

Potentials and Risks of Futurology: Lessons from Late Socialist Poland



Lukas Becht

Abstract In the decades after 1945, the future gained unprecedented prominence as an object of scientific anticipation and state planning in both capitalist and socialist countries of the Cold War world. In Poland, future studies or futurology emerged in the course of the 1960s in reaction to Western intellectual trends, the post-stalinist political Thaw, as well as the domestic socio-economic situation. The Polish futurology turned out to be one of the most productive, institutionally and personally stable research collectives when compared to other socialist countries. This research community generated various approaches to the problem of how to anticipate the unknown future. This chapter examines three of them: making the future an object of knowledge; subjecting it to conscious (political) control; imagining alternatives to the status quo. Re-examining these historical examples of anticipatory knowledge provides a mirror to discuss our current efforts at predicting and controlling the future.

Keywords Futurology · Future research · Poland · Late socialism · Historical epistemology

Planetary Crises, Historiography and the Futurology of the Past

How can you anticipate an unknown future? This age-old question gains renewed urgency in times of threats and challenges related to climate change, ecological crisis, the Anthropocene, and the Covid-19 pandemic. Under these circumstances, anticipatory ideas and practices such as statistical extrapolations, complex model simulations, and scientific and science-fiction scenarios play a crucial and omnipresent role in contemporary strategies of society for coping with perceived threats and instabilities (Robinson 2020; Geulen 2020). Although they are often grounded by faith in

L. Becht (✉)
RECET, University of Vienna, Vienna, Austria
e-mail: lukas.becht@univie.ac.at

Institute of Eastern and South Eastern European History, LMU Munich, Munich, Germany

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science and the capability of technology to mitigate those challenges, notions of catastrophe dominate contemporary cultural imaginaries of the future (Horn 2014). To an observer, the multitude of claims about anticipatory knowledge, although undoubtedly necessary and often unquestioned tools for collective and individual decision making, appear to be taking part in struggles over (re)defining imaginations of the future as well as concepts of the future, present and past (Beckert 2018: 133; Andersson 2018: 17–18).

These re-negotiations have been argued to challenge fundamental notions of historical thinking and the relevance it assigns to knowledge of the past for present and future societies (Chakrabarty 2009; Nycz 2014). Historians' answers to these challenges will be neither definite nor useful in a utilitarian sense. But they can help to cultivate reflexivity and greater awareness of the contingencies inherent in contemporary ways of coping with the future. With the aim of better understanding the genealogies, dilemmas, and alternatives of present struggles, this paper suggests studying a historical example that highlights how anticipatory knowledge in a particular context did indeed renegotiate notions of the future and historical time.

How can and should we refer to the future? How do we anticipate it? How should anticipation be used to shape behaviour and political decisions in the present? These questions gained an unprecedented urgency around the middle of the twentieth century for various reasons, resulting in the emergence of future studies or “futurology”, a transnational scholarly field revolving around the systematic study of the future in a long-term perspective (Andersson 2018; Seefried 2015a). This essay explores how, in the specific historical context of late socialist Poland of the 1960s, 1970s and 1980s, such scholarly activities shifted notions of the future by addressing it first as an object of knowledge, second of social engineering, and third of sociological imagination.¹ In its attempt to historicize past futurology, this essay draws on recent debates on how to write and conceptualize twentieth-century “histories of the future” (Rosenberg and Harding 2005) that go beyond Koselleck's (1979) classical concept of “*vergangene Zukunft*”. The focus is less on past actors' visions of the future, but on concepts, epistemological categories and political circumstances that made such visions possible (Mallard and Lakoff 2011; Graf and Herzog 2016; Daston 1994; Rheinberger 2007; Roelcke 2010).

Future Research in Late Socialist Poland

According to Stanisław Lem, the most severe transformation in the decades after the Second World War was a “deep-going cultural re-orientation [...]. Ever since, our culture stared only at the historical past and the present of humans. Now, however, it begins to turn a part of its diligent and solemn attention to the future of men.” (Lem 1977: 11–12) Future-orientated preoccupations were a global phenomenon, particularly in the 1960s and 1970s. Popular culture, literature including Lem's science fiction itself, the mass media, and public, political, and scholarly discourse were fascinated by mid- and long-term horizons such as the approaching year 2000, a symbol

of either hope for renewal and technological optimism or of *fin-de-siècle* fears of decay. Political and intellectual elites were convinced that what they perceived as accelerated deep-going social and technological change in emerging industrial mass societies, combined with new threats such as nuclear annihilation and ecological disaster, called for anticipation and political steering based on scientific knowledge. This sense of dramatic change and an urgent need for action may remind us of present challenges, while categories and practices related to the future have changed fundamentally.

Since the nineteenth century the power of Western nation states rested on “seeing” (Scott 1999: 4) and coping with social complexity through positivist claims of scientific prevision. The practice of state planning of national economies had spread across the globe inspired both by the record of Soviet industrialization and the capitalist New Deal in the United States. Yet, after the two World Wars the future among intellectuals was a contested and problematic idea stimulating various reconfigurations and new approaches from positivist, to critical, explicitly normative and utopian (Andersson 2018: 2; Seefried 2015a; 2015b). Absorbing new theories and scientific paradigms such as game theory, cybernetics, and systems theory, approaches to scientific anticipation based on non-linear and probabilistic thinking spread in the US and Western Europe and formed what came to be known as the eclectic field of “future(s) research” or “futurology”. Here, the idea of multiple possible futures, whose anticipation was meant to contribute to more “rational” and more “conscious” decisions in a given present, was directed against Soviet-style central planning and the Marxist–Leninist doctrine of historical evolution. Socialist countries had their own traditions of future-related thinking and anticipation drawing on national traditions and Soviet controversies over different approaches to long-term planning in the 1920s.

Yet, it was only after 1956 that renewed contacts and transfers of ideas between the US, Western Europe, the Soviet Union and Central European socialist countries allowed people, activities, and ideas around “future research, management and evaluation, prognostication, planning and philosophy of the future” (Flechtheim 1968: 8) to connect on both sides of the Iron Curtain (Seefried 2017; Andersson 2018: 123–181). Before, highly centralized planning and the doctrine of historical materialism strongly tied practices of future-related thinking to five-year plans and the Marxist-Leninist *telos* of socialist transformation laid out by the party leadership’s directives. Economists in the late 1950s, however, embraced ideas of decentralization, mathematical tools of optimal planning and the earlier forbidden language of cybernetics (Kochanowicz 2010). At the same time, according to the sociologist Stanisław Ossowski (1967: 180), revisionist social thought with its calls for democratization and a renewed search for socialism’s future path of development, did not alter the substantial tenets of the “monocentric” concept of the future and social order dictated hierarchically by the centre of power (the Communist Party leadership). Hence, most paradoxically, in Poland after 1956 an interest in new approaches to scientific anticipation and the problem of the future emerged among social scientists and economists as a combination of contacts and scholarly exchange with colleagues, books and theories from the West and reform-minded Marxist and

non-Marxist scholars' aim to re-formulate the nexus between socialist modernization, future-thinking and planning.

More precisely, systematic research on the future was debated by Polish social scientists in the early 1960s in their attempts to grapple with what they regarded as new phenomena under socialism; namely, the lifestyles and cultural practices created by mass-media and consumption. This led them to announce the establishment of "Polish 'futurological' studies" (Siciński 1967: 243) at a large conference in May 1967, where more than seventy participants from the social, cultural, economic, natural, medical and technical sciences gathered to discuss methods of "predicting the future and a model of culture"² for socialist Poland (Kurczewski and Lutyk 1967). Studies on the future of socialist culture were meant to guide socialist planning beyond its fixation on economic figures and parameters of investment, productivity and work effort, yet the full realization of this initiative was interrupted by the events of March 1968.

Nevertheless, the idea was continued by the Committee for Research and Prognostics "Poland 2000"³, which was created at the Polish Academy of Sciences in 1969 and still functions today. The research this committee has organized since then established a tradition of interdisciplinary debate among scholars from various fields, who pool their expertise and research in order to draft holistic outlooks on Poland's future in relation to global trends, analyses of specific social problems and areas of policy intervention. It was less a workshop for new methods than a stable collective of scholars who devised expert opinions for the government, mainly on request, but with considerable room for injecting reform proposals. Furthermore, many translations of foreign works related to future studies, such as the "limits to growth" report to the Club of Rome, go back to the initiative of this collective, who also held regular methodological seminars. These activities brought together more than 300 scholars and intellectuals with different worldviews, including opposition-minded intellectuals, technocrats and supporters of the communist regime. During the reform processes after 1989, the most learned future researchers in Poland played a rather marginal role, as the new elites were often recruited from a younger generation. In fact, political and public attention for futurology had been diminishing since the mid-1970s. Nevertheless, with methods such as scenario planning, model simulations, and Delphi panels diffusing into business consultancy, market and consumer research, NGO's and the state administration, contemporary activities of "foresight" in Poland as elsewhere have their roots in the futurology of the 1960s and 1970s.

Studying the future under state socialism was an activity constrained by (self-) censorship and the "monocentric" party control over political decisions (Sułek 2009). However, it should be seen as an ambivalent resource in the context of a late socialist society in which science, technology and expertise, in general, were typically referred to by an official rhetoric that had given up on big, revolutionary ideological projects and was instead searching to consolidate the regimes' power through piecemeal reforms (Klumbyté and Sharafutdinova 2013; Plaggenborg 2010). This, in turn, allowed scholars to gain considerable room for manoeuvre for ambivalent or even critical stances, reform proposals and the transnational exchange of ideas, either by paying lip-service to, or truly believing in, the "modernity" of socialist society. Their evolutionary optimism prevailed also in the face of catastrophic global predictions

in the 1970s, fading only with the severe crisis of state socialism in the 1980s. The following three examples are aimed at depicting how future research produced and re-negotiated the future as an object of epistemology, governance and imagination.

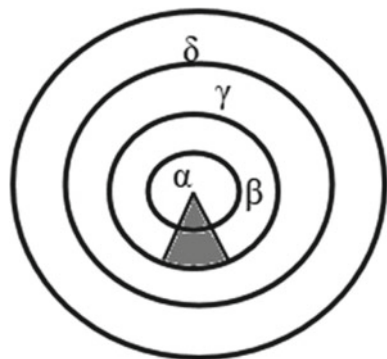
Epistemology: Meta-Prognostic Modelling of the Future

In the twenty-first century, it is an unquestioned practice that complex scientific models simulate future natural and social courses of events. That these models transform the unpalpable future into an “object” of knowledge is seldom problematized explicitly. Yet epistemological dilemmas arise when the future is objectified. They become visible when looking at a peculiar historical example, in which modelling the future served to determine the general limits of the “sphere of reasonable planning” (Rolbiecki 1972: 52) in the late socialist Polish context.

This problem was elaborated in an article published in 1972 in the Polish journal *Zagadnienia Naukoznawstwa* read by historically and philosophically interested students of science. Its author, the rather unknown philosopher Waldemar Rolbiecki (1927–2002), worked at the research planning office at the Polish Academy of Sciences. He attended workshops led by Tadeusz Kotarbiński, a philosopher of science and the main representative of the Polish school of praxeology, the philosophy of effective human actions (Skarbek 2003). Fascinated by the newly emerging future research, Rolbiecki wrote several articles and a book, in which he developed what he called “prognoseology” (Rolbiecki 1970: 239–261), a meta-prognostic inquiry into the foundations of “the prognostic activity of man” (Rolbiecki 1967). At the core of this reflection, as with every anticipatory activity, was an intellectual operation, which is exemplified by the model displayed below?: the transformation of the unknown future into an object of (scientific) knowledge.

Rolbiecki defined the future as the compound of all events that are possibly going to happen and have not yet occurred; thus, not as a time span or a phenomenological horizon. The resulting topological model (Fig. 1) included a core (α) which

Fig. 1 An “ergonal” model of the future and the limits of planning [Greek letters added by the author, L.B.] (Rolbiecki 1972: 52)



represents all intentional human actions that will be undertaken in the future. Moving in an outward direction, the next circle (β) is defined by consequences of these actions, which themselves are not intentional deeds; followed by all (γ) events resulting from past—and thus irreversible—human actions; and finally, the largest circular sphere (δ) of events contains events which neither result from nor are themselves human actions.

Rolbiecki's (1972: 49) argument, which set out to delineate limits to predictability and to planning the future in this very general manner, makes the strong assumption that “in principle the whole future (i.e., every future event) can be discerned.” Yet his conclusion was visualized by a triangular cone depicting how narrow “the scope of reasonable planning of the future” (Rolbiecki 1972: 52) was in comparison to the full range of future events. This conclusion should be read against the background of socialist politics in Poland in the early 1970s, which still placed high hopes on central planning as the major instrument of creating a technologically advanced and affluent society. Equally remarkable, however, is that Rolbiecki explicitly suggested to move future thinking away from questions of instrumentality, teleology and effective action towards an inquiry into human (and non-human) agency.⁴ He (Rolbiecki 1972: 46–47) noticed that it was becoming ever more difficult to neatly separate human from non-human future events, as their causal entanglements were growing with interventions into the ecosphere and the use of technology.

Social Technology: Future Research as an Instrument of State Planning

Notwithstanding such sobering claims, the aim of efficiently shaping social relations and behaviour was and still is the most important rationality behind the will to anticipate. As part of a complex transnational history of debates and practices of social engineering and state planning in the nineteenth and twentieth centuries (Matejka et al. 2018; Etzemüller 2009; van Laak 2008), future researchers shared the aim of a “rational” design of social relations and of using scientific evidence to more efficiently achieve desired goals of social, economic or technological “progress”. In fact, the emergence of future studies in the People's Republic of Poland was intertwined with debates about socialist planning and its methods in the 1960s and 1970s. New tools and paradigms were introduced into the planning process and time horizons extended through cybernetics and the mathematical techniques of optimization. Yet the future research conducted in Poland was less a mathematized practice than an interdisciplinary framework for thinking about desired social and cultural goals. Among the planning officials, at least among those curious in the voices of social and humanist scholars from outside the planning office's apparatus, this did not necessarily lead to a change in the concrete planning techniques or their impact on real economic consequences. However, their interest in future studies translated into shifting notions of the future and how to address it via planning.

This can be exemplified by a presentation given by Józef Pajestka (1924–1994) at a seminar in Tokyo in the autumn of 1967, which was concerned with “The World in 2000”. He travelled there as one of the leading planning officials from the People’s Republic, formally as director of the Institute for Planning, a research institute within the structure of the state socialist Planning Commission.⁵ In his talk on “The State and Approaches to Future Studies in the Socialist Countries” (Pajestka 1967), Pajestka reflected on the instrumentality of future research for planning and how it had contributed to a shift of approaches compared to highly centralized hierarchical planning that had been practiced under Stalinism (Ellman 2014: 22–47). It should be said that this was neither indicative of a substantial change in the system’s overall functioning nor its efficiency to produce economically desired outcomes. Yet the metaphors by which planning was described by elites such as Pajestka had shifted considerably.

As part of an evolutionary typology of approaches to planning, Pajestka’s paper argued that the traditional model, exercised through a strictly hierarchical system of decision-making and designed to maximize industrial production, had been based on “a set of clearly defined goals (formulated in the long-range plan) which are to be attained whatever the circumstances. (This is similar to guiding a missile which is to attain the Moon).” (Pajestka 1967: 160). According to this metaphor, plans functioned as instructions devising long-term goals that were to be achieved as a result of consecutive short-term plans. Pointing out deficiencies when it came to consumption and efficient use of resources, the debates after 1956 experimented with cybernetics, complex simulations, mathematical programming, and futurological projections as a way to include the expertise of sociologists and culturalists. Although historians have convincingly shown that this was hardly able to revolutionize the *modus operandi* of the socialist economy (Ellman 2014: 366), the categories, based on which planners were addressing the future were now aiming at “optimal” decisions among many possible alternatives, and targets moved between conflicting social, economic, or cultural optima. Pajestka and his colleagues described the role of future research for planning as a cone, the cone of a flashlight (Secomski 1971: 6). The new “type of steering has no direct, built-in quantitatively determined goals which have to be absolutely attained. It follows, of course, certain rules and tends towards certain directions, it implies also a look ahead (anticipation) [...]. This is somewhat similar to motoring for pleasure, where the headlights serve to choose the direction one wishes to follow and the best and safest road.” (Pajestka 1967: 160) The idea of futurology providing headlights—at least in theory—opened the model of planning via centralized and unquestionable instructions to limited deliberation about desirable goals *and* means, including those of non-socialist origin. This also meant that planning was no longer “programmatic steering” but instead “adjustment” through “rolling plans” (Pajestka 1967: 158–161).

Despite the change of terminology future research remained an instrument of social technology, a means of achieving goals defined outside of itself. Furthermore, the practice remained rather hierarchical, and the use of prognostic research in the 1970s did not in fact live up to its promises of more rational, efficient, and socially balanced plans. Similarly, technocratic hopes of converging with Western capitalist

economies in terms of growth, innovation and supply of consumer goods while diverging in social, cultural and political orientations, did not survive the severe crises of socialist economies in the 1980s.

Sociological Imagination: Future Research as Contemporary Utopia

It was against the background of the political and economic crisis in Poland of the late 1970s and early 1980s that a fundamentally different understanding of future research regained relevance among scholars of Polish society. Although this opposition is easily overestimated in retrospect, it is worth noting that the “past futurologies” depicted here were not only means of efficient adjustment and prolongation of the status quo but could also provide a framework for thinking about desired goals and imagining a radically different future.

A somewhat surprisingly pessimist paper presented by the sociologist Andrzej Siciński (1924–2006) to a workshop in Mexico City in 1978, which was later re-worked several times for presentations in Poland, illustrates this alternative. The workshop was a joint meeting of an international research group gathered under the auspices of the World Futures Studies Federation (WFSF) and the United Nations University, aimed at the formulation of visions of world order and social organization that, in a world after de-colonization, the oil crisis, and perceived limits to economic and demographic growth, could be “desirable” to a vast transcultural majority of people and nations (Masini and Steenbergen 1983). Siciński travelled to Mexico as a professor of the Polish Academy of Sciences specializing in empirical life-style research. His scholarly interest in future studies had emerged in the early 1960s, when he was one of the most active in promoting its methods and transnational debates in Poland (Filipkowski 2017; Gliński and Kościański 2009). Having expressed hopes that scholarly interest in the future would expand social imaginaries beyond the mere sociotechnical goals of planners and politicians (Siciński 1972), Siciński also sat on an expert panel for the government of Edward Gierek (Mazurek 2015) in the late 1970s. His presentation at the Mexican WFSF conference, however, documents an intellectual and political frustration with future research’s ability to contribute to desired social improvements, while at the same time the sociologist began to support the emerging opposition movement back in Poland.

Siciński (1983: 101–2) opened his paper by stating the radical impossibility to design a vision of a desirable society that would meet with acceptance from different cultural standpoints and, at the same time, have a realistic chance of realization. However, he then set out to sketch principles which he deemed most fundamental to such a vision. Siciński’s desirable society had to balance freedom and equality, something which could nowhere be better realized than in a cooperative. One would have to “introduce cooperative principles into the administration of society in towns

and regions, and, finally, on a global scale” (Siciński 1983: 104). Experts and planners, including sociologists like Siciński, would perform the role of advisors to the public, not to central authorities. Decisions were to be taken based on the participation of those affected by them. However, global convergences of excessive materialistic consumerism, processes of cultural standardization and the centralization of decision-making procedures like the “monocentric” party rule in state-socialist Poland, made Siciński doubt the realization of his vision.

In fact, the introduction of martial law by the Communist Party in December 1981 to crush the Solidarity movement led Siciński to radicalize his conclusion. After these events, the situation in Poland was, in a critical way, closed to the realization of a collectively desirable social order. As Siciński put it, future research should, first and foremost, practice utopian thinking (Siciński 1985). While faith in future thinking as an instrument of social engineering had dwindled away, Siciński insisted on its power to imagine alternatives to the status quo.

Conclusion

How to know the future in advance, and how to control and imagine it, are acute questions in the face of the Anthropocene and climate crisis. Historicizing futurologies of the past means asking how historical actors and collectives dealt with those questions under particular historical circumstances. Arguing that this may help to better understand the genealogies and contingencies inherent in contemporary anticipatory ideas and practices, the short episodes from the history of future studies in late socialist Poland in the 1960s, 1970s and 1980s, which this essay presented above, may sharpen today’s awareness of at least three major dilemmas related to those questions.

First, anticipatory knowledge always objectifies the future. One has to carefully observe, then, how this is done, and whether it creates greater awareness of one’s own and others’ agency or whether it is primarily geared towards enhancing efficient action. As the second and third examples have shown, anticipation is an element of political strategies that govern social relations. It serves socio-technical purposes. It is thus very important to examine closely how predictions construct their relationship to historical time and agency: Do they adjust to an externally defined future telos, or do they serve to formulate visions of radical change? Which actors articulate them following which objectives? One should thus evaluate contemporary practices of anticipation as to whether they are able to expand and broaden our imagination towards alternative futures instead of narrowing them down to inevitable processes. Also, one should be critically aware of the social positions and political agendas behind anticipations that claim to be scientific and objective. Obviously, these are no binary dilemmas, neither in practice nor in theory.

Being aware of those questions and their historical manifestations may help to historicize and critically evaluate the contemporary sense of crisis and the role of scientific anticipations within them. Shades of optimism and pessimism have changed

considerably since the 1970s. Also, in terms of complexity, systematicity and refinement, contemporary anticipatory ideas and practices largely excel in the historical future research of the 1960s and 1970s. A striking difference to today's projections can also be seen in the size and complexity of their data sets and algorithms. However, these futurologies of the past established precedents for the orientation of anticipatory ideas and practices towards historically changing scientific standards. Their analysis, as this essay hopes to have shown, is a worthy effort for historians, because it contributes to a deeper and critical understanding of what a futurology of the Anthropocene will (and should) look like. However, it is not historians who will decide whether such ascience of the Anthropocene's future is ever going to emerge.

Notes

1. This is not a chronological order but an analytical distinction. I will use the terms "future research" and "future studies" interchangeably. For historical works on the little-known case of future research in Poland, see Kiecko (2018), Sułek (2009), and Becht (2017). In general, future research under state socialism was rather referred to as "prognostyka" to distinguish it from the "futuresology" in "the West". Sommer (2016; 2017), Catanus (2015), Rindzeviciute (2016a, b), Rocca (1981), Andersson (2018: 122–140).
2. All translations in the text, including potential mistakes, are from the author, L.B.
3. Its full original name is *Komitet Badań i Prognoz "Polska 2000" przy Prezydium Polskiej Akademii Nauk*, later renamed *Komitet Badań i Prognoz "Polska w XXI wieku"* ("Poland in the 21st Century"), and after 2000, *Komitet Prognoz "Polska 2000 Plus"* (Komitet Prognoz "Polska w XXI Wieku" przy Prezydium PAN 1999).
4. In fact, Rolbiecki (1972: 43) himself made a sharp distinction between his own approach concerned solely with the agency (*sprawczość*) of human actions, and an efficiency-related perspective (dealing with *sprawność*) which in Polish sociology at the time was commonly associated with praxeology and the concept of social technology or social engineering (*socjotechnika*) by Adam Podgórecki (1966).
5. In Polish, *Instytut Planowania*. When his presentation was published, Pajestka had already become deputy head of the Planning Commission (*Komisja Planowania przy Radzie Ministrów*); hence, formally ranking as a deputy minister and member of government.

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