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8 THE 50-YEAR HISTORY OF ACADEMIC FUTURES STUDIES IN HUNGARY

Abstract

Fifty years ago, in 1976, the Hungarian Academy of Sciences (HAS) recognized futures research as an independent scientific discipline. This chapter examines the antecedents, key stages, and characteristic features of the 50-year history of futures in Hungary. Presenting each stage, it aims to provide a comprehensive overview of the specific social and science policy environment, its changes, and its internationally recognized theoretical and methodological developments. In Hungary, the early years of futures research – the late 1960s – coincided with a reform that was rare under socialism: the new economic mechanism. Embedded in this environment, the renewal of national economic planning was linked to the start of research into the theoretical and methodological foundations of futures research and the development of a complex vision for Hungary in 2000. Futures research underwent rapid development in the 1970s and 1980s and appeared on the international scientific scene, and after this it was referred to as 'futures studies'. Its development was characterized by a clear distinction between forecasting and futures studies, the delineation of their relationship, and the emergence of futures studies as both a basic and applied discipline. After the regime change in 1989, futures studies in Hungary embarked on a path of rapid renewal. The most important realization was that, in a democratic society, the future orientation of institutions and people is decisive in shaping the future. Since the mid-2010s, especially following COVID-19, theoretical and methodological research and the practical implementation of integrated and participatory foresight activities have been flourishing.

Keywords: futures field, forecasting, futures studies, foresight, Hungary

Absztrakt

Ötven évvel ezelőtt, 1976-ban a Magyar Tudományos Akadémia (MTA) független tudományos tudományágként ismerte el a jövőkutatást. Ez a tanulmány a magyarországi jövőkutatás 50 éves történetének előzményeivel, legfontosabb szakaszaival és jellemzőivel foglalkozik. Célja az, hogy áttekintést nyújtson a konkrét társadalmi és tudományos politikai környezetről, annak változásairól, valamint nemzetközileg elismert elméleti és módszertani fejleményeiről és azok fényében mutassa be az egyes időszakok hazai jövőkutatásának fő jellemzőit. A jövőkutatás korai évei – az 1960-as évek végén – egybeestek egy olyan, az új gazdasági mechanizmusnak nevezett reformmal, amely a szocializmus idején nem volt túl gyakori. Ebben a környezetben a népgazdasági tervezés megújulása összekapcsolódott a jövőkutatás elméleti és módszertani alapjairól szóló kutatások megkezdésével, valamint egy összetett magyarországi jövőkép kidolgozásával 2000-re vonatkozóan. A hazai jövőkutatás kutatás az 1970-es és 1980-as években gyors fejlődésen ment keresztül, és a nemzetközi tudományos színtéren is megjelent. Megkülönböztette a prognosztikát és a nagy távlatú komplex jövőkutatást és feltárta azok közötti kapcsolatokat, valamint meghatározta a jövőkutatásnak mint alap és alkalmazott tudomány művelésének jellemzőit. Az 1989-es rezsimváltás után a magyarországi jövőkutatásba gyors és jelentős megújulás zajlott le. A legfontosabb felismerés az volt, hogy egy demokratikus társadalomban az intézmények és emberek jövőorientáltsága döntő jelentőségű a jövő alakításában és ezt meg kell valósítani a jövőkutatás módszertanának fejlesztésében is. A 2010-es évek közepétől óta, különösen a COVID-2019 után, virágzik az előretekintésen alapuló elméleti és módszertani jövőkutatás, valamint az integrált és részvételi előretekintő tevékenységek gyakorlati megvalósítása.

Kulcsszavak: jövőkutatás, előrejelzés, jövőtanulmányok, előretekintés, Magyarország

Introduction

Fifty years ago, in 1976, the Hungarian Academy of Sciences (HAS) recognized futures studies (FS) named futures research[1] as an independent discipline and established the Futures Research Committee within the HAS. This chapter examines the antecedents, key stages, and characteristic features of FS over the past 50 years. By presenting each stage, it aims to provide a comprehensive overview of the specific social and scientific policy environment, its changes, the internationally recognized theoretical and methodological developments in Hungarian FS, the disciplinary connections of Hungarian FS, and its role in shaping the future.

The circumstances surrounding the recognition of futures studies (FS) as an independent academic discipline

The Futures Research Committee was established within HAS IX, Department of Economics and Law Sciences, with the aim of helping to establish and develop the discipline in Hungary and providing a regular forum for scientific exchange.

Scientific recognition had been facilitated by the reform movement that began in 1968, organized around a new economic mechanism, and by the policy of international détente between East and West that began in the 1970s. The reform of existing socialism in Hungary was primarily limited to economic reforms and their scientific underpinnings, which is why it was able to promote the long-term development of economics and the scientific foundations of socialist planning. The policy of détente helped overcome the ideological conflicts between Marxist prognostics and bourgeois futurology that had been inherited from earlier times in the countries of the socialist camp. This enabled greater access to the futures literature of developed countries.

As a precursor to scientific development, it is essential to mention the development of the first national vision for the future in 1970 – titled Hungary in 2000 – which was carried out by a university research group of young researchers led by Professor Géza Kovács within the Department of National Economy Planning at the Karl Marx University of Economics[2] (Kovács, 1970). This visionary research

1 Until the paradigm shift in the Hungarian FS in the 1990s, the prevalent approach was to make predictions and forecasts for a single future. Therefore, we intentionally call it "futures research" in the first half of the chapter and change to "futures studies" (FS) from the section "New paradigms and research trends in the mid-to-late 2010s" onwards.

2 The legal predecessor of the Karl Marx University of Economics is the current Corvinus University of Budapest.

project was linked to the establishment of long-term planning and was based on combining quantitative trend analyses with qualitative expert opinions, like the works exploring the future carried out in the United States in the 1960s with a view to exploring the year 2000 (Kahn & Wiener, 1967). It is largely thanks to this research that FS gained recognition as an independent discipline within the HAS.

It is worth noting that Hungarian futures research had its own journal, Prognosztika (Prognostics in English), from the 1970s onwards. Initially published by the Scientific Society of Organization and Management, it later collaborated with the Futures Research Committee and the Institute for Research Organization of HAS. Although it initially focused on economic prognostics and forecasting as futures research became an independent discipline, Prognosztika increasingly served to publish theoretical and methodological issues of futures research in a broad sense. Unfortunately, the journal was only published until the mid-1980s due to organizational changes and the deepening economic crisis. These favourable starting conditions, however, laid the foundation for the rapid development of futures research as a scientific discipline.

The 50-year development of domestic FS can be divided into three phases, starting from its official recognition as a scientific discipline to the present day. The first phase lasted until the early 1990s, while the second phase lasted until the mid-to-late 2010s. The third phase began with the COVID-19 pandemic.[3]

The development of the discipline until the 1990s

During this initial phase, workshops for futures research were established, along with institutional networks for preparing and applying forecasting and visioning to the future. Theoretical and methodological research in futures research was conducted by research groups mainly operating within universities and research institutes, which were regularly supported by the HAS from its own budget. The preparation of forecasts and visions for the future was coordinated by the Futures Research Committee, which played a major role in organizing working relationships with the National Planning Office and ministries.

3 Other research dealing with the history of Hungarian FS manages historical processing in a different, often broader context. All literature published to date agrees on the division into phases and that the first two phases lasted until around the middle to end of the 2010s (Hideg et al., 2014; Novaky, 2017; Nováky & Kristóf, 2022; 2025). However, there are significant differences between recent literature and committee discussions regarding the emerging characteristics of the third phase. See also the section titled 'After COVID-19.'

During these years, a practice of interrelated and mutually reinforcing theoretical-methodological and practical research developed. This was since futures research, as a positivist science, examined the objective possibilities of future developments as a real process and sought to find and elaborate on probable futures. The theoretical and methodological foundations and methods necessary for this were tested by the National Planning Office and various ministries through current tasks of forecasting and visioning. The close connection between the theoretical-methodological and practical aspects of futures research was made possible by the fact that futures research defined itself as an external circle of socialist planning and a tool for strengthening its scientific foundations (Kovács, 1970). At the time, it was thought that futures research consisted of two closely related areas: on the one hand, it made forecasts with the aim of exploring development trends in specific areas of the future, and on the other hand, it created complex visions of the future for the purpose of developing a system of long-term socio-economic and technical development goals. The latter area was called long-term complex FS to distinguish it from forecasting (Kovács, 1979).

Within the framework of methodological and method application research, the processes of forecasting and vision building were systematized, the applicable methods were described in a detailed and reproducible manner, and the theoretical and methodological issues of the reliability testing of futures research products were elaborated (Besenyei et al., 1977; 1982). As a result, futures research as a science came into line with international standards in the field. Thus, it became a multidisciplinary science striving for interdisciplinarity, which quickly developed into a widely practiced field.

The development of specialized and multidisciplinary forecasts and complex visions of the future (forecasts, forward-looking studies, and future images for Hungary) became commonplace in response to the needs of domestic planning and policy practice. Among these, the following are particularly noteworthy: forecasts that took global models into account and provide forward-looking projections of domestic development opportunities; forecasts concerning the development of natural resources, environmental protection, energy, scientific and technical development, agriculture, economy, and society (health, population, housing, urbanization, crime, etc.). The basic principle of all forward-looking work was that trend analyses should be linked to the objective and scientifically well-founded expectations of experts and practitioners working in the relevant fields. These regular studies, conducted by futures researchers, then became the subject of national futures research conferences organized by the Futures Research Committee of HAS.

The culmination of this phase was the publishing of a futures research textbook, Jövőkutatás, which clearly summarized the essence of futures research as a science,

its main characteristics, the range of methods to be used, and the most frequently used methods in futures research, furthermore, the evaluation of the reliability of futures research (Hideg et al., 1992).

During this period, Hungarian futures research had stronger external ties with the socialist countries of the time (Poland, Czechoslovakia, East Germany, Bulgaria, Romania, the Soviet Union), all members of the Council for Mutual Economic Assistance (COMECON). Hungarian futures research also participated in the development of the methodological basis for joint forecasting in the 1980s within COMECON's Working Committee for Prognostics of Scientific and Technological Development. Hungary's participation in the establishment and work of the World Futures Studies Federation (WFSF) represented an opening towards the developed world. Particularly noteworthy in this context was the organization of a European regional expert consultation and a WFSF world conference in 1987 and 1990, respectively, with the participation of members of the Futures Research Committee of HAS.

When futures research in Hungary was first established, the researchers were mainly economists, philosophers, historians, statisticians, and experts in various fields of scientific forecasting. This explains why futures research was understood as a positivist science and was classified as a field of economics. On the positive side, the multidisciplinary composition of futurists, based on their original training, was advantageous for the application of the discipline. Learning about and comparing scientific approaches across different fields helped lay the foundations for interdisciplinary thinking in the positivist discipline of futures research. It should be noted that there has been no change in this domestic classification of disciplines since then, even though FS no longer resembles this positivist science classified under economics.

New paradigms and research trends until the mid-to-late 2010s

The second phase of Hungarian FS demonstrates that it functioned as a mature science. This means that futures research, which had previously been based on a single paradigm, underwent a paradigm shift, accompanied by the emergence and cultivation of new paradigms, and is now named FS onwards. Initially, the term 'Hungarian futures research' meant that futures research as an independent discipline must deal with the future that will be realized. This field of research must become interdisciplinary. Futures research is not the same as scientific prediction, but it must study the future in its multifactorial, dynamic interrelations.

Long-term complex futures research refers to the need to look ahead over a longer period, whereas futures research aims to explore the different types of relationships (social, economic, technical, ecological, etc.) and their interactions. It is named long-range complex futures studies in the international literature. (Meadows et al. 1972; Somet, 2009; Hughes 2019.)

Foresight means that the new discipline does not have to deal directly with the future that will be realized, but rather with how people, social groups, and institutions think about and shape their ideas about the future in the present, and with the methodological help that futures research can provide in this process. Although Hungarian futurists embraced the English terms 'FS' and foresight for this new scientific approach in international publications, the Hungarian term "jövőkutatás" for the new kind of futures research remained unchanged.

Changing paradigms in Hungarian FS

The renewal of Hungarian FS was facilitated by the 1989 regime change and the simultaneously ongoing paradigm debates in international FS. The regime change led to the collapse of the institutional system that had ensured the practical application of futures research. However, the transforming socio-political institutional system was no longer interested in forecasts and visions of the future, as the main actions of the regime change were aimed at establishing a multi-party democracy and a market economy without the National Planning Office. The following economic crisis led to the elimination of large domestic companies or their transfer to foreign ownership, while small and medium-sized enterprises showed little sign of life. At the same time, International FS also underwent a process of self-examination, which made it increasingly clear that scientific FS cannot undertake to predict the probable future; therefore, it must change its scientific basis and connect with efforts aimed at the revolutionary renewal of scientific thinking, especially in the social sciences. These circumstances, acting in concert, stimulated debates about the meaning of the future and the tasks of FS in the new context, as well as the exploration of new possibilities for renewal.

By the mid-2000s, Hungarian FS had also begun to interpret the future that exists in the present through the lens of research, recognizing the importance of dynamic interrelationships among the past, present, and future, the future orientation of future-shaping actors, and the need to study them. It became clear that we must break with the positivist paradigm of futures research and instead view the future in FS as a multi-actor social process of shaping the future. For this reason, we do not search for the future – the future that will come into reality – in the traditional sense, but rather study how social actors can shape their own future.

In this spirit, Hungarian FS turned towards new directions. As early as the mid-1990s, researchers began to assess the future orientation of various future-shaping groups and the Hungarian population's attitude towards the future. The first and pioneering results of this research were published in Futures in 1994 (Nováky et al., 1994). Researchers then examined the relationship between different age groups of young people and the future, exploring the expectations of secondary school students, their parents, and their teachers regarding the education system and the possible future of education and vocational training. These expectations were incorporated into a vocational training foresight. Continuing along this path, studies (Hideg, 1996–2014) assessed the attitudes of large domestic companies as well as small and medium-sized enterprises operating in the service sector towards the future. However, these various research results on future-shaping needs and expectations had not been put to practical use, because even large domestic companies that were still operating were not prepared to shape their future, while small and medium-sized enterprises could not afford to engage futures specialists to address their future due to a lack of resources. Although future-oriented studies were unable to shape practice, they did significantly contribute to the domestic futures researchers' understanding of the need for a paradigm shift and of one of its emerging directions, turning towards critical FS and foresight.

During this period, Hungarian futurists were engaged in several new theoretical research topics. Besides future orientation and foresight issues – which embody the essence of post-normal and critical FS – these new topics included the applicability of evolutionary thinking (approaches, modelling), the recognition of the chaotic nature of different processes (also social ones), and ways to modernize the theoretical and methodological foundations of FS. This research provided a good basis for Hungarian futures researchers to gain proficiency in the approaches and methods of evolutionary FS. The theoretical and methodological research led to Hungarian FS taking the lead in researching FS paradigms (Hideg, 2002) and analysing the main characteristics of international FS as well as the circumstances of paradigm shifts along these paradigms. The first comprehensive book on this topic was written by the Hungarian futurist Éva Hideg (2015).

Between 1996 and 2009, outstanding opportunities emerged for practical FS. In 1996 and 1997, the first foresight project concerning the future of vocational training was conducted in Hungary (Hideg & Nováky, 1998). Following this, a second foresight case, focusing on regional vocational examination centres, was conducted in 2006 (Bartus et al., 2007). In 1999–2000, a technology foresight study was conducted within the framework of the OMFB (National Committee for Technology Development) as part of the TEP Programme 2000 (Bitó, 2000; Havas, 2003). This research, which explored domestic technological develop-

ment and its possible complex future scenarios, looked ahead to 2050, adapting the most advanced foresight practices of the time. Another similarly exceptional opportunity emerged from 2007 to 2009, when the Council for Economy and Society commissioned the preparation of future scenarios for Hungary by 2025 (Nováky, 2010). This futures study was prepared with the involvement of various stakeholder groups, and members of the Futures Research Committee at HAS were active participants in the project's steering committee. The president of the organising and steering committee, Erzsébet Nováky, was also president of the Futures Research Committee. Unfortunately, these were not followed by further foresight or FS activities commissioned by users.

In the years following the change of regime, the opportunity to develop foresight studies or future scenarios in response to practical needs was either lost or arose only occasionally; however, theoretical and methodological research continued making steady progress. Until 2014, it was possible to apply for basic research projects in the field of FS under the National Scientific Research Fund (OTKA), when it was replaced by a more differentiated application system, the National Research, Development and Innovation Fund (NFKI).

In the years following the millennium, Hungarian FS strengthened its presence and role in the WFSF. As a result, the FS team at the Budapest University of Economic Sciences and Public Administration (now Corvinus University of Budapest) ran a Summer School of WFSF between 1999 and 2004 and organized a WFSF world conference in 2005, both in Budapest (Balázs & Gáspár, 2010).

The growing strength of domestic theoretical and methodological research, as well as its presence in international FS literature and the work of the WSFS, resulted in a large team of Hungarian futurists becoming involved in the COST A22[4] action (Foresight Methodologies – Exploring New Ways to Explore the Future) (2004–2007) and the accompanying international discourse. As a result, Hungarian FS and its results became visible and known in the European knowledge space.[5] This further increased the international presence of Hungarian FS, which, in addition to publications in high-quality futures journals, also significantly increased the active participation in international research projects (Nováky & Kristóf, 2022).

Despite these international successes, it has not been possible to renew the connection between domestic FS and domestic practice. Practice-oriented research in the field of FS has primarily focused on sustainability, corporate foresight, the

4 https://www.cost.eu/actions/A22

5 The Hungarian team published 3 chapters in books made in the framework of COST A22. (See Alács, 2013; Kristóf, 2013; Hideg et al., 2013).

renewal of the healthcare system, the future of higher education, agrarian and bankruptcy forecasting, scenario building, backcasting, and technology foresight. Significant methodological and foresight organizational experience has been accumulated in evolutionary and learning algorithms, interactivity, stakeholder participation, online methods, and futures workshops, as well as in the development of learning processes for project participants.

From Forecasting Critique to Participatory, Value-Driven Practice

As critiques matured, Hungarian FS deepened conceptually in terms of time, strategy, and path creation. Rather than treating the future as an external object to be predicted, researchers reconceived strategy as a practice that creates futures. The work on how strategy research interprets time and future reframes organizations as anticipatory agents (Gáspár, 2015), and path creation needs to consider historically conditioned constraints and opportunities (Gáspár, 2011).

Building on the earlier multi-level methodological experiment (Havas, 2008), participatory backcasting was used to co-create plural visions of the university, translating desirable futures into sequenced, actionable pathways that engage faculty, students, and administrators (Pataki et al., 2018). The Hungarian contribution is its normative, value-driven application of participatory methods—especially backcasting and participatory systems mapping (Köves et al., 2013; 2021). In parallel, systems mapping clarified feedback and leverage points for sustainable consumption, demonstrating how different framings reshape policy learning (Kiss et al., 2018).

In the second half of the 2010s, Hungarian FS began to participate in major international projects. Hungarian futurists primarily collaborated with the Visegrad countries[6], but they also appeared in other international projects. Noteworthy among these was their participation in the Millennium Project, which involved forecasting the future development of the SOFI (State of the Future Index) and developing concepts for advancing the UN governance system.

Structural reorganization began at the HAS in the early 2010s. As a result, the number of committees was significantly reduced by merging the smaller units. Thus, in 2012, the Futures Research Committee was transformed into the Statistical and Futures Research Scientific Committee, within which the Futures Research Scientific Subcommittee continued to operate as an independent subcom-

6 The Visegrád Group (also, the Visegrád Four or the V4) is a cultural and political alliance of four Central European countries: the Czech Republic, Hungary, Poland, and Slovakia.

mittee. In 2003, the nationally organized FS conferences had been replaced by annual statistical and FS conferences linked to the annual conference series of the Hungarian Science Festival, organized by HAS. All of these are held publicly in front of a large audience, promoting domestic science and Hungarian FS.

In the absence of an independent domestic FS journal, this period of development was characterized by the publication of Hungarian-language studies by domestic futurists in the form of booklets. Three series were published by the predecessors of today's Corvinus University of Budapest, as the research group there was the strongest in organizing this field of science and financing publications (Hideg, 1996–2014 and 1998-2014; Nováky & Kristóf, 2003–2006).

During this period of uprising, the old pathways to becoming futurist continued to operate, but representatives of new scientific fields, such as psychologists, sociologists, computer scientists, ecologists, biologists, geneticists, etc. also became interested in FS. A new source of talent emerged in the form of young researchers graduating from various PhD programs, who contributed significantly to FS's achievements during this flourishing period, both through their approach and their choice of topics. This renewed human-researcher quality has since then already contributed greatly to the strengthening of the interdisciplinary nature of FS and the establishment of new paradigms in the cultivation of FS in Hungary.

After COVID-19

The pandemic created an artificial dividing line in the development of domestic FS. Following the pandemic, the trends in scientific development that had already been emerging continued to gain strength. One such trend was integrated FS, the paradigm-shifting aspects of which had already appeared in theoretical and methodological literature in the mid-2010s (Hideg, 2013). The essence of this idea and approach lies in the completion of the co-evolutionary approach and the integrated use of interconnected methods in both theoretical and methodological thinking, as well as in practical research projects. This has resulted in the relative separation of theoretical and practical foresight (the latter also known as foresight or integrated foresight), but also in the recognition of their interrelated development. There is a growing recognition among Hungarian futurists that cultivating foresight as a praxis activity has become an independent profession. Its main task is to develop the futures methodology and to organize and manage the complex processes of exploring possible and/or desirable futures for practical future shaping. This means that professional futurists must be able to collaborate with researchers and practitioners across diverse fields.

In the 2020s, the development of integral FS and foresight has shed light on yet another aspect of integration: that integration into large research projects may be a new and increasingly widespread practice in the application of FS and foresight. This began in 2017–2018 with a complex future exploration of the possible futures for Hungary in 2050 as an independent research unit in a large-scale ecological restoration project in Hungary (Hideg et al., 2019).

Hungary's regional engagement was evident in the cross-border foresight on the future of business in the Visegrad region, incorporating national insights into Central European dialogues (Sacio-Szymańska et al., 2016; Gáspár et al., 2023). Hungarian researchers have participated in further Visegrad Fund projects focusing on the post-pandemic recovery and sustainable pathways of the Visegrad countries[7], as well as forecasting key factors influencing climate change in the region[8].

More recently, Hungarian futurists have been involved in the international research project MAPS[9], which started in 2024, aided by Horizon Europe Research and Innovation Programme, as well as in a new COST Action programme, FOGOS[10], on the futures-oriented governance of outer space. Apparently, Hungarian integrated FS and foresight seek to connect with more dimensions of sustainability and degrowth, the informatization of healthcare, or the development of innovation activities.

New research topics in Hungarian integrated FS and foresight include addressing metamodern challenges and developing responses to them, researching and developing futures literacy (Meskó, 2024 & 2025), and the use of AI in integrated FS and foresight practice.

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7 Post pandemic recovery in the V4 region, https://4cf.pl/visegrad2030

8 Forecasting Factors Influence on Climate Change as a Part of Sustainable Development Goals, https://wsb.edu.pl/forecasting-factors-influence-on-climate-change-as-a-part-of-sustainable-development-goals

9 Models, Assessment, and Policies for Sustainability (MAPS), https://mapsresearch.eu

10 Futures-oriented Governance of Outer Space: Towards Peace, Equity, and Environmental Integrity (FOGOS), https://www.cost.eu/actions/CA23118

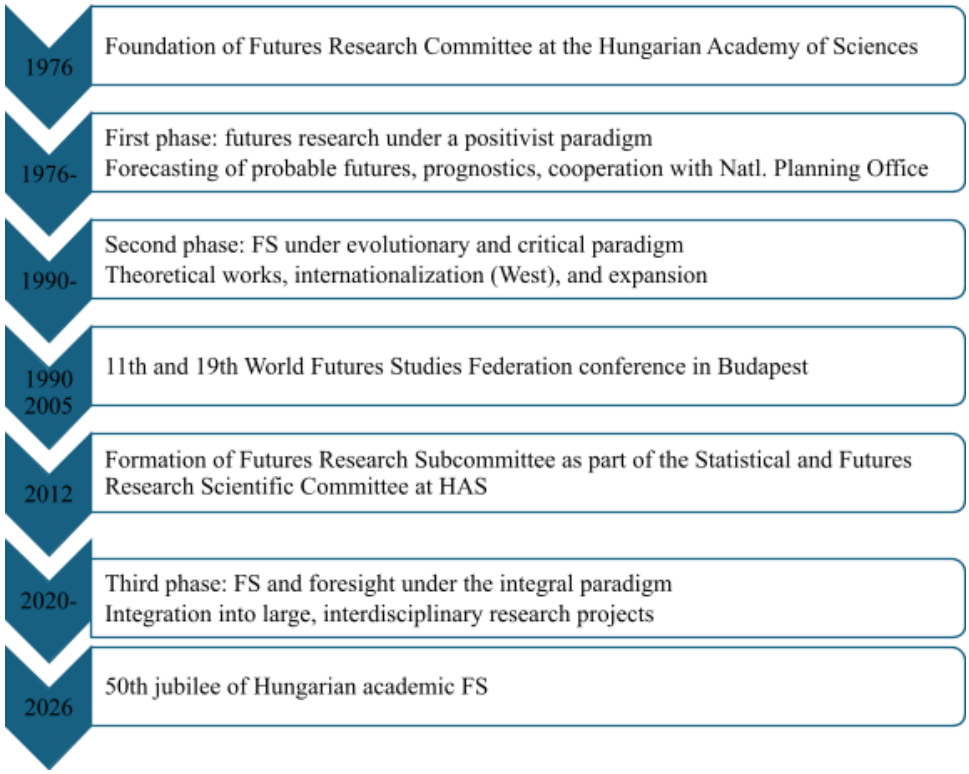

Figure 1. Timeline of Hungarian FS.

Summary

The 50-year history of Hungarian academic futures research and later FS has been characterized by both major upswings and major setbacks. The three phases are connected by the fact that, from the very beginning, Hungarian futurists sought to see futures research, and further, FS and foresight recognized as an interdisciplinary discipline, which can crosscut and systematize the results of different fields of science according to the logic of its own research goals, tasks, and methodology. The first phase, the era of futures research, lasting from the mid-1970s until the 1990s, was marked by balanced and vigorous development, as the development of theoretical and methodological foundations proceeded in tandem with practical, future-oriented research. During these 15 years, a positivist and successful discipline of futures research emerged, which became institutionally embedded in the social practices of the time. The following phase, which began with the change of regime, was marked by a search for new research directions, a paradigmatic renewal of futures research, and the emergence of FS, and the not entirely successful quest for a place for practical FS. This second phase yielded outstanding results in terms of international presence and recognition; however, numerous

obstacles hindered the practical application of these new findings in Hungary. The post-COVID-19 period has brought two new development trends. One is the strengthening of integrated FS in terms of co-evolutionary theory, methodology, and practice, and the other is the development of an online integrated foresight process organization based on broad participation and online solution.

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