Henry Schultz. Economists will recognize their names; the rest of you will not.” James M. Buchanan (p. 140) also reminisces about Knight: “During the first quarter I took courses with Frank Knight, T.W. Schultz, and Simeon Leland. I was among the very first group of graduate students to return to the academy after discharge from military service during World War II. We swelled the ranks of the graduate classes at Chicago and elsewhere. Within a few short weeks, perhaps by mid-February 1946, I had undergone a conversion in my understanding of how an economy operates. (...) For the first time I was indeed an economist. I attribute this conversion directly to Frank Knight’s teaching, which perhaps raises more new questions than it answers.” Later, Buchanan writes, “In the classroom he came across as a man engaged always in a search for ideas. He puzzled over principles, from the commonsensical to the esoteric, and he stood continuously dismayed at the arrogance of those who spouted forth the learned wisdom. Knight gave those of us who bothered to listen the abiding notion that all is up for intellectual grabs, that much of what paraded as truth was highly questionable, and that the hallmark of a scholar was courage in cutting through the intellectual haze. The willingness to deny all gods, to hold nothing sacrosanct —these were the qualities of mind and a character that best describe Frank Knight. And gods, as I use the term here, include the authorities in one’s own discipline as well as those who claim domain over other dimensions of truth. Those of us who were so often confused in so many things were bolstered by this Knightian stance before all gods. Only gradually, and much later, did we come to realize that in these qualities it was Frank Knight, not his peers, who attained the rank of genius. As he was the first to acknowledge, Frank Knight was not a clever or brilliant thinker. He was an inveterate puzzler; but his thought process probed depths that the scholars about him could not realize even to exist. To Knight, things were never so simple as they seemed,
Have we lost sight of the common good? If so, can economics help? Tirole: “Economics works toward the common good; its goal is to make the world a better place. To that end, its task is to identify the institutions and policies that will promote the common good. In its pursuit of the well-being of the community, it incorporates both individual and collective dimensions. It analyses situations in which individual interest is compatible with the quest for collective well-being, as well as those in which, by contrast, individual interest hinders that quest” (p. 5).


Two rare economists who are able to provide an honest critique of economics while showing also what is appealing and beautiful in economics. Both books are valuable sources in understanding what economists can and should accomplish.

and he remained at base tolerant in the extreme because he sensed the elements of truth in all principles. (…) Knight was the advisor who told me not to waste my time taking formal courses in philosophy, who corrected my dissertation grammar in great detail, and who became the role model that has never been replaced or even slightly dislodged over a long academic career. In trying to assess my own development, I find it impossible to imagine what I might have been and become without exposure to Frank Knight” (p. 144). Ronald H. Coase (1994: 195) was also influenced by Knight: “At Dundee I began to read the literature of economics—Adam Smith, Babbage, Jevons, Wicksteed, Knight,” as was Gary S. Becker (p. 256): “I stayed at Chicago for six years, the first three as a graduate student. During the second year I was looking for a thesis topic and had already done some research on an economic approach to political democracy. My paper on this topic was almost published in the Journal of Political Economy, but one of my teachers, Frank Knight, was the referee, and he did not like it. I have kept his comments to this day. Knight was a great economist, but he looked at democracy with what I would characterize as a normative point of view. He defined democracy as government by discussion.” Finally, George J. Stigler (2004: 81) too recalls Knight positively: “There I met and got to know three economists I still consider to be outstanding: Frank Knight and Henry Simons, and a year later, on his return for the U.S. Treasury, Jacob Viner. Knight was both a great and an absurd teacher. The absurdity was documented by his utterly disorganized teaching, with constant change of subject and yet insistent repetition of arguments. In the course on the history of economics he was interested mostly in the seamy side of religious history, but got great relish out of emphasizing the perversities and blunders of Ricardo and other historic figures in economics. His greatness is attested best by the fact that almost all the students were much influenced by him. He communicated beyond any possible confusion the message that intellectual inquiry was a sacred calling, excruciatingly difficult for even the best of scholars to pursue with complete fidelity to truth and evidence.” He adds, “One thing that Knight and Simons both succeeded in teaching me, and in fact overtaught, was that great reputation and high office deserve little respect in scientific work. We were told to listen to the argument and look at the evidence, but ignore the position, degrees, and age of the speaker” (82). He also explains that “I wrote my dissertation in the history of economic thought under Knight. He was the soul of kindness and generosity in dealing with me, then and forever after but in retrospect there was a fly in the ointment. He was so strong-minded and so critical a student of the literature that it was a good many years before I could read the economic classes through my eyes instead of his. I have never brought myself to read through my doctoral dissertation, Production and Distribution Theories: The Formative Period, because I knew I would be embarrassed by both its Knightian excesses and its immaturity (83)”Lastly, he admits that “I am no longer a faithful follower, although I am still an admirer, of Frank Knight and Henry Simons: each person has a mind-style of his own, and eventually it asserts itself. This does not mean that we are immune to our environment, but it does argue for me that environmental influences will be subtle” (93).

The objective of the book is to explain successes and failures of both economics and behavioural economics - or in the words of the author: “set the record straight”.


The Brockman version for economics, including very short contributions by scholars such as Daron Acemoglu, Ken Binmore, Tim Besley, Richard A. Easterlin, Victor Ginsburgh, David F. Hendry, Siegwart Lindenberg, Jeffrey D. Sachs, the late Robert D. Tollison and even Carl Christian von Weizsäcker and many more.

Finance


“Neoclassical economics has largely ignored the body. It is economics from the neck up” (p. 33)

“… economics needs to put the body back into the economy. Rather than assuming rationality and an efficient market – the unfortunate upshot of which has been a trading community gone feral – we should study the behavior of actual traders and investors, much as the behavioural economists do, only we should include in that study the influence of their biology” (p. 36)

“When I was actively running the fund I suffered from backache. I used the onset of acute pain as a signal that there was something wrong in my portfolio” (p. 89)

Management


You can’t read about management without reading at least one of Drucker’s books. The eclectic Drucker was one of most influential thinkers on management theory and practices47.

Organizational Science


Still a timeless roadmap to understand organizations and a must read for any social scientist.


March is the author of several important books, such as A Primer on Decision Making, Organizations, The Pursuit of Organizational Intelligence, A Behavioral Theory of the Firm or the enjoyable On Leadership. In this book, he focuses on the role of experience in creating intelligence in organizations and beyond.

47 Drucker grew up in a home in Vienna where government officials, scientists, and intellectuals met to discuss ideas and insights in soirées his parents organized very frequently. People like Schumpeter, Hayek or Mises were regular guests. I recommend taking a look at his autobiography Adventures of a Bystander to get an idea about the cultural and intellectual environment in Vienna.
Marketing

Philip Kotler, Hermawan Kartajaya, and Iwan Setiawan (2016). Marketing 4.0: Moving from Traditional to Digital.

Bye bye Marketing 3.0, hello Marketing 4.0 by Philip Kotler (who helped to create the field of social marketing) and Hermawan Kartajaya, and Iwan Setiawan. Moving beyond a human-centred marketing to cover more aspects of the customer's journey.

Sociology


The Preface begins: “We are proud but concerned sociologists. We worry lest in the near future the current course of sociology will lead to academic self-destruction. We trust, therefore, that our readers will be influenced less by our criticism of the current state of our discipline and more by our sincere, enthusiastic attempt to suggest a way out of what is by many accounts a very grave and deepening crisis”.


Granovetter’s latest work in the area of economic sociology. An emphasis on social, cultural, and historical consideration, coupled with a purely economic focus when exploring economic action and institutions.

Another set of two books by Smelser:


A collection of essays throughout his career on the nature, status, methodology, problems, current situation, and the future of sociology.

Smelser’s George Simmel Lectures. In this volume he identifies some central problematics of the discipline (“generic, recurrent, never-resolved and never-completely-resolvable issues”).

Political Science and Governance

Gary King, Kay Lehman Schlozman and Norman H. Nie (2009). The Future of Political Science: 100 Perspectives.

* A must read: the book provides the future potential roadmap of Political Science.


Haidt: “This book is about why it’s so hard for us to get along. We are indeed all stuck here for a while, so let’s at least do what we can to understand why we are so easily divided into hostile groups, each one certain of its righteousness” (viii).


Lawrence H. Summers: “Government vs. the market was the central subject in the twentieth-century debates. How best to combine public and private sector efforts to meet the needs of citizens is the key subject for the twenty-first century. Zeckhauser and Donahue’s important book will define this debate for years to come”.

Social Psychology

This textbook (almost 800 pages) was written with the goal of providing a broad, integrative, cutting-edge overview of the primary areas of scholarship within social psychology.


Back cover (comment by the UQ Winnifred Louis): “In Psychology for the Third Millennium Harré and Moghaddam provide a rich integration of neurological, cultural, and individual levels of analysis in psychology - the human actor as a biological organism, a social being, and a moral agent. Compelling reading!”.

History


New and sophisticated methods are being used in the study of the past. For example, the field of cliometric history was born from a marriage between historical problems and advanced statistical analysis. The book presents the view of two different scholars and traditions discussing the validity of (their respective) methods: Robert William Fogel, Nobel laureate in economics, and Geoffrey Elton political and constitutional historian.


As a trained economist and historian, Boldizzoni’ is concerned about the evolution of economic history and attempts to show that a change of direction is needed: “The more I reconsidered the goals that had been reached and the innovation methods tested in the past century, the more evident did the decline that the discipline has undergone in recent years appear to be. More than anything else the claims to originality in this field seemed to be the result of ignorance of the past”.

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48 See also Marc Bloch’s The Historian’s Craft.
Anthropology


What is anthropology and what can it tell us about the world? Culture is becoming an important topic and we need to harness anthropologists' understanding of culture and other key concepts with which anthropology tries to make sense of the world.


Technological change has become so rapid that we are no longer learning from the wisest individuals in the group. The problem is that the new online world is filled with masquerading experts. From thin and deep to shallow and broad. How do we plan for this world? How will knowledge be sorted and accumulated?


Many of us remember the romantic comedy When Harry Met Sally with Billy Crystal and Meg Ryan and the famous restaurant scene. We are first and foremost social creatures!


First translation of a series of lectures given by Lévi-Strauss in 1986, synthesizing his major ideas about structural anthropology.

Law

“In Shakespeare’s Twelfth Night, a shipwreck separates brother and sister, who each conclude falsely that the other died. Reunification of Sebastian and Viola at play’s end resolves confusion and causes rejoicing (but not by everyone). Similarly, economics began as a close relative to law, but their methodologies diverged in the twentieth century. When the subjects lost communication with each other, some scholars in one subject thought the other subject had died intellectually. In the last quarter of the twentieth century, however, a powerful scholarly movement brought these subjects back together. Reunification of law and economics has resolved confusion and caused rejoicing (but not by everyone). With law and economics reunified, now is the time to explain some causes and cures of the poverty of nations” (p. x).


An exploration of the scientific evidence on conscience and its relationship to law.
Identifying Scientific Challenges in Different Fields: Part 2

Overall


You may have come across Oxford Professor Marcus du Sautoy (Charles Simonyi Professor for the Public Understanding of Science) when watching Netflix (see The Story of Maths, The Code, or the The Secret Rules of Modern Living: Algorithms). Here he provides insights into the The Known Unknowns, Chaos, Matter, Quantum Physics, The Universe, Time, Consciousness, and Infinity.

Environmental Sciences


“If the hydrino exists, it overturns quantum mechanics and reshapes the paradigm of physics for the twenty-first century”.


Understandably, a very busy communicator of science, see here: “Unfortunately my waiting list for school visits is now full so I can’t accept anymore invitations to talk to schools at the moment. However I have a fantastic team of Maths students from Oxford who will run workshops for schools. For more information visit Marcus’ Marvellous Mathemagicians”.

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Back cover: “Cold fusion is an energy source that could provide clean water to Planet Earth, zero-emission vehicles with unlimited mileage, a solution to the climate crisis and much more. It is clean, compact, simple, inexhaustible and … physically impossible. At least that is what science has considered since an infamous and rejected scientific claim in 1989. But in January 2011 the Italian inventor Andrea Rossi demonstrated a sloppily-wrapped device that boiled water with heat emanating from something that seemed to be cold fusion. Too good to be true, some said. Fraud, according to others”. Lewan’s journey to search for the truth about Rossi and the strange device.


Let’s skip forward to a future when fossil fuels are burned out.


Visions about the future of science and how scientists and laypeople can collaborate to address the most urgent challenges.


Can we connect smart technology to justice, solidarity, and sustainability?


Cooper, an environmental scientist, discusses the power of volunteers in shaping and changing the future of science.
Biology


The biological organism is a kind of high technology and the use of nanobiotechnology provides the ability to manipulate genomes - and thus has the potential to recapitulate under our own conscious deliberation the course of natural genomic evolution.


A journey through the study of genomics since the discovery of the DNA double helix to better understand our biological future.


The central question posed by theoretical biologist Josh Mitteldorf and Dorion Sagan (son of Carl Sagan and Lynn Margulis): “Aging is the very antithesis of what Darwin called ‘fitness’ – the competitive vigor and reproductive potential of organisms. If aging is governed by genes that cause us to become frail, to lose our fertility, and to die, then how did those genes prevail in evolutionary competition? How could aging have evolved? (p. 9).”


Exposing “sacred cows” in biology, how they shaped the thinking, and how trust was misdirected. How do our lapses reflect how we think, both individually and collectively?


After reading and discussing Joseph Henrich’s book The Secret of Our Success: How Culture Is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter last year it
might be worth checking out what we can learn from Laland’s book. The book, according to Tomasello, “brings together processes of biological and cultural evolution in unique and fascinating ways to explain what it means to be human”.

Neurophysiology, Neuroscience and Beyond


The most recent book by Damasio who brought us contributions such as Descartes’ Error: Emotion, Reason, and the Human Brain, Looking for Spinoza: Joy, Sorrow, and the Feeling Brain or The Feeling of What Happens: Body and Emotion in the Making of Consciousness. He has new facts and interpretations to share on questions that he has been exploring for years: Why and how we emote, feel, use feelings to construct ourselves; how feelings assist or undermine our best intentions; why and how brains interact with the body to support such functions. His focus: “feelings have not been given the credit they deserve as motives, monitors, and negotiations of human cultural endeavors”.


A tour de force of 700 pages to explore the biology of violence, aggression, and competition, the behaviours and impulses behind them, but also the biology of cooperation, affiliation, reconciliation, empathy, and altruism.


A compilation of Porges’ important work in neurobiology. Structure of the book: Theoretical Principles; Biobehavioral Regulation During Early Development; Social Communication and Relationships; Therapeutic and Clinical Perspectives; and Social Behavior and Health.

How can we generate resilience against aging and stress? Is a toughening regime a valuable alternative? Dienstbier’s book is about how toughness develops and how aging and stress affect our mental capacities and our emotional stability by degrading our endocrine systems, depleting our neurochemicals, and ultimately damaging our neural structure.


The aging of the population requires a better understanding of age-related brain conditions.


Shakespeare was wrong, there is an art to finding the mind’s construction in the face. A short book that explores a lot of important questions: How does neuroscience impact society? Can neuroscience read your mind? How moral is your brain? Are you in control? Show me your brain and I will know what you buy? Where does this leave us?

Engineering


A growing new scientific and engineering field that studies nature’s model to take inspiration when creating engineering and design solutions.


Ready for the convergence of the digital and physical worlds?

A detailed combination and collage of computer science, biology, and neuroscience with the quest of mapping how these fields meet and how they help our understanding of “brain, mind, and machine”.

Physics, Cosmology, and Astronomy


The story he tells in this book is a tragedy. In 2007 he made the point that in the last couple of decades no major progress in fundamental physics has been observed after 200 years of explosive growth. He criticizes the over-emphasis on string theory: “Because string theory is such a high-risk venture – unsupported by experiment, though very generously supported by the academic and scientific communities – there are only two ways the story can end. If string theory turns out to be right, string theorists will turn out to be the greatest heroes in the history of science. On the basis of a handful of clues – none of which has an unambiguous reading – they will have discovered that reality is far more vast than previously imagined. Columbus discovered a new continent unknown to the king and queen of Spain (as the Spanish royals were unknown to the residents of the New World), Galileo discovered new stars and moons, and later astronomers discovered new planets. All this would pale in the face of the discovery of new dimensions. Moreover, many string theorists believe that the myriad worlds described by the huge number of string theories really do exist – as other universes impossible for us to see directly. If they are right, we see far less of reality than any group of cave dwellers saw of the earth. No one in human history has ever guessed correctly about such a large expansion of the known world. On the other hand, if string theorists are wrong, they can’t be just a little wrong. If the new dimensions and symmetries do not exist, then we will count string theorists among science’s greatest failures, like those who continued to work on Ptolemaic epicycles while Kepler and Galileo forged ahead. Theirs will be a cautionary tale of how not to do science, how not to let theoretical conjecture get so far beyond the limits of what can rationally be argued that one starts engaging in fantasy” (p. xvii).


Penrose expresses a level of certain unease about some of the trends in thinking around the physical laws governing the universe.

Nobel Laureate Lederman and Hill (who works at the Fermi National Acceleratory Laboratory) explain what’s next: e.g., what new particles, forces, and laws of physics lie beyond after the Higgs Boson (aka “The God Particle”) was discovered?


Laughlin, Nobel Laureate in Physics: “I am increasingly persuaded that all physical law we know about has collective origins, not just some of it. In other words, the distinction between fundamental laws and the laws descending from them is a myth, as is the idea of mastery of the universe through mathematics alone. Physical law cannot generally be anticipated by pure thought, but must be discovered experimentally, because control of nature is achieved only when nature allows this through a principle of organization” (p. xv).


Smolin: “I’ve come to believe that time is the key to the meaning of quantum theory and its eventual unification with space, time, gravity, and cosmology. Most important, I believe that to make sense of the picture of the universe that cosmological observations are bringing to us, we must embrace the reality of time in a new way” (xii).


Nobel laureate Wilczek: “This book is a long meditation on a single question: Does the world embody beautiful ideas?”


Humans’ continuing mission: to explore strange new worlds, to seek out new life and new civilizations, to boldly go where no one has gone before.

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50 For a Q&A article with Brian Higgs, see https://www.economist.com/blogs/babbage/2012/07/qa-brian-greene.
Mathematics


Noli turbare circulos meos (Do not disturb my circles) may have been Archimedes’ last words before he was slain by a Roman soldier in Syracuse. As mathematics is created by people, mathematics depends on narrative. This book includes contributions by scholars who provide missing insights on the interdependence of mathematics and narrative.


An attempt to describe several abstract configurations that may be informative in our understanding of the mind. Neuman: “[B]eing highly cognizant of the limits of a neo-structuralist venture, the final decision to write the book crystallized in my mind when I visited the beautiful city of Naples for a conference. One night, and while sitting near the window of my hotel room and observing the sea with its repeating patterns of waves, some threads wove together in my mind. I suddenly realized how deeply interconnected are several ideas that have interested me for many years, from Russell’s definition of a number to the mathematical concept of the groupoid. From there, this book naturally emerged in the form you are currently reading” (p. viii).
December 14

Identifying Scientific Challenges in Different Fields: Part 3

We are getting into the Christmas spirit: reflecting on communication, education, philosophy, the past and the future, and religion.

Communication Sciences


Big data provides new opportunities to test interesting theories from the past. The Preface explains the key story of the book, namely “a story of change and a story of recurrence. If we look at how communication technologies have been received over the last two hundred years, a pattern clearly emerges: like a pendulum, responses oscillate from wonder to fear, from apprehension to awe. These emotions get expressed, over and over, with the visual aid of metaphors that, in their persistence, seem to have grown deep roots in our collective imagination”.


Turkle\textsuperscript{51}, an expert on human-technology interaction, brings us back to the importance of face-to-face conversation and not just connection.


Google remembers everything, while forgetting plays a central role in human decision-making. How can we cope in a comprehensive digital memory environment?

\textsuperscript{51} See also last year’s reading group list. She was married to Seymour Papert who died in 2016. Check out what we can learn from Seymour Papert.

The creative Schank “has had it with the stupid, lazy, greedy, cynical, and uninformed forces setting outrageous education policy, wrecking childhood, and preparing students for a world that will never exist. His keen intellect, courage, and razor-sharp wit cuts away several layers of conventional wisdom, causing readers to confront their own prejudices and school-distorted notions of learning. No sacred cow is off limits – even some species you never considered” (back cover).


Kevin Simler and Robin Hanson’s chapter on Education was strongly influenced by Caplan’s book (or according to the authors “scribbled from”). Caplan: “When I started writing this book, I knew I’d need to read piles of research but failed to foresee the enormity of the piles. Education isn’t just a major industry; it inspires researchers’ curiosity because it’s their industry. No one discipline owns the topic; departments of education, psychology, sociology, and economics all contain armies of education researchers. While I personally hail from the economist tribe, I’ve tried to read broadly and deeply in all four fields. My synthesis is contrarian, but my evidence is not. My strategy is to collect standard findings in education, psychology, sociology, and economics, then snap them all together… Socially speaking, this book argues that our education system is a big waste of time and money”.


Anthony Smith (Former President of Magdalen College, Oxford): “The university is a ruined institution, forced to abandon its historical raison d’être and enmeshed in consumerist ideology… The task that substitutes for the pursuit of culture is the adherence to Excellence, which relegates the university to the treadmill of global capitalism. It turns out graduates as objects, not subjects, at so much per head, under the scrutiny of the state bureaucracy. That is the nub of Bill Reading’s superbly argued pessimism… His essay provides an insight into contemporary vacacion as experienced in every form of society and community obliged to exist in the new globalized economy. The university has always suggested an institution immune to wider trends, but Readings… argues very convincingly for its fragility.”
It is a microcosm caught in the coils of consumerism, and forced to act as a satrap in that kingdom… The dysfunction, as he envisages it, is very deeply pondered and rather brilliantly expounded”.


How would you proceed if you have the chance to develop a new kind of higher education?


Resnick: “As the year 1999 rolled into 2000, I participated in a conference session where people debated the greatest inventions of the previous thousand years. Some people argued that the printing press was the most important invention; others argued for the steam engine, the light bulb, or the computer. My nomination for the greatest invention of the previous thousand years? Kindergarten” (p. 6). Resnick, LEGO Papert52 Professor of Learning Research, leads the MIT Media Lifelong Kindergarten group that develops new technologies and activities.


An exploration into the nature of higher education, its change and stability that may offer guidance in coping with the perception of a crisis.

Elizabeth Losh. The War on Learning: Gaining Ground in the Digital University.

According to Losh, the book “resists the acceptance of shortsighted commodity solutions from corporate vendors; instead, this book champions the making of hard choices about investment in new forms of digital labor and the adoption of new practices around digital literacy”.

52 See again Papert’s book *The Children’s Machine: Rethinking School in the Age of the Computer* from last year’s reading group list.

Aoun, president of Northeastern University, provides his suggestion of a model of higher education with the aim of developing and empowering a new generation of creators who can employ our technological wonders.

Historical Sciences


Historical sciences (geology, palaeontology, and archaeology) have made substantial progress despite working with mere traces of the past. How can we understand that puzzle? Currie’s answer: thanks to being “methodological omnivores”.

Philosophy


Socrates refused to renounce his philosophy in court after being accused of both corrupting the minds of the youth of Athens, and of impiety, which led him to his end: “So long as I draw breath and have my faculties, I shall never stop practising philosophy and exhorting you and elucidating the truth for everyone that I meet … And so gentlemen … whether you acquit me or not, you know that I am not going to alter my conduct, not even if I have to die a hundred deaths”. Alain de Botton admits that such behaviour was so different to his own: “In my conversations, my priority was to be liked, rather than to speak the truth. A desire to please led me to laugh at modest jokes like a parent on the opening night of a school play. With strangers, I adopted the servile manner of a concierge greeting wealthy clients in a hotel – saliva enthusiasm born of a morbid, indiscriminate desire for affection. I did not publicly doubt ideas to which the majority was committed. I sought the approval of figures of authority and after encounters with them, worried at length whether they had thought me acceptable. When passing through customs or driving alongside police cars, I harboured a confused wish for the uniformed officials to think well of me”. He continues: “But the philosopher had not buckled before unpopularity and the condemnation of the state. He had not retracted
his thoughts because others had complained. Moreover, his confidence had sprung from a more profound source than hot-headedness or bull-like courage. It had been grounded in philosophy. Philosophy had supplied Socrates with convictions in which he had been able to have rational, as opposed to hysterical, confidence when faced with disapproval. That night, above the ice lands [he was traveling back to London from New York], such independence of mind was a revelation and an incitement. It promised a counterweight to a supine tendency to follow socially sanctioned practices and ideas. In Socrates’ life and death lay an invitation to intelligent scepticism” (p. 7). Alain de Botton is also an excellent and enjoyable speaker; see, e.g., here in Australia.


“A book devoted to a particular thinker often presumes that thinkers got everything right. I don’t think this is true of Plato. Plato got about as much wrong as we would expect from a philosopher who lived 2,400 years ago. Were this not the case, then philosophy, advancing our knowledge not at all, would be useless. I don’t think it’s useless, so I’m quite happy to acknowledge how mistaken or confused Plato can often strike us” (Prologue).


Using methods of cognitive science and cognitive linguistics, the authors rethink the potential of what philosophy can become.


The maverick and creative Kauffman was faculty in residence from 1986 to 1997 at the Santa Fe Institute, is author of The Origin of Order and At Home in the Universe. On the central aim of his book, he says: “My hope is that we rethink ourselves and our world and feel invited to co-create and evolve toward a new interwoven civilization beyond our own” (xiii).
Religion


This group of authors have written several books on the economics of religion (e.g., Economic Origins of Roman Christianity, Sacred Trust). The authors write in the Preface: “Our study of Christianity shows that the economics of religion has little to do with counting the money in the collection basket and much to do with understanding the background of today’s religious/political divisions. Because religion is a set of organized beliefs, and a church is an organized body of worshippers, it is natural to use economics – a science that explains the behaviour of individuals in organizations – to understand the development of organized religion”.


Bainbridge is also a creative mind who has conducted a substantial body of work in the area of Sociology of Religion (also co-authored with Stark, author of the book Future of Religion, which won the “Outstanding Book of the Year award by the Society for the Scientific Study of Religion). In this book he combines his research on religion with his research on video gaming (see The Warcraft Civilization: Social Science in a Virtual World). Here he looks at the fantasy religions of 41 games.

53 Check out also last year’s reading group book Religion in Human Evolution: From the Paleolithic to the Axial Age, Jonathan Haidt’s The Righteous Mind: Why Good People Are Divided by Politics and Religion that I listed under Political Science and Governance. Kevin Simler and Robin Hanson have also a chapter on Religion.

54 Sadly, Tollison died in 2016. See here Clemson’s In Memoriam. He was a fascinating scholar who brought a breath of fresh air in economics, with rigorous exploration of a large number of different topics (public choice, sports, science, religion, art, etc.).

A closer look at (among other things) the neuroscience of religiousness.


The anthropologist Barbara King: “We humans crave emotional connection with others. This deep desire to connect can be explained by the long evolutionary history we share with other primates, the monkeys and apes. At the same time, it explains why humans evolved to become the spiritual ape — the ape that grew a large brain, the ape that stood up, the ape that first created art, but, above all, the ape that evolved God” (p. 1).

Roberto Mangabeira Unger (2014). The Religion of the Future.55

How Unger sees his book: “Beginning with a criticism of major orientations in the spiritual history of humanity, it argues for a radical revision of the moral, political, and metaphysical ideas that have informed the revolutionary orthodoxy of the West, with its two-fold roots in the Semitic religions of salvation and in the modern secular projects of democracy and romanticism”.

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55 See also The Singular Universe and the Reality of Time: A Proposal in Natural Philosophy (with Lee Smolin).