

**BOOK REVIEW**

The Cultural Embedding of Foreknowledge in Modern Society

Recent Contributions to the Analysis of Social Prediction

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Andersson, Jenny (2018) *The Future of the World: Futurology, Futurists, and the Struggle for the Post-Cold War Imagination*. Oxford, New York: Oxford University Press.

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Pietruska, Jamie L. (2018) *Looking Forward: Prediction & Uncertainty in Modern America*. Chicago: University of Chicago Press.

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The desire to know the future, or at least glimpses of it, is as old as human culture, and ideas of the future, literary and scholarly utopias, and more generally, social hopes have consistently occupied a place in humanities research. More recently, however, social prediction and the practices, rituals, discourses, and tools of prediction in modern societies have seen an increased scholarly interest. This holds true for the anglophone literature, and one is tempted to attribute this to the belated translation into English of Reinhart Koselleck's 1979 book *Vergangene Zukunft [Futures Past]*, which appeared only in 2004 (Koselleck 1988 [1979]; 2004). Yet there has also been a considerable increase of publications in German literature. The two books under review thus contribute to a burgeoning literature, and they do so in innovative ways.

To assess their innovative character, some remarks on the state of art are required. Recent contributions to the literature on how people produce and disseminate foreknowledge seem to take one of four alternative approaches to their object. First, we find studies focusing on a specific *field of foreknowledge*: forecasts of the weather (Harper 2012; Fine 2007), of economies and markets (Friedman 2014; Beckert 2016; Beckert and Bronk 2018; Reichmann 2018), or of the climate

(Heymann, Gramelsberger, and Mahony 2017a). Second, we find studies that relate the stories of *individual forecasters or futurists* such as Herman Kahn (Ghamari-Tabrizi 2005), Hugh Everett III (Byrne 2010), or Ossip K. Flechtheim (Keßler 2007). Third, we find studies that describe specific *avant-garde groups of people or movements* (McCray 2013; Turner 2006; Lepore 2020). And fourth, we find studies that restrict their attention to a specific *place and time* concentrating on prognostication efforts in a specific country or region in a specific historical epoch—mostly, in recent years, the Cold War (Andersson and Rindzevičiūtė 2015; Rindzevičiūtė 2016; Tolon 2012; Dayé 2020; Eberspächer 2019; Seefried 2015).

Apart from being concerned with approaches to knowing the future, the two books under consideration share the goal of moving beyond some of the limitations that result from following one of these perspectives. They do so, however, in different ways. Jenny Andersson's *The Future of the World* marks a deliberate attempt to go beyond the restriction of *place and time* (fourth perspective), whereas Jamie Pietruska's book, *Looking Forward*, questions the feasibility of a focus on a specific *field of foreknowledge*.

In order to overcome the restrictions related to focusing on one specific field of prognostic activity, Pietruska compares several fields with the aim to identify the “culture of prediction” in place in late 19th century North America. Pietruska argues that by this time, daily forecasts had become increasingly widespread, thus extending the battle zone of their epistemological legitimacy to include not only scientists and philosophers, but also farmers, lay weather forecasters, government officials, fortune-tellers, journalists, and insurance companies. Together, they built the networks that, by collecting data, made crucial predictive endeavors possible and helped in their dissemination.

The term “culture of prediction” had initially been proposed by Gary Alan Fine (2007) to emphasize the cultural work that went into countering the inherent uncertainty and, it might seem, presumptuousness of predictive claims. Cultures of prediction have been described to be functional insofar as they stabilize predictive knowledge claims that are epistemologically highly unstable due to the unavailability of empirical data about the future (Heymann, Gramelsberger, and Mahony 2017b). Pietruska, however, extends this term to cover not only the producers of foreknowledge, but also the consumers. Thus, she traces the history of predicting changes in international cotton trade (chapter 1), daily weather forecasts (chapter 2) and the reluctant attempts to produce long-range weather forecasts (chapter 3), and reviews how 19th century economists, among them Samuel Benner and Edward Bellamy (whose utopia *Looking Backward* from 1888 is alluded to in the title of Pietruska's book), were envisioning the future of the economy (chapter 4).

In contrast to these instances of prediction which are more widely addressed in the history of science literature, a lengthy chapter 5 then turns to the doings of fortune-tellers and addresses how representatives of this group responded to charges of illegitimacy. By the 1870s, Pietruska shows, consulting fortune-tellers had become a real trend, a “craze.” Among others, she relates the story of Mary Kroeger, known as Countess Habeba, who offered her services during the second half of the 19th century, first in Washington, DC, and later in New York City. Kroeger frequently advertised in local newspapers, and as a matter of fact, fortune-telling was a hot topic for the media at that time, where various people debated and tried to make sense of this cultural phenomenon. What was it that drew people to consult such service of dubious value? Was it superstition, a reminiscence of apparently obsolete forms of pre-modern thinking? Was it to be taken as indicating a movement of anti-Enlightenment?

Drawing on coeval newspapers, Pietruska argues that people—and especially women, who had emerged as the main customers for fortune-tellers in this era—had learned to take their predictions with a skeptical distance. “[T]he appeal,” Pietruska writes (p. 207), “was not the relative accuracy of the fortune but rather the experience of the telling, a form of self-reflexive epistemic play that transcended fixed categories of authenticity and quackery such that clients understood [its] entertainment value [...]” Fortune-telling was understood as “a transaction in which patrons exchanged a small amount of money for the hope of more rewarding financial and romantic futures” (p. 213). Just like other predictive endeavors discussed in the earlier chapters, fortune-telling had become a means of coping with uncertainties.

However, the alleviating psychological effect of the discussed forms of social prediction did not follow from resolving the uncertainties of modern life, but rather from promoting their acceptance. In Pietruska’s book (and in fruitful and acknowledged contrast to the other conceptualizations of the term mentioned above), this is what constituted the specific “culture of prediction” in the US during the decades leading to 1900: The shared web of meaning fostered not the epistemological stabilization of predictive claims, nor their cognitive authority, but rather the acceptance of uncertainty as a key characteristic of modern society.

The concluding chapter 6 elaborates on the consequences of this finding, resulting in a broad historiographical argument—one that the comparative approach allowed Pietruska to defend quite convincingly. The argument challenges a well-established position, namely that the late 19th and early 20th century culture was informed by a “search for order” (Wiebe 1967). Pietruska’s argument transforms and develops this position. She shows that while predictability might have been inspired by a “search for order,” it “yielded just the opposite: acceptance of the uncertainties of economic and cultural life” (p. 3). The diffusion of techniques of prediction did not only make society more rational, in the sense that foreknowledge allowed for better decisions. It also helped people to develop a more reasonable position towards foreknowledge, allowing them to assess the limits of what can be known more wisely than before.

While Pietruska thus takes aim at the limitation to a specific *field*, Andersson challenges the restrictions of *space and time* that characterize many historical and sociological treatises on prediction. Her book covers the history of futurology. Her starting point is the claim that concurrent accounts of the history of futurology describe it as a distinctly U.S.-based endeavor of the Cold War era. This, she argues, underestimates the transnational aspects of the field’s emergence and neglects both the continuities from earlier decades and the impact that futurology had on shaping the post-Cold War world. After an introductory chapter 1, chapter 2 delineates her intellectual program for a “new history of the future” that should proceed from conceptual history à la Koselleck and others to become an “intellectual world history.” She claims that in contrast to other accounts, which “sought to trace a line of continuity between particular forms of expertise produced by military concerns in the Cold War and later forms of neoliberalism and neoconservatism,” her research shows that the international field of prediction was far more heterogeneous than these accounts suggest (Andersson, p. 27; see also p. 9).

Based on these historiographical considerations, the substantial historical narrative begins in chapter 3. It discusses how a series of influential thinkers—ranging from Martin Heidegger and Hannah Arendt to Lewis Mumford and Ossip K. Flechtheim—conceived of the future and of the responsibility of intellectuals to address it. Despite the considerable differences among them, Andersson argues that all these thinkers felt the need to tame the disruptive effects of modern



rationality by reconsolidating human reason and developing it to counter global capitalism, totalitarianisms, and the dawning age of the atomic bomb. Of the persons named, Ossip K. Flechtheim (1909-1998) is most likely the least well-known. Born to a Jewish family in a town now located in Ukraine, Flechtheim grew up in Germany. After the Nazi takeover, he left Germany and after several stations in Europe arrived in the United States in 1939. Here, he was in contact with representatives of the Frankfurt School (most notably Erich Fromm and Herbert Marcuse), as well as with Lewis Mumford, Isaac Asimov, and Thomas Mann. Flechtheim's most influential conviction—and the core of his ideas on futurology, a term that he coined—was that even at the risk of creating anxieties and despair, a human being had the right to know what to expect. As Flechtheim put down in several writings from the 1940s, knowledge about the future thus was a core element in the intellectual and moral education of the citizen in the 20th century. To Andersson, Flechtheim's futurology (and the similar ideas of Mumford) provided a link between European cultural critics à la Oswald Spengler and the emerging, more radical forms of social theorizing that would inform the various social movements in the 1960s, because it emphasized the future as central theme of democratic protest.

At the time that Flechtheim, Mumford, and other left-leaning intellectuals were discussing the moral and intellectual functions of futurology, the future also became a core issue of liberal debates. Among the spaces where these debates took place, Andersson singles out the Congress for Cultural Freedom (CCF; cf. chapter 4). Here, the notion of future was in a language rooted in modernization theory, and future research was “part of a kit of strategy devices, planning tools, and instrumentalities designed to promote and protect a specific version of the future.” (Andersson, p. 50) The Congress was a meeting place for a large number of influential thinkers, yet for the history of futurology, the encounter between U.S. sociologist Daniel Bell (1919-2011), French political theorist Bertrand de Jouvenel (1903-1987), and representatives of the Ford Foundation proved to be decisive. After a 1960 meeting of the CCF, the Ford Foundation decided to support de Jouvenel's *Futuribles* project. *Futuribles*—which was both the name of the research institute headed by de Jouvenel and of the journal that it produced—became the first transnational home of futurology. Bell had organized a series of talks of de Jouvenel throughout the United States, and he visited the institute in 1962 on behalf of the Ford Foundation, of which he was a consultant. Subsequently, Bell became a member of the project's scientific advisory board (together with Eugene Rustow and the ubiquitous Edward Shils). To the Ford Foundation, the *Futuribles* project was an important link to the otherwise quite unreceptive scenery of French social science (cf. p. 60).

De Jouvenel's understanding of the task of futurology was made most clear in a book that became a classic of futurology, published first in French as *L'art de la conjecture* in 1964 and then translated at the initiative of the CCF as *The art of conjecture* in 1967.¹ The future was a result of decisions taken in the present. These decisions should be informed by a comprehensive yet necessarily speculative view on the future consequences of these decisions. The art of conjecture consisted of comprehensively describing the possible consequences of present choices. These descriptions were called *futuribles*, a coinage melting the terms “futures”—in its plural form—and “possible,” thus referring to the imagined future worlds that had to be evaluated normatively in order to provide orientations to present-day decision makers. Despite its systematic nature, conjecture was no science. Rather, it

¹ Andersson claims, on p. 58, that the CCF produced an English translation of *L'art de la conjecture* already in 1962 (p. 58); there certainly existed earlier versions of the text, one of them even published as a book in 1963 in preparation of a specific meeting under the title *Futuribles: essay sur l'art de la conjecture*. Yet for the book itself, all consulted sources, among them Colquhoun (1996), WorldCat, and the respective entry in the *Encyclopedia Britannica*, support the publication dates given above.

“included the active creation of desirable images of action so that forms of behavior could be influenced beforehand” (p. 63).

After having sketched the transnational origins of futurology, Andersson turns to some better-known parts of the history of 20th century prediction efforts. Chapter 5 discusses the efforts on prediction undertaken at the RAND Corporation, a research organization established shortly after the end of World War II as a collaborative project between the U.S. Air Force and Douglas Aircraft Company that developed into a prototypical Cold War think tank. RAND researchers pioneered various influential techniques of futurology, among them the scenario analysis and the Delphi technique. While at RAND these techniques were mostly used to explore issues of military relevance, the late 1960s saw an increasing application of these techniques to problems outside the military realm. Chapter 6 thus returns to Daniel Bell, now relating the events around his term as the president of the Commission for the Year 2000 in the American Academy of Arts and Science. While the Commission itself did not reach its self-proclaimed aims, its activities informed Bell’s influential book *The Coming of Post-Industrial Society* (1973).

Andersson’s book is the result of a grant of the European Research Council that allowed her to assemble a group of scholars from across Europe, among them people who grew up on the Eastern side of the Iron Curtain, such as Eglė Rindzevičiūtė and Vítězslav Sommer. Chapter 7 reflects the cultural and linguistic diversity of the group led by Andersson and describes selected approaches to prediction taken in the Soviet countries. The lines of research covered are Radovan Richta’s work on the Scientific-Technological Revolution (STR) in Czechoslovakia, the forecasting efforts headed by Bestuzhev Lada in the USSR, and the studies carried out by the Center for Methodological Future Research in Bucharest under its director Mihai Botez. All these efforts were taken out in close awareness of and direct engagement with the events taking place outside the Soviet bloc, thus corroborating Andersson’s claim that futurology must be understood as an international endeavor.

Chapter 8 then describes a series of international events taking place in the late 1960s and early 1970s that show how de Jouvenel’s idea about the active role of men in shaping the future played out with intellectuals who, in stark contrast to the aristocrat-liberal de Jouvenel, were politically drawn to the Left. Its main focus is on the “Mankind 2000” conference that was organized in 1967 in Oslo by Johan Galtung and Robert Jungk (Jungk and Galtung 1969). Again, this was a very international event: virtually all actors featured up to now participated in the conference. The activist-leftist spin, however, was not to the liking of all—as Eric Jantsch wrote to Jungk in a private letter: “If we cannot meet to discuss our common area of interest, future studies, without you bringing your whole world and trying to drag me into this mess, then I will regretfully stay at home.” (cf. p. 162; I provide my own translation of the original quote). Apart from interpersonal disgruntlements, the new activist spin had consequences for the use of the established techniques of future studies. “As futurists rejected scientific prediction, they turned the models and forecasts developed by futurology on their head and used them as tools with which to imagine possible exits from the existing system.” (p. 179) Inspired by the writings of Brazilian Paulo Freire, Robert Jungk created the future workshop (Zukunftswerkstätte) as an interactive and deliberative education tool. The future, in Jungk’s perspective, had to become a matter of open democratic debate.

The development of the 1970s are then discussed in chapter 9. Indirectly, and delayed by various obstacles, the “Mankind 2000” conference led to the creation of the World Futures Studies Federation in 1973. The Club of Rome published *The Limits to Growth* in 1972 (Meadows et al. 1972),

the UNESCO established the Global Futures Network, and in parallel, the future became a playground of visionaries of various sorts, among them Barbara Marx Hubbard. The concluding chapter 10 emphasizes once more that foreknowledge was relevant to all sorts of people and therefore evades the restrictions of an easy narrative, as many recent works on the social sciences during the Cold War apparently suggest. It was “a fundamentally heterogeneous enterprise, in which highly morally charged notions of humanity and the world met.” (p. 225)

Both books under review make a clear thesis and use considerable and far-reaching evidence to establish them convincingly. They are also correct in pointing out the limitations of the current scholarly literature on social prediction. The comparative approach taken by Pietruska allows her to corroborate her thesis and at the same time convince the reader of the fruitfulness of the approach; her crystal-clear writing does everything to support these two intellectual objectives.

Andersson’s book, on the other hand, falls prey to its author’s ambition. Restricting oneself is a burden, but also a duty if one wants to describe the development of a scientific field. The more heterogeneous a field, the more the author is required to make cuts. Andersson’s wish, however, to develop a comprehensive view on the history of futurology apparently hindered her from making decisions as to what parts of the story should be left out. As the book stands now, it exemplifies—rather than analyzes—the heterogeneity of the field. The amount of undigested details from individual biographies that the book contains makes it hard to follow the argument. Further, while the chapters are put in chronological order, the events described within these chapters extend beyond singular points in time, forcing the story to jump back in time with every new chapter.

Another issue that emerges in the comparison of the two books regards the scrutiny of the two publishers. Pietruska’s *Looking Forward* is an impeccable book and testifies to the quality of the editorial efforts of its publisher, the *University of Chicago Press*. In contrast, Andersson’s *The Future of the World* reads like neither language editors nor peers had taken sufficient care to help her level out some of the countless errors which the book contains. These range from orthographic mistakes—the last name from Eugene Rustow (Rüstow) was not Rostow, as she continuously claims; it is especially important to be clear in this regard in order to avoid confusing Rustow with contemporary modernization theorist Walt Rostow—to more problematic errors, such as claiming (on p. 86) that Olaf Helmer was born in Vienna (he was born in Berlin) and declaring his friend Carl Gustav Hempel to be the leading figure of the Vienna Circle (which, while entertaining relations to its members, he certainly was not). Andersson also claims that Helmer and Nicholas Rescher started developing the Delphi technique in 1946—wrong again! Rescher had been, at most, in loose contact with Helmer during that time, mostly through their mutual friend and acquaintance Carl G. Hempel (Rescher 1997). The Delphi technique was developed at the RAND Corporation, with the first studies being carried out in the late 1940s by Norman C. Dalkey and Helmer, whereas Rescher joined RAND only in 1954 (Dalkey and Helmer 1962 [1951]; Dayé 2018). Also, the classic treatise of mathematical game theory, *Theory of Games and Economic Behavior* by John von Neumann and Oskar Morgenstern, not only receives a new title (on p. 80): *A Mathematical Theory of Games and Human Behavior*; what is more, von Neumann and Morgenstern are even credited for introducing the Prisoners’ Dilemma (instead of RAND researchers Merrill Flood and Melvin Dresher).

Unfortunately, similar carelessness appears with regard to the interpretation of intellectual positions—for instance, when Andersson declares that when philosophers Olaf Helmer and Nicholas Rescher introduced the term “inexact science,” they “meant the social sciences” (p. 87). Only a few lines later, Andersson claims otherwise: “All sciences, said the paper, are inexact” and exactness “was thus not the relevant difference between natural and social science” (p. 87). This, it should be added,

is a correct interpretation. Helmer and Rescher posited that in some “branches of physics, such as parts of aerodynamics and of the physics of extreme temperatures, exact procedures are still intermingled with unformalized expertise. [...] They must therefore properly be called sciences, but they are largely inexact since they rely heavily on informal reasoning processes” (Helmer and Rescher 1959, 26). A proper reading by an editor or a peer would have helped her clarify this and similar issues in the presentation of ideas.

On at least one occasion, this carelessness of author and publisher grows into a potentially derogatory statement: futurist and billionaire Barbara Marx Hubbard (1929-2019) certainly was a controversial figure in the futurology field for her advocacy of spiritualism. But to claim (on p. 205) that she had been married to Scientology founder L. Ron Hubbard when, in reality, her husband had been philosopher and artist Earl Hubbard, puts a large question mark over the historiographic diligence of the author and over the quality assurance procedures of *Oxford University Press*. This is very unfortunate, because it undermines the otherwise important contribution Andersson’s work would be able to make to the history of social prediction.

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