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Higher education in Nordic countries: analyzing the construction of policy futures

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Abstract
In this special issue, we analyze how societies in different countries have responded and continue to respond to the fact that the future is and has always been unpredictable and unforeseeable. The starting point for these studies is the recognition that the world situation is more complex than ever before due to current and foreseeable global challenges. The most serious of these threats and challenges are climate crises, natural disasters, and habitat degradation. To address the growing uncertainties arising from these challenges, societies around the world are placing increasing expectations on higher education and science, and are adopting proactive measures, such as various foresight techniques, to improve their preparedness and long-term resilience. In this special issue, we aim to provide fresh perspectives on foresight and preparedness for the future, especially in the Nordic context in the fields of higher education and scientific research. The special issue focuses on four Nordic countries—Denmark, Finland, Norway, and Sweden—while maintaining a global perspective on the changes occurring around them.

Keywords Higher education futures · Nordic countries · Anticipatory governance

Introduction

The future has always been unpredictable, and the world remains a complex place, marked by potential cultural, political, and economic tensions as well as open conflicts. What distinguishes the present situation from earlier times, however, is the unprecedented complexity and scale of current and foreseeable global challenges, making it increasingly difficult to comprehend the predicaments we find ourselves in (Simon & Tamm, 2021). These challenges arise from a myriad of factors, with climate crises and environmental degradation being the most existential (Marginson, 2024a; Witte, 2023). In addressing these rising uncertainties, societies around the world are placing increasing expectations on higher

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education and science as well as adopting proactive measures, including various anticipatory techniques to enhance preparedness and build long-term resilience.

In this special issue, we aim to provide new insights into these developments, particularly in the realm of Nordic higher education and research. The focus is on four countries—Denmark, Finland, Norway, and Sweden—while maintaining a global perspective on the transformations emerging around them. The enactment of future policies in these countries presents an interesting case for analysis, considering their image as progressive societies (Marklund, 2023), the role foresight plays in state decision making, and the significance of the social dimension of higher education institutions (HEIs). The social dimension of Nordic HEIs is evident in the expectation that they respond to future economic and societal needs alongside their primary missions of teaching and research (Välimaa, 2018). This societal expectation of Nordic HEIs arises from the substantial public funding they receive and the perception of HEIs as socially responsible institutions tasked with addressing future challenges.

Multiple initiatives in higher education and research, along with various proactive measures, are being undertaken in Nordic countries (e.g., Nordic Council, 2019, 2020) and worldwide to respond to future challenges. The most prominent of these include measures for sustainable development, which have involved HEIs around the world in promoting sustainability through teaching, research, communication, and outreach activities (Berchin et al., 2021). However, there is a concern about the limited potential of these initiatives, particularly because societies are entrenched in arrangements, technologies, and behaviors that are not only detrimental to nature and society but also difficult to change (Goldstein et al., 2023; Witte, 2023). Such entrenched arrangements and behaviors are also apparent in higher education and science, which promote technological and economic progress that accelerates climate change while simultaneously providing advice and solutions for its mitigation (Witte, 2023, see also Rosa & Scheuermann, 2009).

In addition, anticipatory techniques and other proactive measures developed in higher education and research institutions to provide persuasive data and aid long-term societal preparedness encounter considerable problems. They often fall prey to speculation, market interests, and political biases, thus undermining their capacity to help societies address escalating global problems (Andersson, 2018). Such biases are evident both in the private and public sectors, most notably in the actions of transnational corporations, which have exacerbated the climate crisis, for example, by overemphasizing uncertainties in global warming projections that are harmful to markets (Supran et al., 2023) and by producing powerful scenarios of ideal global societies without any limitations on using oil or other fossil fuels (Andersson, 2020a; see also Urry, 2016). In the public realm, anxiety continues to grow as governments worldwide fail to seriously consider alarming projections and act coherently and urgently to solve global problems (e.g., Hickman et al., 2021). These complications also impact the governance of higher education and research, where national visions and roadmaps for higher education, research, and development often default to business-as-usual practices to reconcile economic growth with sustainable development goals.

In this special issue, we explore these aspects, focusing on the questions of how and by whom the futures of higher education are constructed and enacted. We analyze the governance and development of policies, their historical layers, and how these policies are currently shaped by different visions and roadmaps created to respond to growing challenges. In the context of the research approach, we endeavor to advance the notion that rethinking the temporal dimension of higher education policy research is essential, as its insights predominantly pertain to past and present solutions and their implementation. Policymaking has always been an inherently future-oriented process, with changing imaginaries shaping the current development of higher education and research. This also implies that the future

is subject to various aspirations for influence, making it an important yet uncharted terrain in higher education policy research. Furthermore, while multiple issues and aspirations are present in contemporary discourse about higher education, some issues, such as the climate crisis, are more pressing and existential than others, necessitating a reconsideration of higher education beyond globalization's economic possibilities (Marginson, 2024b; Rizvi et al., 2022).

Against this backdrop, the next section begins with an analysis of contemporary trends in higher education that are extended into the future. Thereafter, we focus our attention on the Nordic context and discuss the temporalities of the Nordic welfare model and Nordic higher education. This is followed by an examination of the literature on anticipatory practices and governance and the complexity they add to the analysis of the higher education policy domain. Finally, we present articles exploring these topics from different perspectives.

Tendencies in higher education

There is a vast body of scholarship on the diverse tendencies shaping the future of higher education and research (e.g., Király & Géring, 2019; Marginson, 2016, 2022, 2024b; Moisio, 2018; Naidoo, 2016; Robertson, 2017, 2022; Shahjahan, 2016; Shore & Wright, 2017). These tendencies have gradually evolved to encompass a range of transformations with far-reaching implications. Among them, the economization of education stands out as a significant ontological shift, steering universities to produce skilled labor in lieu of their traditional missions of promoting basic research, the self-formation of persons through knowledge, and social conscience and critique (Dall'Alba & Barnacle, 2007; Marginson, 2023; Shore & Wright, 2017). This ontological turn, resonating with the notions of progress, has coincided with the rapid spread of digital technologies, transforming organizational and governance structures and reshaping perceptions of time and the future within the higher education field (Facer & Wei, 2021; Rizvi et al., 2022; Robertson, 2019; Shahjahan, 2019; Stein, 2019).

Globalization and neoliberalism have driven the economization of higher education, finding their expressions in the prioritization of economic policy imperatives and the visions of a global knowledge economy. Neoliberal ideologies, emphasizing competition as a defining feature of capitalism, have continued to shape higher education, aiming to transform higher education institutions (HEIs) into competitive revenue-generating institutions and education and research into commodities governed by performance criteria (Marginson, 2024a; Naidoo, 2016). Globalization facilitates the dissemination of neoliberal notions worldwide, while also promoting the expansion of science networks and enhancing academic mobility. These practices, while still largely shaping the higher education landscape, are now being influenced by emerging nationalist sentiments and economic protectionism (Marginson, 2024a).

Technological development promotes the process of globalization, enabling the movement of people, ideas, and capital across borders (Rizvi et al., 2022). Digitalization, intricately intertwined with this process, has assumed diverse forms and, as such, strongly impacts the formulation of higher education policies. Digital platforms, for example, have facilitated the creation of new types of learning environments (Literat, 2015), enabled new categories of social research, and provided avenues for academic collaboration (Lupton et al., 2018). This fast-growing platform economy has infiltrated academia worldwide,

shaping perspectives on how knowledge should be curated, produced, and published; how knowledge should be taught and learned; and how the acquisition and production of knowledge should be financed (Robertson, 2019; see also Farrow & Moe, 2019; Williamson, 2016).

Moreover, debates about AI, which have persisted for more than half a century, have gained momentum in recent years, driven by advances in big data, cloud computing, computing power, and machine-learning algorithms capable of performing complex tasks traditionally associated with human intelligence (e.g., Naude, 2021). The literature on AI in higher education has expanded rapidly while being criticized for a lack of depth and conceptual precision. Proponents argue that AI will profoundly impact agency in higher education in the short term, necessitating adaptive responses from HEIs, yet the specific implications remain unclear. Critical voices call for a dismantling of the myths surrounding AI and advocate for research, particularly in higher education, to focus on its social implications (see, e.g., Bearman et al., 2023).

In summary, existing research on trends in higher education offers valuable insights into global temporalities, particularly in relation to economic and technological development. Moreover, it invites further research on how higher education and science respond to current and foreseeable grand challenges, particularly climate emergencies, and on the role of various actors in creating these responses (Marginson et al., 2023; Witte, 2023). More attention is also needed for future governance of these challenges, including foresight techniques, such as visions and roadmaps, and their use in the field of higher education, as they shape the imaginaries and the enactment of policies, while setting the normative preferences and frameworks for future resources and financing (cf. Andersson, 2018; Aukyt et al., 2019).

The Nordic model and its temporalities in the global context

Issues related to the future governance of grand challenges have been addressed in the Nordic context. These countries have sought to portray themselves as progressive, peaceful societies that strive for leadership in addressing these challenges (Nordic Council, 2019; see also Khan et al., 2021). Nordic countries have also been regarded as role models of good governance, ranking highly in surveys on quality of life and demonstrating the early adoption of innovations and technologies that drive economic growth. Higher education and research are seen as key factors in maintaining this role. However, reconsidering this positive slant seems necessary, as it remains somewhat unclear what the Nordic model actually signifies and whether Nordic societies correspond to their globally distributed public image (Strang, 2016, 2020).

The Nordic model has attracted renewed global interest over the past two decades. Thriving since the 1960s, the Nordic welfare model encountered severe criticism following the economic downturn in the 1990s. The feeling of success quickly evaporated following the disintegration of the Soviet Union and subsequent political movements in the 1990s, which raised concerns within the Nordic region about the risk of becoming irrelevant and being drawn into the world's political periphery. European integration and globalization induced processes akin to convergence and unification, which led to diverse responses in the Nordic countries and put pressure on the concepts of the Nordic model, particularly the ideas of universal welfare provision and exceptionalism. The serious debt incurred by the Nordic countries in the 1990s was attributed to the welfare system being associated

with failed socialism, which generated an impasse and critique of the welfare state model (Musiał, 2009).

This resurgence of interest commenced in the wake of the worldwide financial crisis of 2008 and focused on the way countries navigated economic volatility, fostered innovation, and maintained their welfare systems while engaging in global politics (Musiał, 2009; Nordic Council, 2014). There is much literature on the principles of the Nordic model, highlighting universal welfare rights, high decommodification, and related independence from market forces, equality, and minimal social stratification. The model has also been described as a Nordic version of social democracy (Välimaa & Muhonen, 2018) or a middle ground between capitalism and socialism (Musiał, 2009). Common values include egalitarianism, peacefulness, environmentalism, and a commitment to social progress. The value of trust in public institutions underlies the model, reducing transaction costs, fostering social cohesion, and promoting economic efficiency (Kettunen & Petersen, 2022; Välimaa & Muhonen, 2018).

The notion of the Nordic welfare model is considered historically constructed, with various temporal layers manifesting in formal and informal rules and norms today. Historical encounters have fostered alliances and collaboration among Nordic countries, from the past to contemporary agreements extending into the future. There is a fluidity in contemporary everyday practices and transnational cooperation, evident in parliamentary activities, which contribute to a shared commitment to strong egalitarianist values among countries (Välimaa & Muhonen, 2018). The current global recognition of this model is reinforced through international collaboration, including scientific research and publications such as the present one (Byrkjeflot et al., 2022).

Nordic countries have historically engaged with divergent notions of the future, adopting varied approaches toward them, which is largely attributed to their geopolitical location between the East and the West (Andersson & Keizer, 2014; Musiał, 2009). It is suggested that their political alignments, coupled with the circulation of ideas across different temporal layers, have contributed to the development of the conception of the welfare state and the articulation of the idea of Nordic higher education with a social dimension. The distinctive features of the Nordic welfare model thus emerge from a complex interplay of historical interactions and the global recirculation of ideas (Kettunen & Pedersen, 2022; Välimaa, 2018). Globalization and European integration have given rise to political processes through which Nordic countries have sought to redefine their regional identities and justify their solutions promoting societal development.

Besides their analytical signification, transhistorically and geopolitically structured models, such as the Nordic model, are employed to foster regional unity for varied political purposes (Kettunen & Pedersen, 2022). For example, the Nordic Council has promoted the dissemination of the Nordic welfare model through a shared narrative, envisioning the Nordic region as the most integrated and sustainable in the world by 2030, with education, research, and innovation as cornerstones for the future. Vision 2030 contains three prioritizations: a green, competitive, and socially sustainable region. (Nordic Council, 2019.)

It is suggested that such visions often present a more favorable and less nuanced view, overlooking underlying problems. There are dissenting voices critical of the Nordic welfare model, citing issues such as restrictive immigration policies and social problems (Byrkjeflot et al., 2022). Moreover, there are seeming tensions within the Nordic 2030 vision, potentially undermining its effectiveness. In the context of the green transition, the Nordic vision 2030 reconciles economic growth and competitiveness with sustainable development, excluding more ambitious plans such as the reduction of consumption-based carbon footprint, which in Nordic countries is among the highest per capita globally. Hence, there

seems to be a discrepancy between the sustainability aims of the Nordic vision and the measured sustainability of the Nordic lifestyle and consumption outsourcing production and emissions to the developing world (Ala-Mantila et al., 2023; Maczionsek et al., 2023).

Moreover, past experiences have shown that such grand plans for Nordic cooperation have often resulted in disappointment, with divergent choices emerging from historical experiences and geographical locations (Musiał, 2009). While frustrations have led to setbacks, they may also have spurred smaller-scale projects and, in some cases, Phoenix effects. Examples from the past include the transformation of the failed attempt to establish the Nordic economic cooperation organization NORDEK into the Nordic Council of Ministers and the dissolution of the Scandinavian Defense Union, which contributed to the formation of the Nordic Council (Strang, 2016).

Nordic higher education and discussions about its future adaptability

Higher education and research provide multifarious opportunities to respond to the challenges of the future. These include, for example, the production and dissemination of measurement data on future problems, including climate change, the development of a transformative approach traversing scientific boundaries, and the production of new types of projections and other anticipatory techniques as well as analysis for adaptation and resilience. Higher education can help to share current information about questions related to a sustainable future, for example, by reforming curricula to cover these topics and offering free education and courses to the general public. Overall, higher education and research institutions are vested with increasing expectations due to growing future uncertainties, but the resources allocated to take on all these topics remain scarce (Berchin et al., 2021; Witte, 2023).

Given the progressive slant of the Nordic model and the aspirations of the countries to offer leadership in addressing future challenges, together with the fact that underlying values of sustainable development goals adhere to those of the Nordic model, it would be expected that Nordic HEIs would easily adopt or even assume leadership in solving future problems and promoting global sustainable development goals. However, while many Nordic HEIs comply with the SDGs, others seem to align with the goals in a symbolic way. To highlight this variation, it seems useful to outline what the Nordic higher education model entails and how it seems to take on global tendencies (Stensaker & Hermansen, 2023, this issue).

There is consensus in the literature that, at a conceptual level, a set of principles exist that define the Nordic model of higher education (Fägerlind & Strömquist, 2004; Mjøset, 2022; Nokkala & Bladh, 2014; Pulkkinen et al., 2019; Rinne, 2010; Välimaa & Muhonen, 2018). This model is underpinned by shared values among Nordic HEIs that assert that higher education is a universal welfare right (Vabø, 2014) and that universities should function as socially responsible institutions and pivotal contributors to societal and economic progress (Geschwind & Pinheiro, 2017; Välimaa, 2011). Within this framework, Nordic higher education has evolved around the values of egalitarianism, substantial public funding, and strong bonds with the state (Rinne, 2010; Välimaa, 2018). A key characteristic of the model is its emphasis on human capital development, commitment to the equality of opportunity, and the view of higher education as a means of realizing the goals of the welfare state (Ahola et al., 2014).

Despite shared societal values and common goals for reform, recent studies have highlighted differences that are inherent and historically, politically, and socially embedded (Ahola et al., 2014; Foss Hansen et al., 2019; Nokkala & Bladh, 2014; Välimaa, 2018; Välimaa & Nokkala, 2014). Variations in positional hierarchies, institutional forms, modes of governance (e.g., Capano & Pritoni, 2020), and funding and access policies are evident among contemporary Nordic higher education systems. Notably, differences in the nation-state building function are more pronounced in Finland and Norway than in Sweden and Denmark. In Finland, higher education played an important role in creating a national identity and building the nation, functions that were also emphasized in Norway. Sweden and Denmark, on the other hand, are traditional kingdoms where higher education has not played as significant a role in shaping identity as in Finland and Norway. Overall, prior studies have shown that the degree of convergence or divergence between Nordic higher education systems varies depending on the level of analysis, suggesting that the Nordic model should be regarded as an ideal rather than a rigid scheme (e.g., Ahola et al., 2014).

The introduction of global tendencies, particularly neoliberalist sentiments, into Nordic HEIs has raised questions about the sustainability of their ideal characteristics, such as equality, trust, fairness, low stratification between institutions, institutional autonomy, extensive public funding, and the role of the state (Antikainen, 2016; Välimaa, 2011, 2018). Nonetheless, the Nordic welfare model is seen to have the capacity to adapt and absorb changes, which may be attributed to its inherently incompatible qualities, such as high taxation and economic efficiency (Kettunen & Pedersen, 2022). These qualities are also evident in higher education, for example, in the way in which HEIs are held accountable through the use of meticulous performance indicators for the allocation of performance-based funding, with Finland having the highest share of such funding among Nordic countries (e.g., Kivistö et al., 2019). This adaptability may explain why the tension between the ideals of the knowledge economy and the Nordic welfare model appears rather subdued. Therefore, recent scholarly accounts suggest that the contemporary portrayal of Nordic countries as knowledge economies is discursively a natural extension of the welfare state, which, through publicly funded education, has fostered literacy and other essential skills necessary for this transition to knowledge economies (Andersson, 2020b).

There is much potential in higher education and science institutions, including those in Nordic countries, to respond to future challenges and promote SDGs, although they seem not to live up to this promise yet (Stensaker & Hermansen, 2023; Witte, 2023). Globally, their potential is shaped by temporally layered developments; these developments have led to the entrenchment of economic priorities in higher education, colonial asymmetries in the field, and rising nationalist sentiments, which affect international collaboration and the utilization of scientific knowledge for the benefit of future societies (Marginson, 2024a, b; Stein, 2019). Finding alternatives and disentangling from these entrenchments remain challenging (Shahjahan, 2019; Stein, 2019).

There are multiple reasons for such entrenched issues impeding the response to future challenges, particularly in the area of sustainable development in higher education; these reasons can be attributed to factors such as fragmented policies leading to short-termism and a lack of resources, obstructing a transformative approach that would make a real impact and change behavior (Witte, 2023). Moreover, while there is hope for change and new possibilities, there is also growing anxiety over inadequate responses to existential crises, along with a dearth of knowledge about how future strategies are governed, which futures are privileged, and by whom.

Examining the construction of policy futures

Proliferation of anticipatory practices

Questions about how perceptions of the future are shaped and whose future it will be have recently attracted increasing interest across disciplines. Rising uncertainties, along with the hope of finding solutions for their mitigation, have amplified these inquiries, positioning the future as an object of governance. This implies that the development of policies and decisions increasingly involves anticipation and a future-oriented approach to build resilience and facilitate the transition toward a future expected to be sustainable, egalitarian, just, and stable. Knowledge about the future and tools for its creation, therefore, become salient elements of governing the future while such knowledge is expected to lead to improved decisions and policymaking (Heino, 2021). These questions also warrant further attention in the field of higher education, considering the rising expectations for the field and the construction of policy futures that shape the realization and governance of these expectations.

Studies from various fields have approached these questions from diverse perspectives, highlighting the multifaceted nature of governing the future at present. Among these accounts, studies on the history of futures (Koselleck, 2004; Seefried, 2014; Andersson, 2018) provide an interesting viewpoint when analyzing the changing ways people anticipate and seek to influence eventualities. They attribute the intrinsic sense of uncertainty to a wider shift in conceptualizing the future as an open space (Adam & Groves, 2007; Andersson, 2018). This temporal notion, arising from the idea of progress and the related break from the ecclesiastical order, renders the future indeterminate, albeit susceptible, to human interventions and multiple influences by actors with different normative preferences, capacities, and repertoires of knowledge (Adam, 2010; Adam & Groves, 2007; Koselleck, 2004). What this implies for contemporary political and strategic considerations, including the realm of higher education, is that when the future becomes wide open, power is assigned to those with expertise and leverage to shape future expectations.

The notion of the future as an indeterminate open space underlies the contemporary capitalist dynamics and its speculative finance systems, encompassing uncertainty as one of the key factors (Delanty, 2020; Urry, 2016). This uncertainty also ushered in the rise of neoliberalism, which promised a stable future realized through free markets and welfare for individuals. Yet, its promises became exhausted as financial crises revealed its role in deepening inequalities and environmental catastrophes, along with its detachment from social logic. Despite responses to these adverse consequences, neoliberalism remains resilient, even as debates about finding viable alternatives intensify (Beckert, 2020).

Envisioning a future that is uncertain yet filled with expectations for varied opportunities and related contestations has become an industry of its own for various actors including transnational corporations (such as Google and Shell), environmental organizations, governmental bodies, including intergovernmental bodies (such as the European Strategy and Policy Analysis System), academic bodies (such as the Oxford Martin School), and military organizations (such as Pentagon) (Urry, 2016). Moreover, states employ various consultancies to implement anticipatory practices, such as the creation of shared visions, to influence the future and build consensus for executing decisions that impact future policies. This expanding terrain of future expertise has been

characterized as a field that is more unruly than organized and inhabited by actors who use diverse knowledge claims as leverage to influence the politics of higher education and to condition future views (Andersson, 2018; Brown et al., 2020).

Globally, intergovernmental organizations (IGOs) work to make certain futures knowable while aiming to achieve authority in their governance (Berten & Kranke, 2022). The Organisation for Economic Cooperation and Development (OECD), for example, has contributed to contemporary circumstances through its early endorsement of the vision of unlimited growth (Schmeltzer, 2015; Urry, 2016). This includes the OECD's early projects, such as *Interfutures*, which claimed there were no limits to growth in the 1970s and thus challenged previously published futures reports, such as *The Limits to Growth* by the Club of Rome (Andersson, 2019). Such globally advocated visions can diffuse into national and institutional policy schemes and higher education strategies in diverse ways. For example, the vision of limitless growth has contributed to the contemporary notion of knowledge economies, privileging performance and learning as a source for growth and competitiveness, and aiming for maximization of returns on higher education investments (Robertson, 2017; Shahjahan, 2019). It is promoted through various platforms including annual outlooks on the economy and other fields, assessments of future trends in education (OECD, 2018, 2019), and a surfeit of reviews (e.g., OECD, 2016, 2017a, b). In higher education, the notion of the knowledge economy has received much critique, particularly for the way it constrains the ability to imagine higher education without competitive logic and configures policy debates (see, e.g., Peters, 2013; Wright, 2019; Shahjahan, 2019; Kallo, 2021).

Foresight processes have also become widespread within the EU, especially with the implementation of the Lisbon Strategy and its subsequent EU 2020 strategy, which aimed to develop the EU as the most competitive region in the world, setting the agenda for modernizing higher education in Europe. Foresight processes have been used to create shared visions, increase adherence to future goals, unify divergent views, and unite stakeholders behind common goals. They are intended to produce a consensus through a variety of means, such as outlining reasonable goals and outcomes that stakeholders are expected to pursue. Within the EU, foresight is usually defined as a discussion about an open future and the communicative process. However, it can act as a kind of governance technology to avoid questioning the policy process, thereby increasing its effectiveness by preparing the grounds for implementation (Andersson, 2008). Overall, the EU's anticipatory processes are essentially framed by its underlying idea of European integration through a single market, reflecting the path advocated by neoliberalism (Beckert, 2020).

A new research agenda on anticipatory governance is emerging across different disciplines, analyzing how uncertain futures are governed in the present and the consequences of such governance. It examines anticipatory processes as sites of political negotiations and contestations, shaping the prioritization of policy agendas. These processes, involving various techniques to produce knowledge for policymaking, may result in either opening up or closing down development pathways. A critical analysis of these processes seeks to uncover how the knowledge about the futures is created, how uncertainties are interpreted, and how alternative futures are characterized (Muiderman et al., 2023).

There is a plethora of techniques of anticipation deployed in various fields to reduce uncertainties and enhance state preparedness (Anderson, 2010). Their development was formerly situated outside academia, undergoing processes similar to scientization and professionalization. In this way, different anticipatory techniques came to encompass a variety of methods premised on disparate fields of study, such as econometrics, cognitive and behavioral sciences, and computation modeling and simulation. However, these early techniques encountered manifold problems attributed to their inability to predict significant

events, such as the economic crises in the 1970s and the collapse of the Eastern bloc. Therefore, a new style of reasoning interested in alternative conjectures, with an emphasis on a qualitative approach, was amplified. This notion of alternative futures has remained widely used since then, despite increasingly austere future prospects, especially of the climate crises, reducing the scope of alternatives (Slaughter, 2020).

Various anticipatory techniques are now in use, yet there are considerable problems with some of their tenets (Beckert & Bronk, 2018). *The scenario method*, for example, was originally developed for policy analysis and military readiness during the Cold War and was then deployed by transnational corporations, such as Shell. It was adopted in the Limits to Growth report (Meadows et al, 1972), and it also provided the organizing format for the subsequent reports by the Intergovernmental Panel on Climate Change (IPCC) (Granjou et al, 2017) including the latest AR6 report (e.g., IPCC, 2023). The scenario method refers to a particularly significant and possible world that, among other potential worlds, deserves special attention (Kamppinen et al., 2003). An examination of how scenarios have been fabricated in global education shows that they can be negotiated to display certain potential worlds that are more auspicious than others (Robertson, 2005).

The *Delphi method of forecasting*, originally developed by the RAND Corporation in the 1960s and reinvented in the 1980s and 1990s, is frequently used in the preparation of visions and strategies in higher education. Its scientific premises lie in assembling and analyzing intuition—that is, expert judgments of probable developments within a certain time range—which are then reduced to a variety of identifiable sequences of likely events (Andersson, 2018). *Visions*, publicly perceived as shared views of possible worlds to pursue (Kamppinen et al., 2003) and often used in public speeches and papers, including those related to higher education and research (e.g., Ministry of Education and Culture, 2019), are not always socially shared. Creating visions is a strategy to forge political unity and consensus, while the construction of shared beliefs within this process has received little critical scrutiny. Governance through visions and roadmaps, while fostering consensus, accelerates policy processes yet obscures dissenting perspectives (Kallo & Välimaa, 2024, this issue) and potentially erodes the quality of policy and preparation of laws (e.g., Rainio-Niemi, 2015).

Anticipatory practices in higher education in the Nordic world

The notion of an open future has shaped the development of anticipatory techniques from their early development to their present applications. It reinforced the stout belief in Western Europe, including Nordic countries, and the US in the 1960s, invoking that the future could be forged and controlled through scientifically validated methods (Seefried, 2014) and that *planning* would be the way to guide and monitor postwar societal development (Wagner, 2008). These early forms of techniques were reinforced by the belief in the human capability to predict the future and surrounded by naturalistic epistemology justifying knowledge reduced to the natural sciences (Aukyt et al., 2019).

Anticipatory practices have underpinned the development of policies and governance in higher education in Nordic countries and globally. *Planning*, as an early form of such practice, has constituted a major domain in higher education since the 1960s, finding different expressions worldwide, as indicated in the Special Issue (*Higher Education*, 1972/4) published in the first volume of this journal. The editorial outlined the promises and topics of planning, as well as the challenges, such as the lack of long-term plans, technical deficiencies, and political inadequacy of promoting a participatory approach to planning based on

ideological grounds (Williams, 1972). Strong doubts about the purpose of planning were also expressed in contemporary scholarship concerned with international planning, finding it an arena of political power and a tool for social engineering that served dominant interests and enforced social control (Escobar, 2009).

In Nordic countries, social democracy and the principles of economic efficiency underpinned the idea of social planning, affecting early interventions in the construction of Nordic welfare states (Kettunen, 2019). Regional policies and the expansion of higher education systems were integrated into planning processes as part of the implementation of goals for economic growth (Kivinen et al., 1993). It was during those years that the ideas about "rational planning" developed by Swedish economist Gunnar Myrdal were distributed internationally and received with enthusiasm in many countries, such as Finland, where they inspired the country's social policy reforms. At the core of rational planning was the idea of a close connection between planning and education—a society based on scientific planning that enabled an enlightened citizenry (Kettunen, 2019). The belief in planning reached its apex in the OECD study, in which Finland and Norway participated, along with Japan and France, to examine how social research could be optimized to support political decision making and planning. Some termed this development as outright "planification" (Pollak, 1976; Wagner, 2008).

Planning processes were suspended in the 1980s and 1990s, following state steering reforms aiming to better prepare states as globally competitive knowledge economies. The steering reforms were aligned with the socioeconomic changes shaped by neoliberalist tendencies and globalization as a spatiotemporal restructuring of social practices. This transformation affected thoughts on how to prepare for the long term, implying that rigid planning does not provide an adequate way of dealing with the contingent future (Kettunen, 2019).

In higher education, budgeting and planning were widely used to secure systemic continuity while managing institutional expansion and labor market relevance through short- and medium-term goals. A variety of plans were enforced in education and research, including periodic plans that extended beyond budgeting and addressed the labor market's needs. Planning in its previous forms has been abandoned, while continued efforts have been undertaken to develop anticipatory methods and databases to ensure that educational provision better meets the demands of the future economy. In Sweden, for example, the state-led rational planning of higher education was critiqued for its disregard of diversity and flexibility (Sköldberg, 1991) and gradually succeeded by self-regulating governance structures (Askling & Foss-Fridlizius, 2001).

Contemporary forms of anticipation cater to higher education and labor market needs, often referred to as "skills anticipation" (CEDEFOP, 2023a, b, c). They have been augmented by new anticipatory rhetoric and techniques, such as the creation of national and regional visions, institutional strategies for various time frames, roadmaps, globally structured initiatives, and other projections (Tervasmäki, 2023). The metaphors of road and roadmaps, for example, have been used in the development of policies in Danish and Finnish higher education, involving various actors in their implementation. These policies primarily address the labor market needs while paying little attention to the aspects outside of this scope, such as the transformative role of higher education (cf. UNESCO, 2023).

Kettunen (2006) described this transition from traditional planning mechanisms to the contemporary repertoire of anticipatory actions as the emergence of "a new kind of planning ideology." This shift has created a niche for a novel type of "consultocracy" (Gunter et al., 2015; Ylönen & Kuusela, 2018), marking a change in the Nordic culture of decision making from a corporatist model between the state and the universities to one shaped by

various actors including think tanks and interest groups (Strang, 2020). At the center of this shift are diverse arrangements of knowledge creation raising questions about whether certain interpretations of the future become privileged or even dominant—and, if so, based on whose knowledge and expertise they do so. This construction of policy futures, as Moisio (2018, p. 28) describes, could be perceived as a process of semiosis, where "a given imaginary, or set of imaginaries, takes the form of a dominant imaginary, [and] begins to re-orient economic, cultural, and political strategies and related practices."

All of the above concepts of the future and its anticipation have a common starting point in that they all seek to reduce uncertainty about the unknown future and make it manageable or at least predictable. This management of the future seems to be both a constant need and an objective of society. Therefore, anticipatory practices, such as the creation of visions and roadmaps, fulfill certain societal functions through the shaping of expectations and the provision of an orientation for social organizations (see Appadurai, 2013). These practices are anchored in social structures and constitute a central element in political decision making (Aukyt et al., 2019; Beckert & Bronk, 2018). In higher education, such practices have become staples of contemporary policies and have mobilized a series of strategies often destined to increase the competitiveness of higher education. These anticipatory processes, even though they are often proclaimed as being participatory by nature, can constitute normative mechanisms obscuring the boundaries between visions, policies, decision making, and implementation.

Articles of this Special Issue

The contribution of this Special Issue is to rethink the temporal scope and the width of perspectives in higher education policy analysis. Insights derived from policy analyses usually address past and present solutions and their implementation, often overlooking the inherently future-oriented nature of policymaking. This disparity suggests the need for more elaboration on how policies seek to forge future actions and outcomes as well as how future projections and imaginaries shape the contemporary governance and development of policies. This orientation in research would entail unfolding the spectrum for conceptual and theoretical underpinnings, and new engagement with empirical data.

In higher education research, there is a certain consensus that HEIs follow historical traditions and trends while disposing of globally circulated ideas (e.g., Fägerlind & Strömqvist, 2004; Geschwind & Pinheiro, 2017; Välimaa, 2011). Some trends in higher education in Nordic countries and internationally can therefore be discerned. They are implicated in how HEIs operate today and what possibilities they have. In his article on Norwegian higher education futures, *Ivar Bleiklie* identifies two historically grounded scenarios: an academic excellence scenario and a national service scenario. He distinguishes five developments underlying these scenarios.

Managerialist governance reforms have swayed HEIs globally, while their institutional stratification has been more moderate and regulated through education policy in Nordic countries. Reforms increasing institutional autonomy have been undertaken, albeit to varying extents, and coupled with demands for accountability (Kivistö et al., 2019). Generally, neoliberalist and new managerial tendencies imply an increasing convergence between higher education systems, while comparative analyses also illustrate significant variance in governance practices among Nordic countries (Capano & Pritoni, 2020). An analysis of the implications of such governance reforms and universities' changing autonomy is advanced

in *Susan Wright*'s article, which examines the changes in Danish higher education policy, paying attention to the political visions of the country's future and how the role of HEIs in achieving those visions has been constantly redefined.

The article by *Lars Geschwind* and *Hampus Östh Gustafsson* exemplifies how the development of higher education is shaped by temporal dynamics and future imaginaries, particularly the vision of a knowledge society. Their analysis shows how Swedish public inquiries conceptualize the future through an unknown and complex "knowledge society," shaped by qualities such as acceleration and fierce competition. Several themes emerge from the inquiries, including aspects of technologies, tending to overestimate their short-term impact while underestimating their long-term implications.

The changes in the deployment of anticipatory practices, including planning, were reflected in multiple ways in Nordic higher education. In Finland**,** as *Johanna Kallo* and *Jussi Välimaa* write, such plans for education and research were discontinued in conjunction with the state steering reform in 2016 and striving for new kinds of long-term visions and roadmaps for anticipating and responding to future uncertainties. Since then, the anticipation of educational needs has continued to underpin contemporary strategic choices affecting the allocation of key resources and the population's educational level in the long term. These practices were then augmented by the enactment of visions and roadmaps, drawing actors into the coproduction of future imagining. These visions are often proclaimed as participatory but are in fact used to realize predetermined goals and path-dependent policy lock-ins linked with political agendas in a way designed to render consensus possible.

Globally, in the field of education, there is a plethora of visions, including long-term goals and visions that are geopolitically shaped and multi-scalar by nature (Rizvi et al., 2022), usually promoted by intergovernmental organizations, such as the United Nations (UN) organizations, the European Union (EU), and the Organisation for Economic Co-operation and Development (OECD, 2015; Robertson, 2022; Shahjahan, 2016). UN member countries have adopted global goals for 2030 to achieve sustainable development by addressing worldwide challenges. *Bjørn Stensaker* and *Hege Hermansen*'s article analyzes the role of Nordic HEIs in implementing the SDGs through its Higher Education Sustainability Initiative. They examine the translation of these goals into selected HEI strategies and establish that all of them, at a higher level of abstraction, reflect the SDGs, although they take on varied styles of adaptation in doing so. This range of variance extends from symbolic to strategic adaptation, and the underlying differences may be ascribed to how comprehensive or specialized the HEIs are.

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