

The Great Future Debate and the Struggle for the World

Jenny Andersson

► To cite this version:

Jenny Andersson. The Great Future Debate and the Struggle for the World. American Historical Review, Oxford University Press (OUP), 2012, 5 (117), pp.1411-1430. <http://ahr.oxfordjournals.org/content/117/5.toc> . hal-01355594

HAL Id: hal-01355594

<https://hal.archives-ouvertes.fr/hal-01355594>

Submitted on 23 Aug 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

The Great Future Debate and the Struggle for the World

JENNY ANDERSSON

IN 1964, TWO RESEARCHERS AT RAND, Olaf Helmer and Theodore Gordon, presented what they argued was a general theory of prediction, a theory that, Helmer boasted, would “enabl[e] us to deal with socio-economic and political problems as confidently as we do with problems in physics and chemistry.”¹ Work had begun at RAND in the early 1960s to find a systematic and scientific approach to the future. Computers had made it possible to “amass all available information” about ongoing developments and process it in a systematic way, providing “the kind of massive data processing and interpreting capability that, in the physical sciences, created the breakthrough which led to the development of the atomic bomb.”² This meant a radical shift in notions of the future, a shift that was emphasized by many of the futurists of the period. The future, Helmer stated in another assertive piece, could now be liberated from the grip of utopian fantasy and superstition and be welcomed into the halls of science.³

In the years following the publication of the RAND report, futurology was hailed as the new science in international science journals and popularized in newspapers, broadcasts, and study circle materials.⁴ The futurists, wrote Alvin Toffler in his 1972 book by that title, were a new group in intellectual life. The word “futurism” no longer evoked “a school of poets, painters and playwrights who flourished in Europe . . . then vanished into the library stacks and museum showcases.” It “now denotes a growing school of social critics, scientists, philosophers, planners, and others who concern themselves with the alternatives facing man as the human race collides with an onrushing future.”⁵ Unlike astrologers, necromancers, and palm readers, Toffler explained, the quest of this new breed of intellectuals was not to predict the future.

This article is part of a research project titled Futurepol: A Political History of the Future—Knowledge Production and Future Governance, 1945–2010, funded by the European Research Council. I am grateful to the interviewees and former members of the World Futures Studies Federation—Jennifer Gidley, Eleonora Masini, Jim Dator, and Bart van Steenberg, as well as to Ariel Colonosmos, Matthew Connelly, Elke Seefried, and Egle Rindzeviciute for sharing work in progress with me.

¹ Olaf Helmer, “Science,” *Science Journal* 3, no. 10 (October 1967): 49–51, here 51. See also Helmer, *Social Technology* (New York, 1966).

² Helmer, “Science,” 50.

³ Ibid.; and Olaf Helmer, “The Future of Science” (Rand Corporation, Report no. P-3607, 1967).

⁴ See *The Future of Future Research*, Special Issue, *Science Journal* 3, no. 10 (October 1967); “La Futurologie,” *Revue internationale des sciences sociales* 21, no. 4 (1969): 551–674; and the April 19, 1964, issue of the *New York Times Magazine*, which is devoted to futures research.

⁵ Alvin Toffler, *The Futurists* (New York, 1973), 3.

Rather, it was to point to what could possibly be known and done about the future issues facing the present.⁶

Toffler's portrait of twenty-three leading futurists, ranging from the American sociologist Daniel Bell to the Russian prognostician Igor Bestuzhev-Lada, did much to spread the terms "futurist," "futurology," and "futures studies."⁷ In fact, the term "futurology" had been coined in the 1940s by the Ukrainian-born Jewish Marxist Ossip Flechtheim, who was in exile in New York at the Institute for Social Research at Columbia University. To Flechtheim, the future was not a science of prediction, but a new and more systematic utopian reflection on the present. Moreover, futurology was a veritable battleground for different future visions. He illustrated this in a most efficient fashion in the first pages of the German edition of his book *Futurologie*, citing two entries for the word from encyclopedias on opposite sides of the Iron Curtain:

"Futurology: Systematic and critical analysis of future issues" (from the *West German Brockhaus Encyclopädie*, vol. 6, 1968)

"Futurology: A term denoting the attempts of bourgeois scientists and planners in imperialist states to prognosticate future developments in capitalism" (from the East German *Kleines Politisches Wörterbuch*, 1967).⁸

This future predicament became particularly clear for Flechtheim after he had returned to Germany in the late 1960s and was writing from a position as professor of political science at the Freie Universität in Berlin. For Flechtheim, the bipolar world order—foregrounded in the division of Germany—was evidence of the need to wrench the future from the grip of what in his view were two equally totalitarian systems.⁹

TOFFLER ANNOYED "FUTURISTS" WITH his sensationalistic account of what to them was a most serious activity. This activity, however, was complex. Futurists had radically different understandings not only of what the future was and the way it could be studied, but also of the ways in which prediction could be used to control or protest certain futures. The various orientations developed by such futurists—futures studies, forecasting, *prospective*, and *prognostik*, which can be grouped together under the term "futurology"—grew out of the struggle between such different understandings and their different historical origins. What became known in the 1960s as "forecasting" can be traced back to interwar developments in planning and the much longer history of national accounting.¹⁰ It was strongly influenced by Cold War strug-

⁶ Ibid., 4.

⁷ The other twenty-one were Paul Ehrlich, Margaret Mead, John McHale, Marshall McLuhan, Robert Jungk, Arthur I. Waskow, Toffler himself, Arthur C. Clarke, Olaf Helmer, Herman Kahn, Anthony Wiener, Theodore Gordon, M. S. Iyengar, Eric Jantsch, Kenneth Boulding, Yujiro Hayashi, Ossip Flechtheim, Bertrand de Jouvenel, Fred Polak, John Wren-Lewis, and Buckminster Fuller.

⁸ Ossip K. Flechtheim, *Futurologie: Der Kampf um die Zukunft* (Cologne, 1968), 8.

⁹ Ibid., 16, 21, 75–105.

¹⁰ Alain Desrosières, *La politique des grands nombres: Histoire de la raison statistique* (Paris, 2000); Theodore M. Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton, N.J., 1995).

gles for survival and control. Flechtheim and others represented a different current of futures thinking; for them the future was a utopia—not something to be predicted and foretold, but the hope for a better world. Toward the end of the 1960s, this critical strand of futurology came to be known as futures studies. At its core was a rejection of the predictions made by “whiz kids” and nuclear strategists, in favor of a determination to save the world’s future from such prophecies of doom. Thus a struggle ensued over representations of the future of the world in the postwar period, with competing visions of the future as an *is*: an object of science of which certain predetermined traces could be found; and the future as a *becoming*: an object of the human imagination, creativity, and will.

This struggle within the large field of prediction was related to a broader shift in future representations and took the form of a scientific and political controversy over the way that futures were produced. To understand this, we need to consider the role of transnational networks after 1945, and how these networks changed in the decades leading up to the 1970s and beyond. The boom in forecasting that began in the early 1960s was strongly influenced by an American security political nexus, dominated by actors such as the RAND Corporation, the Congress for Cultural Freedom, and the Ford Foundation.¹¹ The subsequent spread of futures studies, however, was linked to emerging new social movements on the global level that were concerned with the future of “mankind”—including previously invisible segments of humanity in the form of unborn generations and peoples in remote areas of the world.¹² This shift from futures dominated by a bipolar interest to representations of a global future was also influenced by the futures actually produced by futurists. Prediction had a productive role in building visions of the future that altered prevailing notions of it. By the late 1960s, forecasters had developed large-scale simulations that gave rise to understandings of the world as an interdependent and fragile system.¹³ Such predictions triggered action on the global level, notably through new social movements such as the peace and the environmentalist movements, which put forward political representations of the threatened world future.¹⁴

While different scientific, cultural, and political notions of the future clashed in important ways within futurology, it can nevertheless be understood as a global field that was held together by the attempts of futurists of different scientific and political inclinations and positions to create legitimacy for themselves and their predictions. This is helpful, since it means that we can focus on manifestations of conflict and collaboration in a transnational field structured by the futurists, and by the publications, organizations, and correspondence that they produced. Nevertheless, it is difficult to outline a history of futurology. The archives and materials left by futurists are almost entirely unexplored, and they are not readily available. Key archives are currently closed to researchers, leaving scholars no option but to rely on secondary

¹¹ See Giuliana Gemelli, *The Ford Foundation and Europe, 1950's–1970's: Cross-Fertilization of Learning in Social Science and Management* (Brussels, 1998); Volker R. Berghahn, *America and the Intellectual Cold Wars in Europe* (Princeton, N.J., 2002); Ludovic Tournès, ed., *L'argent de l'influence: Les fondations américaines et leurs réseaux européens* (Paris, 2010).

¹² Matthew Evangelista, *Unarmed Forces: The Transnational Movement to End the Cold War* (Ithaca, N.Y., 1999).

¹³ Amy Dahan Dalmedico, ed., *Les modèles du futur: Changement climatique et scénarios économiques—Enjeux scientifiques et politiques* (Paris, 2007).

¹⁴ Evangelista, *Unarmed Forces*.

sources and printed materials. Important documents have been retrieved from garages and storage rooms.¹⁵ Language competence has unfortunately been a barrier, particularly for the Eastern European side of the story, but Chinese, Indian, and Egyptian archives have also not been explored. Thus the door can be opened only a crack regarding this subject that has been poorly explored by historians.

WE ARE GOING TO NEED a new field of historical inquiry, one that will move away from the cultural history of utopias and images of the future that historians have studied to date, and focus on the role of prediction in structuring action and actors on the national, transnational, and global levels. Between the immediate post–World War II period and the mid-1970s, the future came to be understood as posing distinct challenges to the functioning of societies, both East and West, and as a sphere in need of intervention—foresight, organization, and rationalization.¹⁶ This is a shift in a much longer history of predictive ideas, a history marked not only by religion, but by the development of the social sciences.¹⁷ It could be suggested that the emergence of futurology in the postwar period was connected to a radicalization of the future at a time when notions of science, politics, and world order were changing rapidly. The early Cold War period saw attempts to domesticate the future and bring it under control, as part of the battle between liberalism and Marxism that was playing out not only in the division of Europe and the world, but also in divisions within nations, as in important struggles over the direction of the social sciences. Beginning in the late 1960s, such attempts at control became the target of a new variant of the critique of modernity and capitalism that was focused on the national and global future.

This is where a new history of the future will differ from previous studies of “futures past” that have examined future concepts as questions of historicity and temporality, directly linked to the rise of modernity.¹⁸ The postwar period raises a different challenge, which is understanding how future horizons and regimes of historicity changed in a time when notions of progress, economic and technological growth, and scientific and political rationality all became sources of contestation, disillusionment, and fear. The postwar period, in fact, can be seen as a series of overlapping historicities in which future horizons changed rapidly and even coexisted, so that the large changes in the temporal horizon described by Reinhart Ko-

¹⁵ For instance, Eleonora Masini’s personal documentation of the World Futures Studies Federation in Rome.

¹⁶ Jenny Andersson, “Choosing Futures: Alva Myrdal and the Construction of Swedish Futures Studies, 1967–1972,” *International Review of Social History* 51, no. 2 (2006): 277–295; Holger Nehring, “Genealogies of the Ecological Movement: Planning, Complexity and the Emergence of ‘the Environment’ as Politics in West Germany, 1949–1982,” in Sverker Sörlin and Paul Warde, eds., *Nature’s End* (Houndmills, 2009), 115–138; Sörlin and Warde, “Making the Environment Historical—An Introduction,” *ibid.*, 1–23.

¹⁷ There is a growing European literature devoted to the intellectual history of prediction; see Heinrich Hartmann and Jakob Vogel, eds., *Zukunftswissen: Prognosen in Wirtschaft, Politik und Gesellschaft seit 1900* (Frankfurt, 2010); Dalmedico, *Les modèles du futur*.

¹⁸ Reinhart Koselleck, *Futures Past: On the Semantics of Historical Time* (Cambridge, Mass., 1985), 191, 266; Lucian Hölscher, *Die Entdeckung der Zukunft* (Frankfurt, 1999).

selleck and François Hartog for the modern period do not make much sense.¹⁹ This period is characterized, rather, by a kind of subjectification of the future, in whose name many actors now speak, but also by an objectification that turns it into yet another domain of science and politics. The birth of futurology in the postwar period is indicative not of a new step in the idea of progress, but rather of the growing unease and fear in a period in which the future became laden with connotations of looming disasters such as ecocide, atomic war, and the population bomb.²⁰ Even the forecasters of the 1950s and early 1960s, convinced as they were of their ability to control the future scientifically, were motivated by ideas of the unforeseeable threat. Futurology was an activity obsessed with opacity and complexity, feedback loops and unintended consequences. This, in turn, was clearly related, on the one hand, to developments in cybernetics and systems theory that created an illusion of future control and provided the intellectual tools with which to grasp complexity, and, on the other, to the way that the predictions produced by such tools also seemed to produce a never-ending array of new futures that called for action. The quest for a general theory of prediction was a search for a scientific form of control at a time when change appeared to be distinctly threatening. A history of the future is therefore a quintessentially political history of power and control, against which important forms of protest also emerged.

Toffler's assertion that futurists were not in the business of prediction was not entirely truthful. Attempts at prediction had been going on at RAND since the war years, when scientists tried to predict the patterns of incoming enemy aircraft.²¹ The primary reason why researchers at RAND could boast, in 1964, that they had invented a new science of prediction was the apparent success of the so-called Delphi method of forecasting. The Delphi study gained a lot of attention across the Western world because of the promises that it seemed to offer for a new science of long-term decision-making.²² In fact, its scientific underpinning lay in assembling and analyzing intuition. It was based on the systematic analysis of the intuitive judgments of a number of experts, who were asked a series of questions concerning the probability of key future developments and the time range in which they could be expected to occur.²³ The examples included nuclear war, key security technologies, chemical control of aging, man-machine symbiosis, mining on the moon, universal automated language, and computers becoming the most significant form of intelligence. Delphi was thus a way of boiling down expert opinion to a range of identifiable sequences of likely future events. Probability was derived through the search for consensus

¹⁹ Koselleck, *Futures Past*; François Hartog, *Régimes d'historicité: Présentisme et expériences du temps* (Paris, 2002).

²⁰ The influence of Rachel Carson's *Silent Spring* (Boston, 1962) is obviously key, although the book was received differently in different countries, but to this we should add the idea of the population bomb, popularized by Paul Ehrlich, *The Population Bomb* (New York, 1968), and the mobilization of the international peace movement. Elodie Vieille Blanchard, "Les futurs entre 1945 et 1972, entre utopie technologique et dystopie écologique" (unpublished ms., Centre Alexandre Koyré, Paris, October 2009); Matthew Connelly, *Fatal Misconception: The Struggle to Control World Population* (Cambridge, Mass., 2009); Lawrence S. Wittner, *Resisting the Bomb: A Short History of the World Nuclear Disarmament Movement, 1954–1970* (Palo Alto, Calif., 1997).

²¹ Phillip Mirowski, *Machine Dreams: Economics Becomes a Cyborg Science* (Cambridge, 2002), 17.

²² T. J. Gordon and Olaf Helmer, *Report on a Long-Range Forecasting Study* (Santa Monica, Calif., 1964).

²³ *Ibid.*, 41–45.

views, produced through repeated questionnaires in which the experts were invited to modify their opinions in the light of the majority view expressed. Convergence of opinion translated into accuracy of prediction. For instance, 25 percent of the experts described a nuclear war as highly probable.²⁴

It was no accident that the Delphi method, which became one of the methodological cornerstones of forecasting, was developed at RAND. Project RAND—a contraction of the term “research and development”—rose to prominence in the immediate postwar period, an outgrowth of the resources invested in military research in the United States during World War II. It developed the use of computer simulation, game theory, nuclear physics, and advanced mathematics for the purpose of reducing uncertainty and promoting a theory of decision-making that could be applied to society, just as modeling and game theory had been applied to business decisions and military scenarios. For the researchers at RAND, the future was a question of survival or annihilation in a coming nuclear war.²⁵

The progress made at RAND, along with the high visibility of the speculative and catastrophic scenarios developed elsewhere, first and foremost by the futurist *bête noire*, the nuclear age theoretician Herman Kahn in works such as *The Year 2000* and *On Thermonuclear War*, led to an interest in the policy potentials of the new science.²⁶ In the domain of military forecasting, this interest was motivated primarily by the perceived need to anticipate Soviet nuclear strategies.²⁷ In the civilian sphere, it was motivated by the desire to improve visibility in economic and social policymaking. Forecasting thus followed the pattern of other planning technologies, such as the program budgeting developed in Robert McNamara’s Defense Department, and migrated into the civilian administration.²⁸ Moreover, forecasting interested a range of leading American social scientists whose work was already focused on generalizability and the quest for laws of social development, among them Paul Lazarsfeld, Talcott Parsons, and Daniel Bell. In 1964, Bell was tasked by the American Academy of Arts and Sciences with the creation of a “working group for the next twenty-five years” of American society, which would explore the uses of forecasting for policymaking. The members included Margaret Mead, Stanley Hoffman, Daniel Moynihan, Eugene Rostow, Zbigniew Brzezinski, Samuel Huntington, and Herman Kahn.²⁹

Unlike the mathematicians, astrophysicists, and nuclear scientists such as Helmer, Gordon, and Eric Jantsch, Bell and the other policy-oriented sociologists and liberals were not interested in prediction per se; they saw a systematic approach to the future as a way of giving policymakers increased scope and insight into possible developments. For Bell, analyzing the future was the basis of what he outlined as a theory of choice, a way of fleshing out alternatives for societal developments, an argument that he developed in his 1973 book *The Coming of Post-Industrial Society*:

²⁴ Ibid.; Theodore J. Gordon, *The Future* (New York, 1965).

²⁵ Fred Kaplan, *The Wizards of Armageddon* (1983; repr., Stanford, Calif., 1991).

²⁶ Herman Kahn and Anthony J. Wiener, *The Year 2000: A Framework for Speculation on the Next Thirty-Three Years* (New York, 1967).

²⁷ See the article in this forum by Connelly et al.

²⁸ Leena Riska-Campbell, *Bridging East and West: The Establishment of the International Institute for Applied Systems Analysis (IIASA) in the United States Foreign Policy of Bridge Building, 1964–1972* (Helsinki, 2011), 108–109.

²⁹ Daniel Bell, ed., *Toward the Year 2000: Work in Progress* (Boston, 1968).

A Venture in Social Forecasting.³⁰ However, such a theory of future choice was motivated by strategic reasons. Just as Helmer defined prediction as a new form of social technology, devoted to the rational choice of the best possible future, for Bell forecasting was an instrument that would enable the modern state to foresee coming developments requiring a shift in political strategy, a new form of collective rationality in a stage-driven process of modernization.³¹ In fact, forecasting was a form of modernization theory, and developed in close connection with the theories of sociologists and economists such as Edward Shils and Walt Rostow. Such theories were dominated by the perceived need to develop an intellectual alternative to Marxism, another theory of history capable of laying out a schema of future development.³²

This explains the emergence of American forecasting through a network of key actors linking the Congress for Cultural Freedom (CCF), the Ford Foundation, and the State Department. The CCF brought together European intellectuals who wanted to protect the arts and sciences from the influences of Marxism. Its connections with the U.S. Central Intelligence Agency, particularly through Michael Josselson, were disclosed in 1967.³³ The idea of forecasting as a tool that could be used in an effort to control the world order was born in the CCF seminars on the social sciences in Milan in 1955, and the subsequent seminar on the problems of economic growth in Rhodes in 1956.³⁴ The archives of the Ford Foundation show the close links between Congress and the foundation's director of international affairs, Shepard Stone; the program officer for the social sciences, Waldemar Nielsen; and especially two French intellectuals who were directly involved in the reconstruction of French social science at the same time, a process in which the idea of forecasting or *le prospective* played a central role: first Gaston Berger, and later Bertrand de Jouvenel.³⁵ The latter was particularly instrumental in the creation of an international network of forecasters under American influence.

Berger held the key position of French director general of higher education at a time when the Ford Foundation was trying to strengthen its presence in the European social sciences.³⁶ These were understood as a strategic battlefield against Marxism, and as completely out of tune with recent American developments in economics, sociology, political science, and international relations, all dominated by a new generation of decidedly liberal and applied scholars in the United States. Berger traveled to the U.S. on a grant from the Ford Foundation in the mid-1950s, a trip

³⁰ Daniel Bell, *The Coming of Post-Industrial Society: A Venture in Social Forecasting* (New York, 1973).

³¹ Bell, *Toward the Year 2000*, 1–6, 63.

³² See W. W. Rostow, *The Stages of Economic Growth: A Non-Communist Manifesto* (Cambridge, 1960).

³³ Pierre Grémion, *Intelligence de l'anticommunisme: Le congrès pour la liberté de la culture à Paris, 1950–1975* (Paris, 1995); Francis Stonor Saunders, *Who Paid the Piper? The CIA and the Cultural Cold War* (London, 1999).

³⁴ Ford Foundation Archives, New York [hereafter FFA], grant file 61-22, Michael Josselson to Shepard Stone, January 8, 1959. Pierre Grémion, "The Role of the Social Sciences in East-West Relations," *Technology in Society* 23, no. 3 (2001): 427–439.

³⁵ FFA, grant file 62-41, log file 7-1121.

³⁶ The Ford Foundation set out its program for the social sciences in the Gaither Report in 1949: *Report of the Study for the Ford Foundation on Policy and Program* (Detroit, 1949). For the influence of the foundation on the European social sciences, see Gemelli, *The Ford Foundation and Europe*; Tournès, *L'argent de l'influence*.

that paved the way for a large financial contribution to social science institutions in France, and which also led to American interest in Berger's proposed Centre de prospective, with which he wanted to bring together French businessmen, intellectuals, and policymakers to systematically reflect on the future. Berger argued that the speed of change was now such that society needed to develop a foresight mechanism capable of illuminating the road ahead, before a collision occurred, thoughts that he set out in a book on the phenomenology of time.³⁷ His reflections coincided with the creation of the so-called Sixième Section, in whose founding he played an instrumental role, and which was dominated by the new economic and social history presided over by his friend Fernand Braudel. A reflection on future time seemed to fit this new history well.³⁸ When Berger died in a car crash in 1960, American interest in France focused on two "men of caliber" who the American funders thought were capable of effecting the desired change in French intellectual life: the international relations and nuclear age theorist Raymond Aron and the political scientist de Jouvenel. Both came to their attention through the CCF. Aron was a leading liberal philosopher.³⁹ De Jouvenel, however, was tainted by his ambiguous wartime experiences. He had made a name for himself in the interwar period as the architect of the idea of a planned economy, *l'économie dirigée*, but also participated in French fascist circles.⁴⁰ Having struggled to reestablish himself in France after the war, he emerged in the mid-1950s as an anti-Gaullist and pro-American liberal who joined not only the CCF but also Friedrich von Hayek's neoliberal Mont Pelerin Society.⁴¹ It appears that de Jouvenel met Nielsen at the CCF's Rhodes seminar in 1956, and that the idea of an intellectual venture focused on the future of democracy was born during their conversation. De Jouvenel was enjoying a certain reputation in the Anglo-Saxon world following the publication of his book *Sovereignty*, a theoretical work of political science in which he expressed the fear of a growing and potentially uncontrollable state, dominated by an expanding bureaucracy and the growth of organizations, that threatened the constitutional principles inherited from the nineteenth century.⁴² While he had had no specific earlier thoughts on the future, other than an interest in collecting economic and social data for his statistical publication *Bulletin SEDEIS*, it apparently was his theories of a constitutional state threatened by growing state power, in France as well as in the United Kingdom (where the Labour Party was immersed in a heated debate on planning and where the CCF also had a strong presence), that won over the Americans. The proposition to create a future think tank modeled after the American foundations in France came from Nielsen, and in 1962 de Jouvenel submitted a grant request to the Ford Foundation

³⁷ Gaston Berger, *Phénoménologie du temps et de prospective* (Paris, 1964).

³⁸ FFA, file PA 60-437. Vincent Guiader, "Socio-histoire de la prospective" (doctoral diss., Université de Paris Dauphine, 2008), 93, 255.

³⁹ Raymond Aron, *Dix-huit leçons sur la société industrielle* (Paris, 1963).

⁴⁰ Olivier Dard, *Bertrand de Jouvenel* (Paris, 2008), 51.

⁴¹ François Denord, "French Neoliberalism and Its Divisions: From the Colloque Walter Lippmann to the Fifth Republic," in Philip Mirowski and Dieter Plehwe, eds., *The Road From Mt. Pèlerin: The Making of the Neoliberal Thought Collective* (Cambridge, Mass., 2009), 45–67.

⁴² Bertrand de Jouvenel, *Sovereignty: An Inquiry into the Political Good* (Cambridge, 1957). Dard, *Bertrand de Jouvenel*, 205–230, 250–254.

for a project that would publish a number of essays by “great thinkers” dealing with problems regarding “the future of democratic institutions.”⁴³

These essays were the so-called *futuribles*, a play on the French *futurs possibles*, and their purpose was to study the development of democracy and democratic regimes in Europe and the world. A number of countries were of concern (including not only France, but also the UK, Yugoslavia, and India, where the first five-year plan had been presented by Jawaharlal Nehru in 1951). The Ford Foundation promptly sent de Jouvenel to Poona to set up a second office for the *Futuribles* project.⁴⁴ Through Nielsen, the foundation also tried to create a similar office in North Africa. In short, *Futuribles* was intended as a liberal alternative to the long-term planning emerging in Third World countries under the influence of Marxism.

De Jouvenel, however, proved difficult to control. He soon abandoned his plan to undertake a detailed study of the conditions for democratization in African and Asian countries and got passionately interested in the future as a theoretical problem of knowledge and power. Systematic conjecture, which he started working on in those first years of the 1960s, would be an equivalent to economic forecasting, but in the area of political science and international relations. Through systematic interrogation of the future, these disciplines would acquire the exactness and power of persuasion of the sciences. In 1962 he published *L'art de la conjecture*, which was translated into English as *The Art of Conjecture* in 1964. Its core idea lay in the theorization of the term *futuribles*. These were the germs of futures in the making, the multitude of variables that one had to study in order to study the future, and to de Jouvenel, it was always a question of choosing between multiple developments. Shunning the word “science” for “art,” he argued that this was an exercise in reflexivity on behalf of the conjecturer.⁴⁵

These ideas of a new philosophical reflection on the future were of secondary interest to the funders at the Ford Foundation, where there were complaints that de Jouvenel had strayed from the strategic goal of understanding future developments of democratic institutions in countries.⁴⁶ When the grant to the *Futuribles* project expired in 1967, it was not renewed.⁴⁷ By this point, however, de Jouvenel was well connected in American social science, in close contact with Gene Rostow, Edward Shils, and Daniel Bell, who were all members of the *Futuribles* board. Through Bell, de Jouvenel had been put in contact with the forecasters at RAND, and he thus became the middleman between American forecasters and an emerging European field.⁴⁸ In 1964, Bell and Rostow helped *Futuribles* organize a conference on prediction at the Yale Law School, in the presence of many of the leading game

⁴³ FFA, log file L8-137, grant files 61-22, “*Futuribles*,” and 62-41, “Strengthening the Democratic Institutions of Europe and Other Areas of the World.” De Jouvenel refers to *Futuribles* in his private notes as “the Nielsen project.” Bibliothèque nationale de France [hereafter BNF], Département des manuscrits, Fond Bertrand de Jouvenel, NAF 28143, Cahier de travail nr. 100, August 1960, note dated August 11.

⁴⁴ FFA, grant file 62-41, BNF, NAF 28143, Cahier de travail nr. 100, August 1960, and 102, January 1961.

⁴⁵ Bertrand de Jouvenel, *L'art de la conjecture* (Monaco, 1964).

⁴⁶ For instance, FFA, grant file 61-22, memo from David Bell to Shepard Stone, August 11, 1962.

⁴⁷ Riska-Campbell proposes that American interest in France waned after de Gaulle withdrew from NATO in 1966; *Bridging East and West*, 5.

⁴⁸ Correspondence between de Jouvenel and Bell in FFA, grant file 62-41, and letters from de Jouvenel to Bell in BNF, NAF 28143.

theorists and international relations and modernization theorists, including Oskar Morgenstern and John von Neumann, Karl Deutsch, Gene and Walt Rostow, Edward Shils, Robert Dahl, Seymour Martin Lipset, Olaf Helmer, and Theodore Gordon. De Jouvenel played something of the role of the European intellectual, allowing himself certain criticisms of game theory, in which the future was narrowed down to a small number of predictable outcomes, and peppering the Americans with references to Jean-Jacques Rousseau.⁴⁹ Also at the conference was the West German journalist Robert Jungk, who wrote scathingly back to his newspaper about the new Wild West in futurology. To him, the forecasters were cowboys or worse, a new breed of social engineers who were trying to manipulate future events to fit their new science, and who were dangerously close to producing the world clash that they were so busy predicting.⁵⁰

Forecasting was not an American prerogative. The central impetus for “gaming” was the United States’ perceived need to monitor Soviet developments, in economic and social affairs generally and in the area of nuclear strategy more specifically.⁵¹ Forecasting was an area in which the Soviets played a key role, and the Americans seem to have felt that they were lagging behind. We know very little about the highly opaque activity of what was known in Russian as *prognostik*. In the USSR as well as in the U.S., futurology seems to have been the domain of both independent scientists and political elites, and in both political spheres it had a highly strategic role close to centers of power. The history of *prognostik* goes back to the interwar period and the beginning of the five-year plans under Lenin, when it signified “plan prognosis,” a scientific reflection on the goals of planning.⁵² It was thus directly related to questions about the objectives of Communist society and Marxist doctrine.⁵³ Several of the forecasters in the Soviet Union and the countries under its influence were persecuted, while the trajectories of others were marked by the various survival strategies of scientists under Communism. During Stalin’s reign, East European futurologists such as the Romanian philosopher Pavel Apostol were imprisoned. Following Stalin’s death in 1953, appreciation of science in the USSR gradually increased. Under Khrushchev, the scientific-technological revolution was proclaimed to be the tool for the realization of the objectives of Communist society.⁵⁴ What Slava Gerovitch has called its “overtake and destroy” mentality led to a turnaround in ideological perspectives on “bourgeois” aspects of science such as computers and cybernetics, which were now understood as tools for the scientific management of Soviet society.⁵⁵ It seems to have been in this context that *prognostik* was also now

⁴⁹ Conference at Yale, December 4–6, 1965, FFA, grant file 62-41.

⁵⁰ Robert Jungk, “Wohin Steuert die Staatsrakete? In Paris konferierten die Zukunftsforscher,” *Die Zeit*, May 14, 1965, 15, clipping, FFA, grant file 62-41.

⁵¹ Kaplan, *The Wizards of Armageddon*; Connelly et al., this issue.

⁵² I am indebted to Egle Rindzeviciute for her help with Russian sources, and I refer to her ongoing research in the Futurepol project in Paris.

⁵³ Nikolai Kremmentsov, *Stalinist Science* (Princeton, N.J., 1996).

⁵⁴ Stephen Fortescue, *The Communist Party and Soviet Science* (Basingstoke, 1986), 17–21; Gordon L. Rocca, “‘A Second Party in Our Midst’: The History of the Soviet Scientific Forecasting Association,” *Social Studies of Science* 11, no. 2 (1989): 199–247, here 201.

⁵⁵ Slava Gerovitch, “‘Mathematical Machines’ of the Cold War: Soviet Computing, American Cybernetics and Ideological Disputes in the Early 1950s,” *Social Studies of Science* 31, no. 2 (2001): 253–287; Egle Rindzeviciute, “Purification and Hybridisation of Soviet Cybernetics: The Politics of Scientific Governance in an Authoritarian Regime,” *Archiv für Sozialgeschichte* 50 (2010): 289–309.

understood as part of a quantitative system using predictive social and economic indicators to monitor progress and change.⁵⁶ The Soviets were eager to take the global lead in forecasting, and Soviet forecasting was presented to the world in the works of two forecasters who enjoyed official sanction and could take part in international activities. Dzhermen Gvishiani (deputy chairman of Gosplan and son-in-law of Aleksei Kosygin) was the Soviet actor behind the creation of the International Institute for Applied Systems Analysis in 1972, working in tandem with his American equivalent, McGeorge Bundy (national security adviser to President Lyndon B. Johnson on East-West relations and director of the Ford Foundation).⁵⁷ Gvishiani's book *Prognostiks* was translated into English as *Trajectories of the Future* in 1972 by the Foreign Technology Division at Wright-Patterson Air Force Base in Ohio.⁵⁸ A second Soviet futurist was Igor Bestuzhev-Lada, a historian and sociologist who had survived a series of changes in the Soviet administration to become the director of the Social Predictions Section of the Institute for Applied Sociology in the Academy of Science.⁵⁹ In 1973, Bestuzhev-Lada became the co-president of the Futures Committee of the International Sociology Association, whose presidency alternated between the blocs. He introduced the Western version of futures studies in the Soviet Union, where the principle of open futures was of course a dangerous one, and where the epistemological debates of futures studies were thus domesticated into rants of Marxist jargon.⁶⁰ The Soviets insisted on the scientific nature of Soviet futurology, as rooted in dialectical Marxism, in contrast to the "bourgeois futurology" of the capitalist world.⁶¹ Bestuzhev-Lada himself was apparently threatened with prison upon his return from the first international futures studies conference in Bucharest in 1972.⁶² Meanwhile, Soviet forecasting was also concerned with, in Bestuzhev-Lada's words, "how to get people to act decisively in order to create their desired future," phrasing that could have been taken from RAND scientist Olaf Helmer's essay on the future as social technology, and which is indicative of the level of technocratic thinking in forecasting on both sides of the Iron Curtain.⁶³ This had more sinister implications in the USSR, where statistics and planning played a central role in an often brutal molding of the social world.⁶⁴

On both sides of the Iron Curtain, forecasting was a field of control. However, it also gave rise to important forms of dissent. In the Academies of Science in Poland and Czechoslovakia, commissions were created in the late 1960s devoted to the future of Communist society. The discussion focused on the question of the postin-

⁵⁶ Martine Mespoulet, "La 'renaissance' de la sociologie en URSS (1958–1972): Une voie étroite entre matérialisme historique et recherches sociologiques concrètes," *Revue d'histoire des sciences humaines* 15, no. 1 (2007): 57–86, here 70.

⁵⁷ Riska-Campbell, *Bridging East and West*.

⁵⁸ D. Gvishiani and V. Lichkin, *Trajectories of the Future* (Springfield, Va., 1972).

⁵⁹ Igor Bestuzhev-Lada, "Forecasting: An Approach to the Problems of the Future," *International Social Science Journal* 21, no. 4 (1969): 526–534. I. Bestoujev-Lada, *Essai de futurologie* (Moscow, 1985). This book was published under the French spelling of the author's name.

⁶⁰ Igor Bestuzhev-Lada, *Sotsial'noe prognozirovanie: Kurs lektsii* (Moscow, 2001).

⁶¹ I. Bestuzhev-Lada, "Bourgeois 'Futurology' and the Future of Mankind," in Toffler, *The Futurists*, 194–210.

⁶² Rocca, "'A Second Party in Our Midst.'"

⁶³ Bestoujev-Lada, *Essai de futurologie*, 279.

⁶⁴ Alain Blum and Martine Mespoulet, *L'anarchie bureaucratique: Statistique et pouvoir sous Staline* (Paris, 2003).

dustrial society—a debate that was directly linked to forecasting in the West as well, particularly through the work of sociologists such as Bell. Bell was in contact with these scholars, economists, and sociologists in Poland and Czechoslovakia.⁶⁵ They applied the problems of postindustrial society to the problem of rethinking Marxism. In Czechoslovakia, the work of Radovan Richta's and Ota Šulc's Futurological Society (published in English as *Civilization at the Crossroads*) inspired the creation of civilian future societies during the Prague Spring. The core message of *Civilization at the Crossroads* was that changes in the industrial and social structure meant that Marxism had to be rethought in order to allow for individualism and creativity—in other words, for opening up the futures of the Communist system in the search for what became known as “socialism with a human face.”⁶⁶ These commissions in Poland and Czechoslovakia were a kind of bridge between the two forecasting worlds.⁶⁷

From the late 1960s on, the future became an arena of direct transnational collaboration in which the different strands of futurology started to collide. This needs to be understood from within the context of the Cold War, which established specific parameters for world futures, but which also gave rise to new forms of scientific exchange and transnational collaboration.⁶⁸ Western and Soviet forecasters read each other in the *Journal of Technological Forecasting* and, from 1969, in the journal *Futures*.⁶⁹ The late 1960s brought the creation of several world institutes and organizations. In the U.S., RAND scientists and Daniel Bell created the Institute for the Future as a “civilian RAND,” and in Washington the businessman Edward Cornish created the World Future Society, focused on issues of corporate and global governance.⁷⁰ But in 1968, the year before the creation of the international think tank the Club of Rome, Robert Jungk and the Norwegian philosopher and founder of peace research Johan Galtung founded an organization called Mankind 2000. The project had been initiated by Jungk and James Wellesley-Wesley at the 1964 inaugural conference of the Confederation for Disarmament and Peace in London.⁷¹ The purpose of Mankind 2000, which grew out of other transnational movements such

⁶⁵ Daniel Bell's records in the American Academy of Arts and Science are indefinitely unavailable to researchers, despite the Academy's claim that its material is available for scholarly research; and the Bell papers at Harvard University were also not available at the time of writing. Interview with Stephen Graubard, New York, March 20, 2012.

⁶⁶ Radovan Richta et al., eds., *Civilizace na rozcestí: Společenské a lidské souvislosti vědeckotechnické revoluce* (Prague, 1966); Eng. trans. *Civilization at the Crossroads: Social and Human Implications of the Scientific and Technological Revolution*, trans. Marian Šlingová (White Plains, N.Y., 1968). Bell discusses the work of the Richta group in the foreword to the Special Anniversary Edition of *The Coming of Post-Industrial Society* (New York, 1999), xxv. See also Rocca, “‘A Second Party in Our Midst,’” 205.

⁶⁷ The IIASA, created in 1972, was intended as such a bridge, and forecasting was a central part of its activities. See Riska-Campbell, *Bridging East and West*; and Egle Rindzeviciute, “Towards a Social History of the Purification of Governance: The Case of IIASA,” <http://www.interdisciplines.org/paper.php?paperID=102>.

⁶⁸ Sari Autio-Sarasma and Katalin Miklóssy, *Reassessing Cold War Europe* (London, 2011).

⁶⁹ Fred Charles Iklé, “Social Forecasting and the Problem of Changing Values, with Special Reference to Soviet and East European Writings” (paper delivered to the International Sociological Association in Varna, Bulgaria, September 1970, and printed by the National Technical Information Service [Springfield, Va., 1971]).

⁷⁰ Edward Cornish, “The World Future Society's First Conference,” *The Futurist* 1, no. 3 (2007): 43.

⁷¹ Unfortunately, much of the archival material of Mankind 2000 has been lost, but the organization still exists: www.m2000.org.

as the anti-bomb movement and the interwar movement of World Federalists or World Parliamentarians, was to free the future from futurology.

There is the danger that a better, more complex and informed grasp of things to come might become the monopoly of power groups served by experts in the new branch of futurism. Such a dangerous development is already well underway. At least four fifths of work in this field has been ordered and financed by governmental departments, military establishments, or large corporations . . . Most developing nations seem to accept that their future lies in catching up with the present of the developed nations. Only the developed nations are defined as autonomous in the sense of having their own future. This means that it is in the power of the rich nations to define and refine the future and to propagate their images . . . This is power—he who has insight into the future also controls some of the present. For that reason it is absolutely essential that futures research is internationalized as quickly as possible . . . In general, to counterbalance and to control the new intellectual tools of anticipation, prognosis, and self-fulfilling predictions, a democratization of “future research” seems of great urgency. The one-sided use of technology and forecasting . . . can lead us right into new forms of totalitarianism. If we tamper with the time ahead of us, as we have already done with the space around us . . . if we spoil the future as we have spoiled the environment, then we are in for an epoch of despotism and desperation—a tyranny of a new modernistic type . . . This must not happen. The future belongs to all of us, not to small oligarchic groups or interests.⁷²

In this sense of a common future for all, the term “mankind” had been used by the international peace movement since the late 1940s, and would be used by the Club of Rome, which began its activities in 1969. It denoted two central propositions: that the world had one common future, and that humanity itself was the central obstacle to that future.⁷³ A project that attempted to free the future from its precarious state must therefore place man himself at the core. The primary ambition of Mankind 2000 was clear from the outset—to create a radical emancipatory movement for the future that would be able to think the world differently, and also, ultimately, to think the individual subject differently. Its second ambition was to act as a platform for discussion in which futurists from the Eastern Bloc could participate.⁷⁴ In 1968, with attention focused on developments in Czechoslovakia, where the work of Radovan Richta appeared to be opening an alternative future to the ones proposed by the two superpowers, there seemed to be a window for this, and in these crucial years, futurology was understood as a possible arena for saving the world’s future. “World” was, in the 1960s and 1970s, understood as a question of surmounting bipolarity. Only in the 1980s and 1990s was this widened to questions of global cultures, development and peace, and women and minority groups, as a wide range of questions from feminism, peace studies, and environmentalism entered into the futurological field.⁷⁵

⁷² Johan Galtung and Robert Jungk, eds., *Mankind 2000* (Oslo, 1969), 367–378.

⁷³ Fred Polak, “Mankind 2000 International,” in Japan Society of Futurology, comp., *Challenges from the Future: Proceedings of the International Future Research Conference* (Tokyo, 1970), 70. See also “Declaration from the OECD Symposium on Long-Range Forecasting at Bellagio, October 27–November 2, 1969,” *Futures* 1 (March 1969): 1–3.

⁷⁴ Radovan Richta presented the summary of *Civilization at the Crossroads* in Galtung and Jungk, *Mankind 2000*, 199–204.

⁷⁵ Conferences took place under the headings “World Alternative Systems” (Dubrovnik, 1976), “The Future of Communications” (Cairo, 1978), “Alternative Visions of Desirable Societies” (Mexico City, 1981), and “The Future of Development” (Beijing, 1988).

The intellectual influences on Mankind 2000 came from the critical field of futures studies. Flechtheim's first writings on the subject went back to 1942 and 1943, and he coined the term "futurology" when he was an émigré scholar in the U.S. At least three prominent European futurists, Fred Polak of the Netherlands, Flechtheim, and Jungk, had direct experience with the Nazi takeover in Europe. They were resistance fighters or refugees who developed their first thoughts on the future while in exile in the U.S. and in Switzerland, and their writings on the subject would remain preoccupied with the question of whether, in light of the use made of technology in totalitarian political systems, the future was intrinsically evil or could be rethought as a sphere of hope and liberation. These thinkers brought out the idea of the future as an existential condition and part of the essence of being.⁷⁶

Polak, who was involved in the construction of the Dutch planning system after the war and who was closely affiliated with the economist Jan Tinbergen, argued in his 1955 book *De toekomst is verleden tijd* that the future was a work of reconstruction between finished and unfinished time. Visions of the future were thus central for pulling society toward new imagined worlds. For Polak, humans were solely responsible for their future, and no other forces of social development could compete with their imaginary potential: "Man can reform and re-create the world after any image he chooses."⁷⁷ This eschatological future was now in crisis. The Enlightenment belief in natural laws, Marx's defeat of utopian socialism, and the ongoing race between the two forecasting versions of the superpowers had eroded humans' imaginary capacity. For the first time in three thousand years, Polak wrote, mankind had no recourse to positive and idealistic images of the future. Instead, the tremendous powers of modern branding techniques had turned the future over to admen, politicians, and warmongers.⁷⁸ An abridged version of Polak's book was published in English in 1973 as *The Image of the Future*. It was translated from the Dutch by Elise Boulding, a leading American peace activist. She later became a central member of the World Futures Studies Federation, which grew out of the Mankind 2000 project.⁷⁹

In *Futurologie* and a series of other writings in the 1960s, Flechtheim argued for a lighter vision of the future, an "Aufhellung der Zukunft" that would allow for a utopian approach to the future even in the Atomic Age. While to Flechtheim futurology was a scientific endeavor and part of a new political science that would enable societies to make truly rational, forward-looking decisions, he saw utopia as a fundamental element in such a scientific approach. The future must be composed not only of the necessary or the possible, but also of the desirable and hopeful. The

⁷⁶ This was what Walter Benjamin immortalized in his depiction of the angel of history blowing backward into the future. Another Jewish scholar, Hannah Arendt, would develop, in *Origins of Totalitarianism*, a theory of totalitarian futures as the total destruction of human creativity inside a locked-down future. Yet another, Hans Jonas, would go on to originate the so-called precautionary principle and conceptualize responsibility for the future as the essence of what it means to be human. Richard Wolin, *Heidegger's Children: Hannah Arendt, Karl Löwith, Hans Jonas, and Herbert Marcuse* (Princeton, N.J., 2001).

⁷⁷ Fred Polak, *The Image of the Future*, trans. Elise Boulding (Amsterdam, N.Y., 1973), 2. This book is an abridged translation of *De toekomst is verleden tijd: Cultuurfuturistische verkenningen* (Utrecht, 1955).

⁷⁸ *Ibid.*, 1–15, 110–135.

⁷⁹ Kenneth Boulding, "Foreword," *ibid.*, vi–vi.

scientific contribution of futurology was the linking of desirability and necessity in such a way as to make irrational social objectives—the growth rate that was destroying the planet, the arms race that might lead to the Apocalypse—obvious. Without utopia, all attempts to look forward would become stuck in what Flechtheim saw as the deeply conservative nature of forecasting and its constant projection of the destructive trends of the present. The future could be thought of differently, from within a continental European philosophical tradition in which it was a particular temporal sphere of anticipation and critique. There were references to Ernst Bloch and Karl Mannheim, as well as to both the American pragmatic philosopher John Dewey and the Polish revisionist Marxist Leszek Kołakowski. The future, he wrote, was a “critical emancipatory function.”⁸⁰ The late 1960s was the timely moment for such critical futurology, Flechtheim argued. Technology had reached a point where it posed both the threat of total annihilation and the possibility of forms of self-realization that had never been seen before. The future lay between these two poles of catastrophe and exhilaration.⁸¹ Flechtheim also created the journal *Futurum* to publish the revisionist futurists in Eastern Europe, notably the Richta group.⁸²

Flechtheim had difficulty finding a position in Germany after the war, and was funded by the Rockefeller Foundation to write a handbook of modern political science. *Futurologie* came out of this attempt to conceptualize the foundations of modern political science.⁸³ With Jungk, he became a central figure in the German New Left.⁸⁴ Jungk had a direct influence on the new social movements of the late 1960s because of his brainchild, the radical participatory future workshops known as the *Zukunftswerkstatt*. The workshops were a way to bring together concerned citizens around future problems, from the local level of a neighborhood or the running of a hospital to the global level of the world system, and to get them to talk about their inner fears about and desires for the future.⁸⁵ This was indeed a radically different idea of social technology. Jungk became one of the leaders of the international peace movement following the success of his bestselling book on the Manhattan project, *Brighter Than a Thousand Suns* (1958). He was also the author of an earlier book titled *Die Zukunft hat schon begonnen: Amerikas Allmacht und Ohnmacht* (1952), translated into English in 1954 as *Tomorrow Is Already Here*, which was a scathing critique of American civilization and its particular conception of the future. It depicted American society as suffering from deep hubris, permeated by the desire to rise above God and domesticate all forms of nature, including the future. The heart of the book was a deeply symbolic description of how the atomic bomb tests in the

⁸⁰ Flechtheim, *Futurologie*, 21.

⁸¹ *Ibid.*, 16, 21, 28, 38, 75.

⁸² *Futurum*, particularly issues 1 and 2 (1968). Flechtheim remained a Marxist throughout his life, and in a series of writings and correspondence with leading Marxists, he argued for the idea of one common global future for all of mankind as a central element of a renewed Marxism. Deutsches Exilarchiv, Deutsches Nationalbibliothek, Frankfurt am Main, Ossip Flechtheim Nachlass, letters from Ossip Flechtheim to Leszek Kołakowski, November 29, 1977, January 16, 1980.

⁸³ Rockefeller Archives Center, file RG 1.2 7175.

⁸⁴ See Robert Jungk and Hans Joseph Mundt, *Deutschland ohne Konzeption? Am Beginn einer neuen Epoche* (Munich, 1964). Elke Seefried, “Towards *The Limits to Growth*? The Book and Its Reception in West Germany and Britain, 1972–73,” *Bulletin of the German Historical Institute London* 33, no. 1 (2011): 3–37, here 26–27.

⁸⁵ Robert Jungk and Norbert Müllert, *Future Workshops: How to Create Desirable Futures* (London, 1987).

Alamo desert sands raped the sacred land of the Native Americans (who appeared in the book as the representatives of a pure natural future).⁸⁶

The writings of these European futurists, along with de Jouvenel's book (which, despite his connections to the American establishment, became to some extent the bible of futures research), laid the foundation of futures studies.⁸⁷ The common denominator of these works was that they were outspokenly critical of forecasting and futurology, an activity that their authors understood as belligerent, imperialist, and directly involved in reproducing the military and industrial interests of the U.S.⁸⁸ The Delphi method, which assessed the probability of nuclear war but never questioned its desirability, became symbolic of many of these reactions. The use of computer modeling and the dominance of the hard sciences were also controversial. In *Tomorrow Is Already Here*, Jungk characterized the megacomputer at RAND as the symbol of an American civilization that had surrendered the future to soulless machines that controlled human decision-making and spat out the derived results of the objective numbers that it had just been fed.⁸⁹ Following from this critique of "establishment futurology," the foundation of futures studies was thus the rejection of futurology as law-driven science, and the understanding that the future could not be addressed with established tools of science such as facticity and empirical observation.⁹⁰ The future was a question of desirability, reflexivity, and social choice. The future, wrote de Jouvenel in *The Art of Conjecture*, did not produce facts, since reliable facts could be derived only from past developments. Fact-based social science was doomed to live in the past, a position shared by Flechtheim, who saw postwar social science as hopelessly stuck in the legacy of a historic nation-state project.⁹¹

Futures studies thus tried to tackle the inherently normative aspect of the future, and to use prediction as a form of mobilization for social change. Beyond these principles of open futures, however, there was great contestation. The federation included hardliner futurists such as the American Zbigniew Brzezinski and the Israeli Yehezkel Dror. The American group connected to the Institute for the Future took editorial control of the journal *Futures* in 1970.⁹² Their vision of a world order built around military security and the status quo was radically different from that of Jungk or of Galtung, the founder of the Peace Research Institute in Oslo and of a program in futures studies as a method of peacemaking at the UN University in Dubrovnik. Galtung understood the future as a third way between the superpowers, and as a sphere of freedom and resistance.⁹³

The founding meeting of Mankind 2000 was held in Oslo in 1968. Thereafter, there was hesitation about how to proceed. The next conference was held in Kyoto

⁸⁶ Robert Jungk, *Tomorrow Is Already Here*, trans. Marguerite Waldman (New York, 1954).

⁸⁷ According to my interviews with James Dator, Eleonora Masini, and Bart van Steenberg, the members of the federation were not aware of de Jouvenel's connections.

⁸⁸ Andersson, "Choosing Futures"; Robert Jungk, "Guest Editorial," *Science Journal* 3, no. 10 (October 1967): 1–3; Jungk, "The Future of Future Research," *ibid.*, 3–40.

⁸⁹ Jungk, *Tomorrow Is Already Here*.

⁹⁰ The term "establishment futurology" or "bourgeois futurology" was used by more radical futurists, echoing Soviet notions of "bourgeois science." Bart van Steenberg, "Critical and Establishment Futurology," in Japan Society of Futurology, *Challenges from the Future*, 93–103.

⁹¹ De Jouvenel, *L'art de la conjecture*; Flechtheim, *Futurologie*.

⁹² See editorial information in *Futures* 2, no. 4 (1970).

⁹³ Johan Galtung, "On the Future of the International System," in Galtung and Jungk, *Mankind 2000*, 12–41.

in 1970, on the initiative of the Japanese Futurological Society, which also meant that the plans for a second conference in the symbolic location of Hiroshima were scrapped. An organization was finally created in 1972 at the Third World Future Research Congress in Bucharest, the general theme of which was "The Common Future of Man."⁹⁴ It was sponsored by the government of Nicolae Ceaușescu and was presided over by the Romanian minister of education, Mircea Malița. Malița was also one of the more prominent Romanian futurists. "The common future of man" was a reference to the common aspects of the future of peoples in different social systems, and was clearly intended to facilitate communication between futurists from East and West. The conference also sought to bridge the gulf that had begun to develop between futures studies futurists and forecasting futurists, and was aimed at clarifying the epistemological state of futures studies, which could now be both philosophical or literary future constructions and scientifically controlled futures. The specific question was the role that futures studies could play in promoting forms of action and forms of social participation. The preparatory documents also stated that everything would be done to ensure that the conference was a "balanced and suitable representation of future research from all nations and countries regardless of their options for different economic and political systems."⁹⁵

Invitations were sent, along with visas to Romania. At the conference, plenary sessions were devoted to how technology could be better adapted to man's needs, to how different peoples around the world imagined their future, and to the "creativity of the common Man," including the question of how futurists ought to relate to questions of public control and participation of the masses. Jungk devoted a session to the theme of futures creating journalism and also conducted one of his future workshops at the conference.⁹⁶

A substantial part of the Bucharest conference was devoted to the editing of a charter, a task handled by Apostol. There were concerns about how to turn a loose body of future intellectuals into a world organization, the first having to do with the fear of bureaucratization and power, and the second with the problem of representation. The latter problem concerned the question of membership for organizations or individuals, which was not an unimportant question, because in some countries there were attempts to restrict membership to officially sanctioned futurists. Clearly almost all of the representatives from Eastern Europe were formally sanctioned. Bestuzhev-Lada is the one Eastern European who remained in the federation until the 1990s. Others were under surveillance and threat. The Richta group, who had had a prominent presence at the Mankind 2000 meeting, could not join such international activities after 1968.⁹⁷ The Polish sociologists, on the other hand,

⁹⁴ UNESCO Archives, Paris, box 1972/001 A506(498)71 AMS, "Third World Future Research Romania," letter from Pavel Apostol to Gene Lyons, March 31, 1972; letter from the Romanian Delegation to the UNESCO Director General, May 16, 1972; letter from John I. Forbes, UNESCO Undersecretary, to Pavel Apostol, August 9, 1972.

⁹⁵ UNESCO Archives, 1972/001 A506(498)71 AMS, Bucharest Newsletter no. 1 of the Continuing Committee of the World Futures Research Conference, signed by de Jouvenel, Arne Sorensen, Miro Constantinescu, and Pavel Apostol.

⁹⁶ Proceedings of the Bucharest World Conference, in Eleonora Masini's holdings.

⁹⁷ Radovan Richta, "The Perspective of the Scientific and Technological Revolution," in Galtung and Jungk, *Mankind 2000*, 198–204.

could.⁹⁸ Apostol was freed from prison after the death of Stalin and reinstated as a philosopher in the Bucharest Academy of Science. Other Romanian futurists, including the dissident Mihail Botez, had much more perilous relationships with the regime.⁹⁹ The country causing problems, however, was Japan, where the Futurological Society, which was deeply involved in planning the nation's new high-growth economy, attempted to block membership to the international federation for free future thinkers.¹⁰⁰

Apostol recounts the disputes that surrounded the creation of the federation in a handwritten document in the UNESCO archive.¹⁰¹ There is no mention in this document of the controversy surrounding the "s" in "futures," which is referred to in interviews with the federation's first two living presidents, Jim Dator and Eleonora Masini, who also describe the Bucharest atmosphere as frightening.¹⁰² The Romanian government took pride in housing a congregation of international futurists, but clearly kept them under surveillance. The "s" in "futures" was a key epistemological principle of futures studies, denoting the importance of futures as open and plural, but it was an obvious breach of party doctrine, and a party representative seated at the front of the room stood up and said so.

The outcome of these conflicts was the creation of a federation, the principle that both individuals and institutions could be members, and the acceptance of differing perspectives on the future. The last principle was essential for the ambition to bring together futurists from across the field, including those involved in "establishment futurology."¹⁰³ The statutes of the federation, adopted at the UNESCO headquarters in 1973, said:

It is felt all over the world that ideas, hopes and proposals coming for futures studies need a new organizational frame, which shall be named World Futures Studies Federation. As a federation it is designed to make cooperative participation in future studies addressed to human and social needs possible and mutually fruitful. The main objective of the Federation is to introduce critical future oriented thinking in all branches of knowledge and action. Studying the future has become a necessity for everyone and is a growing practice in decision making . . . The purpose of the WFSF is to promote futures studies and innovative and interdisciplinary critical thinking among all people.¹⁰⁴

De Jouvenel's *Futuribles* association served as its Parisian headquarters. De Jouvenel himself retired from the federation in 1974 and handed the presidency over to Masini, an Italian sociologist, feminist, and peace activist.¹⁰⁵ In the coming years, she would work hard to broaden the federation's focus to issues of world develop-

⁹⁸ List of federation members, 1973, in Eleonora Masini's holdings.

⁹⁹ Interviews, Eleonora Masini, June 24, 2010, and January 18, 2012, Rome. World Futures Studies Federation, "Futures Studies in the European ex Socialist Countries" (Budapest, 2001), available at <http://vmek.oszk.hu/04000/04011/04011.pdf>.

¹⁰⁰ Unfortunately, I do not know who it was that they wanted to keep out.

¹⁰¹ UNESCO Archives, BRY/ONG/1/boite n. 120, *Fédération mondiale des études du futur*, handwritten document by Pavel Apostol, January 24, 1974, and Bucharest Declaration, September 9, 1972.

¹⁰² Interview with Jim Dator, June 16, 2010, Paris; Interview with Eleonora Masini, June 24, 2010, Rome.

¹⁰³ List of federation members.

¹⁰⁴ UNESCO Archives, BRY/ONG/1/boite n. 120, *Fédération mondiale des études du futur*, Statutes.

¹⁰⁵ Eleonora Masini, "World Futures Studies Federation" (unpublished ms., dated July 2002).

ment and peace, and to organize world conferences with apparently very limited funding.¹⁰⁶

From the outset, it was clear that the WFSF was a global alliance that saw the world primarily through the eyes of European and American intellectuals. Among its members in 1974 were the Americans Henry David, Robert Ayres, James Wellesley-Wesley, John and Magda McHale, Jim Dator, Lewis Mumford, and Marshall McLuhan. The RAND group was thus never part of it. Among the Europeans were de Jouvenel, Jungk, Galtung, Flechtheim, Polak, and Bart van Steenberg, and a number of state planners such as Tinbergen, Lars Ingelstam of Sweden, Serge Antoine and Yves Barel of France, Bestuzhev-Lada, and G. M. Dobrov from the Cybernetics Institute of the Kiev Academy of Science. The federation was granted Category C affiliate status (a mutual information relationship) by UNESCO, meaning that it benefited from the status of affiliated NGOs, but the trouble involved in thinking the future of the world is illustrated by the fact that twice the federation requested Category A status (a consultative and associate relationship), and twice it was refused on the grounds that it did not sufficiently represent the world.¹⁰⁷ In 1980, its members still reflected a dominance of 152 Europeans (13 from behind the Iron Curtain), 71 North Americans, 30 Africans, and 30 Asians.

An important figure in the early years was the UNESCO vice deputy general Mahdi Elmandjra from Morocco, who worked to organize conferences in Cairo and Rabat but was disappointed with the way the Israeli-Palestine conflict broke off the dialogue between North American and Jewish futurists (the McHales, Dror) and possible futurists in the Arab world. An invitation to hold a conference in Tanzania in 1973 was rejected because the scientific committee did not think that an African country would be capable of the organization required, and a planned conference in India had to be called off at a late stage for an unclear political reason.¹⁰⁸ In sum, this federation, a unique and rather puzzling alliance of a highly heterogeneous group of people with a multitude of different political and scientific positions, hoping to save the future of the world, seemed incapable of breaking out of the power patterns of that world.

FUTUROLOGY WAS A FIELD OF world-making, at a time when visions of world futures and world order were changing rapidly. Indeed, in this field we see how the search for stability and safeguarding of the status quo in the immediate postwar period was transformed by the 1960s into a veritable battlefield of competing images of the future of the world. What began as a history of conflicting future images in transnational networks in the 1950s became a new field of global politics in the 1970s,

¹⁰⁶ UNESCO helped fund world conferences by issuing travel vouchers for participants from developing nations, and by channeling support from various regional activities to the conferences.

¹⁰⁷ UNESCO Archives, BRY/ONG/1/boite n. 120, Fédération mondiale des études du futur, doc. CPX/RIO/2/2:273, July 8, 1980, rejection of category A status, 102 Ex Decision, February 6, 1977, of category B status. Letters with request for affiliate status from Peter Mehnke Gluckert, January 25, 1974, and Johan Galtung, April 2, 1974.

¹⁰⁸ Arne Sorensen intervention into panel debate, in Japan Society of Futurology, *Challenges from the Future*, 155.

particularly following the Club of Rome report in 1972.¹⁰⁹ This demonstrates the importance of the emergence of the future as a transnational arena in the decades immediately following the Second World War. In fact, there is a possible new area of research for historians in understanding how the future, in these decades, became a category of action on the national and global level.

The actors and ideas involved in the great future debate testify to more than shifting notions of the future as an object of science or the utopian imagination; they are in fact inherently concerned with the limits of humanity, with what is malleable, influenceable, and possible, and what is, on the contrary, beyond the scope of human will. Studying the role of future visions, predictive ideas, and technologies has the potential to make an important contribution to a renewed political history, one that moves away from the traditional focus on social movements, political organizations, and ideologies, and engages with insights from transnational history on emerging conceptions of alternative worlds and forms of transnational mobilization.¹¹⁰ Embedded here is a history of the future that is of relevance for our understanding of how contemporary societies attempt to manage questions relating to the long term, and how societies produce visions, knowledge, and means of intervention aimed at future change and future control. It would seem that there are moments in which the future is future no more, but present—in other words, when the future acquires a presence and requires urgent action. We are living through such a moment today, and the actors who contributed to the debate in the 1960s and 1970s were directly involved in shaping such a moment. Themes of apocalypse and utopia are thus part of a future history, and the history proposed here is one that takes such fears and hopes on board and considers the engagements that it gives rise to as an important form of social struggle.

¹⁰⁹ Donella Meadows et al., *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind* (New York, 1972).

¹¹⁰ Akira Irye and Pierre-Yves Saunier, eds., *The Palgrave Dictionary of Transnational History* (New York, 2009); C. A. Bayly, Sven Beckert, Matthew Connelly, Isabel Hofmeyr, Wendy Kozol, and Patricia Seed, "AHR Conversation: On Transnational History," *American Historical Review* 111, no. 5 (December 2006): 1441–1464.

Jenny Andersson is a Senior Fellow of the French research council, CNRS, and a researcher at the Center for European Studies at Sciences Po, Paris. She is the author of *The Library and the Workshop: Social Democracy and Capitalism in the Knowledge Age* (Stanford University Press, 2010) and "Choosing Futures: Alva Myrdal and the Construction of Swedish Futures Studies, 1967–1972," *International Review of Social History* 51, no. 2 (2006): 277–295. She is the holder of an ERC Starting Investigator Grant for the project Futurepol: A Political History of the Future—Knowledge Production and Future Governance, 1945–2010, and is currently working on a book on the global history of the future.