The book is interesting and entertaining, but does not answer some of my most pressing questions in this debate: what is the purpose of an education, given today's reality? If the book might persuade economics students to enroll in additional liberal arts courses, I don't believe it is enough to convince undergraduates to pursue a liberal arts degree. The book might not satisfy those who are looking for a convincing argument that will alter the current state of affairs; and, to those who are familiar with the literature on the crisis of the liberal arts, it will feel like it's just more of the same.

Nevertheless, I recommend the book to those who are fond of great literature, not because they will find in it a good justification to study humanities, but because the authors' analysis of the epistemological assumptions underneath novels is, in my opinion, fascinating. To those who are skeptics and are looking for a clear reason to support the humanities, this book might also be a good place to start.

Marta Neves
University of Southern Denmark, Odense
martarodriguesneves@gmail.com

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Philip Tetlock and Dan Gardner: *Superforecasting: The Art and Science of Prediction*

New York 2015: Random House Books, 352 pp.

Is it possible to forecast future events? If yes, what are the skills needed to be as accurate as possible? This book condenses some of the findings of the Good Judgment Project (GJP), which was started in 2011 by Philip Tetlock and Barbara Mellers, in collaboration with the University of California, Berkeley, and the University of Pennsylvania. Volunteers were able to access an online portal in which they had the opportunity to forecast future events. This book analyses the strategies used by the top performers, the 'Superforecasters' that represent approximately 2% of the total sample of participants in the GJP and show to have a diverse background including mathematicians, filmmakers, or retirees. Forecasting future political or economic events is not an easy task, given the complexity and unpredictability of human behaviour, and failure in being accurate is common among most of the very top experts.

In his previous book, *Expert Political Judgment: How Good Is It? How Can We Know?*, Tetlock asked 284 high-ranking professionals to make predictions, anonymously, about future political and economic events. The results showed that most of

these top experts performed very poorly, reaching on average a very low score. But the results also showed that one group of professionals performed better than the other. The two groups were divided, between good performers, defined as 'foxes' and poor performers, the 'hedgehogs'. The mindset and cognitive strategies used by these two categories of experts played a critical role in explaining their high and low scores. The 'hedgehog' is an expert who sticks to a big idea, ideology, or framework that shapes its way of reasoning, leading to infer future scenarios depending on a fixed mindset. Conversely, the 'fox' adopts a flexible mindset, considering empirical facts with a probabilistic approach. In this recent book, Philipp Tetlock with Dan Gardner develop the argument further to understand which strategies helped the Superforecasters in the GJP to reach accurate predictions.

The book is structured around the '10 commandments of Superforecasting', plus an 11th that suggests to 'not treat commandments as commandments', to highlight that Superforcasters must question everything.

What distinguishes Superforecasters from other experts? Are they individuals with a high IQ? Are they math geniuses? Are they news junkies? The authors explain that these qualities do not explain good predictions, whereas the right mental models are the key asset of Superforecasters. Some of the right mental models require the ability to break down a complicated puzzle into sub-questions easier to answer, the capacity to take an outsider look at the puzzle, combined with personal insider knowledge. Moreover, high scores on the personality trait Active Open Mindedness seem to help Superforecasters to contest personal beliefs when they formulate concrete hypotheses to test. Similarly, Superforecasters seem to be comfortable with numbers, but their ability in math is not indicative of their achieve-

ments. What shapes their accuracy is their probabilistic mindset in contrast to a dichotomous or two- or three-setting mental dial of judgement. Last, Superforecasters do remain up to date with the news and adjust their forecast accordingly. However, the authors explain that the accuracy of the Superforecasters is 50% greater even in cases where news updates are not permitted. Seemingly, their diligence in keeping up to date with the news explains only partly their accuracy. Therefore, the right mental models combined with grit and a growth mindset are considered as enabling Superforecasters to effectively tackle new challenges and reach accurate predictions.

Subsequently, the book analyses how groups perform in comparison with individuals. Do groups score better than individuals? Or does being part of a group lead to underperform? In some instances, cooperation could lead to underperformance instead of higher accuracy. Group-think is a problem described as highly disruptive by the authors. It leads a group to a shared agreement, without raising uncomfortable questions, and thus to higher levels of confidence, which can be counterproductive when evaluating the probabilities of a certain event to happen. To test whether groupwork leads to better predictions than individual one's, the authors formed teams of forecasters that could communicate on an online platform, by e-mail or by skype. The individual scores of the group members were then pooled into a group score, so the individual members could see how the team, as an aggregate, was performing. The groups so formed received suggestions for good group practice in order to avoid problems such as group-think and performed on average 23% better in terms of the accuracy of their forecasting compared to individuals. The authors then created groups of Superforecasters, which performed better than groups of 'normal' forecasters. The Superforecasters who entered groups of Superforecasters attained

better performances after joining the group. These groups of top forecasters showed to thrive when avoiding group-think, admitting ignorance, supporting the other members, permitting smooth information-sharing, and enabling active open-minded confrontation. Diversity in the group's composition also increased results, therefore raising some questions on the relevance of ability relative to diversity. Despite these initial results, the authors are cautious in delineating the core characteristics of high-performing groups as they are still at the beginning of their analysis. However, the components capacities, the ability of organizing the group effectively and diversity in the composition are expected to be relevant features of a well-performing team of Superforecasters.

Nonetheless, what is critical when considering a team's strategy is the role of the leader. The team's leader is also a forecaster and this double role could lead to positive and negative outcomes. The authors define it as the 'leader's dilemma'. To solve it, they draw inspiration from a 19th-century Prussian general, Helmuth von Moltke. Moltke's leadership and organisational strategy were adopted by the German army during the Second World War and even now continue to inspire several organisations. Moltke educated his officials in critical thinking knowing that during wartime the plans made in offices are not practical on the battlefield and improvisation becomes a key feature for success. Criticism, disagreement, and determination were highly valued in Moltke's military academies. These skills were a key component of a system that relied on the decentralisation of decision-making power, permitting the official on the battlefield to act according to the moment at hand. The official in the battlefield was not constrained by binding decisions made previously by higher officials, allowing to adapt to eventual changes. The officials were told what to accomplish, their goal, but not how to accom-

plish it. Besides empowering the group, Tetlcok and Gardner highlight the relevance of intellectual humility in a successful leader. This quality is understood as the combination of a sense of self worthiness and of humbleness derived from the consciousness of the complexity of the world and fallible human judgement, permitting better judgment and to rely to the others in the group.

The recipes proposed by the authors are not safe from criticism, therefore they consider also the challenges to their formula of forecasting accuracy. In doing so, they are inspired by the research done by the Nobel Prize-winner Daniel Kahneman. For example, Tetlock and Gardner expose how scope insensitivity does not consistently affect Superforecasters, but is a widespread bias that leads to not fully discriminate or consider differences in the time frame or the number of items in a question and negatively affecting the ability to predict future events. Seemingly, Superforecasters change their cognitive structure by integrating mental models related to the 'system 2', the conscious 'slow' way of thinking, with system 1, their unconscious and 'fast' system, literally reprogramming their way of thinking. Arguably, practice in adjusting their mindset and adopting effective automatic behaviours, explains Superforecasters' abilities in avoiding the cognitive traps exposed in Kahnemann's reaserch. Another challenge is raised by Nassim Khaled Thaleb the author of *The Black Swan*. His argument is that what really matters cannot be forecasted and that only unpredictable events determine the course of history. Taleb degrades forecasting to a useless activity owing to the radical indeterminacy of the world. However, Tetlock and Gardner remain, despite Thaleb's critics, confident that forecasting is possible, to some extent, with effort and the right mental models. They affirm that 'Black Swans' do exist, but they can be predicted by posing and answering the right questions.

In conclusion, in this book, the authors address the fascinating topic of forecasting future events in an entertaining and stimulating way. Tetlock and Gardner contribute to our understanding of how human beings can use mental models and organizational structures to avoid biases and draw more accurate predictions of future events. Highlighting that the method, the strategies, and the mindset used are more salient than inherited cognitive abilities or acquired knowledge to formulate accurate predictions. Therefore, in the eyes of Tetlock and Gardner, forecasting is an enterprise that can be undertaken by everyone, with the adoption of the right mental models. To help individuals do so, they offer an online platform, 'The Good Judgment Project', where beginners in forecasting can start to practice their abilities and sharpen their skills in order to become Superforecasters.

Risto Conte Keivabu
European University Institute, Florence
risto.contekeivabu@gmail.com
risto.conte@eui.eu

Andy Green: *The Crisis for Young People: Generational Inequalities in Education, Work, Housing and Welfare*
London 2017: Palgrave MacMillan, 161 pp.

This book contributes to the developing public, political, and academic debate in the UK surrounding the notion of intergenerational fairness. Green focuses on 'opportunities' for young people in the UK, comparing their relative chances in education, work, housing—even the accumulation of wealth—to those of the generations preceding them and questions whether the disadvantages experienced by today's young people are indicative of a broader decline in generational fortunes. In contrast to David Willett's demographically driven work *The Pinch*, Green is worried about structural shifts and the potential longevity of these disparities—are they temporal or likely to persist and in effect become the new norm?

The book is broadly divided into two parts: the first section is an assessment of Millennials' (those born after 1979) current prospects and the challenges facing them. The second part presents Green's own 'Policies for Intergenerational Equity'. Chapter One considers the impact globalisation and demographic change has had on Millennials and their delayed transitions into adulthood including becoming homeowners, gaining financial independence, securing stable employment, and starting a family. Green identifies demographics and globalisation as well as the financial crisis and ensuing austerity as being the main drivers of the changing nature of opportunities afforded to Millennials, before embarking on a deeper analysis of the key life and policy domains of education, employment, housing, and welfare and wealth.

Using an extensive array of comparative data, Chapter Two highlights several positive trends in education, such as the increasing rate of participation in post-16 education/training and narrowing inequalities in qualification outcomes, but notes that these gains have not been matched by similar improvements in key skills such as literacy and numeracy. In addition, Green concludes, the growth of credentialism has not led to better job prospects for Millennials. They may be better qualified than their parents but the relative worth of these credentials, in particular more generalised bachelor's degrees, on the labour market is declining. This, Green argues, has contributed to growing rates of over-qualification and under-employment amongst graduates. Hence, the benefits in terms of skills and employment prospects of these greater educational opportunities is not overtly clear; however, when taken at face value, Green concludes that education is one area in which Millennials have better opportuni-