The Education and Practice of Futures Studies in Estonia

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The aim of this case study is to analyze the historical and current state of the education and practice of futures studies (FS) in a country that was once a member of the Soviet Union: Estonia. There are other countries in Eastern Europe which used to be or currently are in a similar situation to Estonia, but futures studies developed in different ways, because politics and economies were driven by different strategies or interests, and futurists emphasized different aspects of their research (either the theoretical or the practical, along different paradigms). In certain countries, like in Estonia, FS first achieved scientific (and educational) success after the political change of the early 90s, but this was followed by a long way down to a secondary (backing) position. It seems that an optimal share between education and practice may lead FS out from the pit in Estonia, and in other countries, too.

Keywords: futures studies, forecast, education, research institution, Estonia

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1. Introduction

One of the most developed and widely known characteristics of North-European countries is their considerable investment in education: Denmark, Sweden, Finland and Norway are among the top five investors in education as percentage of GDP (see Figure 1). These countries recognized that the more money they spend on schools, universities and higher research centers, the better their workforce becomes – more innovative, intelligent, thoughtful, and future

oriented. Future orientation is taught and researched in higher education in Finland, but in Sweden, in Denmark, in Norway and in Estonia we can also find specific futures research facilities. For example, there are full time PhD programs focused on foresight and futures studies in Denmark and in Finland, in the latter there are even specialized master programs (Acceleration Studies Foundation 2016). But there are countries which used to have futures studies institutes, but for some reason their budgets have been cut or completely transferred to serve other departments or institutes. The aim of this study is to explore the current situation in Estonia by revealing the historical reasons for the state of future studies and possible future scenarios. The first research question is how are futures studies taught and researched in Estonia, mainly in higher education.

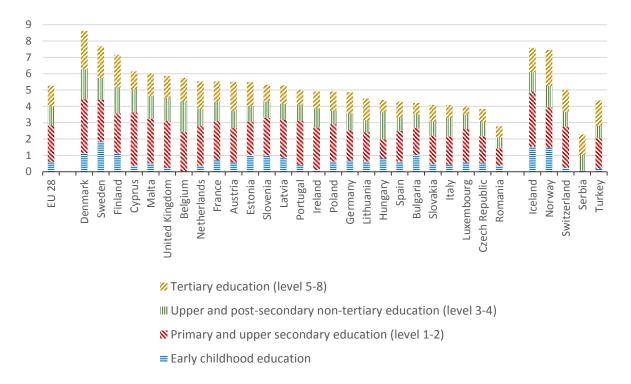


Figure 1. Total public expenditure (% of GDP) on education by education level and country, 2014

Note: no data were available for early childhood education in Belgium and erimary education in Serbia

Source: Eurostat 2017

Futures studies is a social science that deals with trends, conditions, events and turning points in future societies and economies (Nováky 2006). In the Nordic countries, there are different institutes or associations for futurists, and there are also world organizations. But apart from

teaching people to be future oriented, and conducting research on the future in order to uncover some of the possible, expected or unexpected, implications (for example, in technology, in economy, or in gender roles), it is useful to put it in practice as well. Ministries, departments at companies (of strategy and planning) or other organizations may find applicable approaches and methods in futures studies, which they can utilize in their everyday work, or in occasional situations. Application-wise, there is a ministerial committee at the Finnish parliament that discusses future problems and opportunities for Finland (Eduskunta Riksdagen 2017), while in Estonia, futurists were directly involved in elaborating political-economic scenarios after the political change in 1991 (Terk 2001). Furthermore, there are non-profit associations of futurists that provide reports, research and foresight, for example the Millennium Project, an independent global futures research network and think tank (The Millennium Project 2009). This raises the second set of research questions: how and when are futures studies used in Estonia for practical forecasts and foresights? Are Estonian futurists still employed to help national politics? Do companies or organizations hire them to work out scenarios?

As an individual science, futures studies appeared only a few decades ago, in the 1950s. It is rather a young science, thus there are no complete or clear theories and paradigms on which all the futurists (futures studies researchers) would agree. Although some international organizations (e.g., World Futures Studies Federation, World Futures Society) exist that connect the experts and organize conferences for them, the research centers work in isolation, locally, and usually as a part of other departments. A science is indeed more acceptable and reliable if the main theories and paradigms are clearly crystallized. However, being a young and interdisciplinary science, futures studies is continuously varying and re-shaping its theories, and that suggests classification cannot be too sharp. How to these theories and paradigms shape Estonian futures studies? To understand this, it is important to discover the various futures studies approaches worldwide, in education and in practice alike.

By answering these research questions, this work contributes to the unification of futures studies and helps to classify one of the North-European countries, Estonia, using the dominant paradigms and approaches.

The following section provides a literature review which introduces the different futures studies paradigms. The methods used in this study are discussed in the third section, with detailed explanation about why these methods where chosen (including a short introduction of the country, and some futures studies definitions). The section on findings presents and explains the results of the paper. The final section concludes the study.

2. Literature review

By the second half of 20th century, philosophy had gone through an historical evolution of hundreds of years. The different theories and paradigms in mathematics, physics, astronomy etc. similarly developed throughout the ages. In the 19th and 20th century, a scientific revolution occurred in physics for example, when the Newtonian concepts had been passed by positivism (Mach, Einstein, Planck), post-modernism (Heisenberg, Schrödinger), post-positivism and other ideologies (Artigiani 1993). According to Artigiani (1993), post-modernism and contemporary sciences can help society in inventing new ideas and adapting, and that would ultimately lead to a new set of values in post-modern society: uncertainty, complementarity and randomness.

Funtowitz and Ravetz (1994) appraise the question of modern science a bit differently. They believe that diversity and hegemony (in our society) leads to emergent complex systems where individuality, consciousness, foresight and morality help innovation. Furthermore, cyclic trends occur both in human history and in nature from time to time, and though Western cultures consider themselves science-based and consequently objective (ordinary), the unforeseen changes are those that keep civilizations developing (emergent).

The early years of futures studies were dedicated to long term planning. Kahn and Wiener (1967) wrote a methodologically carefully developed, widely accepted and emblematic *prognosis* about the upcoming millennium in 1967. But there were other futurists, too, who tried to pre-calculate the trends and foretell the state of economies, resources or other aspects of civilization. Yet these *prognoses* all failed to come to reality, and that caused a severe distrust in forecasts and a crisis in futures studies paradigms (Hideg 2012). This made futurists reconsider or re-evaluate their roles and possibilities, and change paradigms.

One of the first futurists who distinguished technical-analytic and organizational-social futures studies was Linstone. In his social approach, he considered complexity and alternative future ways to be the elements of future, but he still remained a positivist (Linstone 1989). Bell (1997) extended this idea, claiming that society is formed and built by its individuals, and he thus aimed to depict futures studies as a critical relativist science. An advanced representation of this theory belongs to Masini (1993) who first suggested to use the word "futures studies" (instead of futures research), and looked at it as a construction of culture and society.

Dator (1996; 1998) summarized the outcome of the findings of previous ideas by saying that futures studies should help people in a practical way (in agreement with Masini), not in a disciplinary one (in disagreement with Bell). He started to research emergent themes that can

be thought as the first sign of the evolutionist paradigm (Hideg 2012), albeit this definition had been used by Mannermaa (1991) in another context: society's objective and subjective thoughts that form future systems. Therefore, Hideg (2012) states that the evolutionist approach is one of the currently applied futures studies paradigms.

The other is critical paradigm (Hideg 2012). This is based on the works of two other futurists, Slaughter and Inayatullah. Slaughter (1989) believes that futures studies affects people's way of thinking, and through that their actions, which gives it a critical role. Inayatullah (1990) suggests the deconstruction of the top-down way of thinking, by starting at the social level and digging down to cultural foundations.

Nováky (2005) concludes that in the evolutionist paradigm, changes are generated by the external environment, but internal actors effect its development; while in the critical paradigm, past and future are simultaneously parts of our present, laity actively participates in its forming, and the question is what kind of future alternatives can be described in our present (and it is irrelevant whether some of those become realized or not). Although Hideg's (2012) work, 'Futures Studies Paradigms', logically and clearly classifies futurists' work and theories into these two (and a third, see below) paradigms, she herself argued that these paradigms are not conscious: futurists are not aware of their own paradigms (Hideg 2014).

Rather than sticking to one class or the other, Hideg (2012) also described an emerging and continuously developing paradigm called the integrated paradigm. This is based on the interconnection of theoretical and practical futures studies. Theories, methodology, knowledge and hypotheses are taken from theoretical futures studies, while applications, the know-how of making forecasts and foresights is provided by the practical side in this paradigm. Consequently, the integrated approach is more flexible, and combines the strengths of each side to further develop previous futures studies paradigms. A key goal of this paper is to identify the local futurists' dominant paradigms in Estonia.

3. Methods

The total population of Estonia is slightly less than 1.5 million. Its economy is based on a few primary products (mainly oil shale and timber), on intangible products (software, smart applications) and on services (most of all ICT, research and e-services). It is worth mentioning that this country has the most start-ups per person in Europe, which describes the focal point of Estonian economy perfectly (The Wall Street Journal 2017). As it is a post-soviet country,

capitalism and modern Western economic-political practices have been implemented only a couple of decades ago, in 1991. This means that the changes and development in the economy happened much faster in this region, avoiding some of the main fallacies of capitalism that Western Europe and America could not, but having much less experience in competitive markets. Subsequently, futures studies were absent before 1991, only a strictly regulated version of economic planning was created every five years, supervised by and harmonized with the Soviet central planning committee (see the next section).

However, even in the Eastern bloc, high-level academic scholars and researchers were allowed to examine Western scientists' works, and gain knowledge and experience by comparing it to the Soviet works. Although these researchers were handled in a special way, they had wider rights to travel, but they were closely controlled to ensure that they do not stray from Soviet ideology. This means that the availability of such Western scientific experience was constrained, and could not be publicized without official consent. Furthermore, futurists in Estonia and in the other relatively small Northern countries have always been working at different companies or ministries, and they conducted their futures researches as a part of their projects. Thus it has always been important to work out practical predictions.

For a better understanding of different forecast methods, it is useful to shortly present some definitions drawn from Nováky (2003). First, futurists make a difference in method selection depending on stability conditions. In stability, the future is easier to foretell because it is a simple continuation of past and present. Therefore, mathematical and statistical methods (like trend extrapolation, linear modelling or scenario writing) perform well. The early futures researchers relied heavily on this approach when economic crises were very rare, and prognoses were reliable (see, e.g. Morgenstern's economic prognosis developed in 1928; Nováky 2006). In instability, the role of unexpected, uncertain, unforeseeable factors is much higher, and only more complex and creative techniques may lead to satisfactory forecasts. Such creative methods are chaos calculations, evolutional modelling, participatory methods (for example workshops), scenario writing. These belong to the *futurology* approach, which encompasses visions, predictions, projections and foresights. It puts more emphasis on qualitatively different future alternatives compared to prognostics, which highlights time-spans (or durations) and probabilities.

Scenario planning is one of the most famous and widely used futures studies methods (Kristóf 2002). It was made famous by the oil company Shell that successfully managed to avoid bankruptcy in the 70s when the energy sector suffered a crisis from increasing oil prices. These scenario alternatives were the key, because Shell prepared itself by creating alternative

visions and action plans according to the different possible future changes and economic situations. As it was presented earlier, scenario planning is a useful method both in economic stability and instability. But Shell is only one example, many more companies and ministries use similar planning strategies.

Scenarios are usually worked out in detail, and documented carefully to make adaptation easier in case of emergency. On the other hand, the circumstances of creation and implementation processes are less clear and documented. The published scenarios do not (necessarily) contain information on the project team's education and experience on scenario planning. Regarding education, applications do not show whether professional futures studies (or more narrowly scenario planning) is taught at any universities or other institutes. Nevertheless, in a study that collected online data from 53 firms, two thirds of these firms used scenario planning, making it the most widely used futures studies method (Nováky 2014). How can those who write scenarios learn the correct usage?

Qualitative research methods are appropriate for the goals of the paper. Since the objective is to discover the status of futures studies in Estonia in education and application, information is needed about the first appearance of futures studies; its development from the beginning to the present; its role and reliability in practical situations (projects, applications); the way it is taught as a course at educational institutions; its possible role in the future; and finally, what the dominant approach regarding theories and paradigms is.

The official language of Estonia is Estonian, therefore official documents and historical data are rarely available in English. In order to understand the current situation of the Estonian Institute for Futures Studies, the currently running projects and its appearance in education, which are partly available in English on different Internet pages, I searched for sources of information about early years. I found that the best way to discover the early development of futures studies in Estonia was to conduct interviews with those who had participated in its foundation. This is a very special topic, and futures studies (in such a small country) is researched only by a few people: the Estonian Institute for Futures Studies only had eight colleagues in 2015 (Estonian Institute for Futures Studies 2015). Thus, the number of interviews in international workshops and projects, so I argue that their experience is the most relevant to the questions of this paper. One interviewee held the executive position at the former Futures Studies Department, and later became a project manager and professor of future studies and strategic management at Tallinn University, and a former futures researcher at the Estonian

Institute of Futures Studies. Because of the special topic and the relevant persons being interviewed, the main findings of these two interviews already show saturation. However, other members of the institute may be interviewed to validate findings.

The structure of the interview was simple. Introductory questions were asked about the first appearance of futures studies in Estonia, the interviewees' personal interests in it, and the main approach used in the early years (historical questions). Secondly, questions regarding recent projects and education were discussed, what people's opinion was on futures studies and forecasts, and how the cooperation between futurists and colleagues during shared projects evolved. Finally, closing questions focused on their opinion about the future of futures studies, and something they would have added that they considered important and unspoken about.

The interviews were conducted in April and May 2015. The respondents proved to be open and willing, and although the time was short, their full and circumspect replies answered more questions than had been directly asked. Both respondents spoke English well. If some points were unclear, those were clarified shortly. In a research like this, where most exact descriptions of feelings and emotions are not part of the subject, a narrower vocabulary does not worsen data. Only one interviewee had been recorded (and the record transcribed), and both respondents gave their oral consent to me to use their interviews for research purposes.

The Estonian Institute of Futures Studies is (as of May 2015) a department of Tallinn University. This means it runs in accordance with university regulations, and the dean of the faculty and the rector of the university are responsible for its work. Nevertheless, the institute has independence to some extent, its researchers have the right to decide (on a professional basis) what reports and projects should be elaborated. Although the exact location and the look of interiors of the institute or of any other futures studies centers barely have a direct or significant effect on education or practice, I spent some time on field observations to analyze the working environment of local futurists.

As of May 2015, the web page of the institute contains information about the main fields of research, some recent projects and a few archival documents. These have short English descriptions, only one or two are uploaded and freely available in full. I searched online first, and when I realized that sufficient data is available, I decided to conduct the interviews with a focus on other questions, but not on current projects. But I was interested in their personal opinion on these projects, so I asked the interviewees a question in this regard. The answers pointed towards projects that were not described in detail on the internet. The online research also helped me in clarifying Estonian names which were connected to futures studies and/or mentioned by the interviewees.

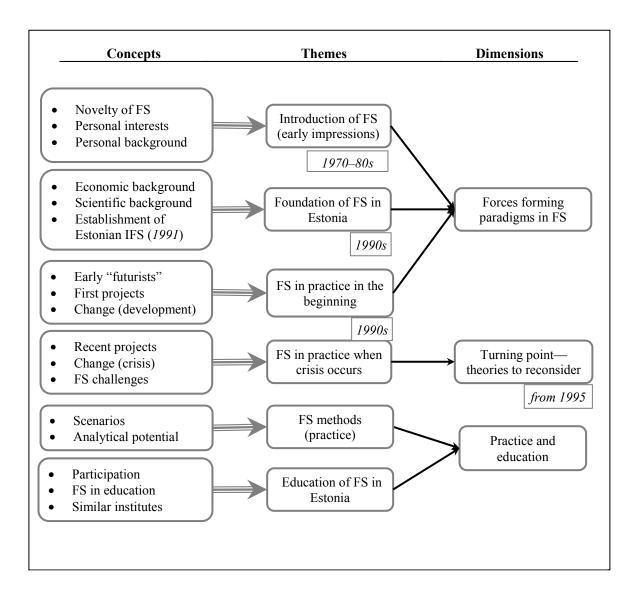
Having conducted the interviews, I started the coding process. I wrote broader codes first, and then I narrowed down the ones which I considered too general and unpunctual. The emphasis in the two interviews differed sometimes, but the respondents never went far from the topic, and they knew each other, therefore their interviews validated one another.

4. Findings

The historical background of Estonia highly influenced people's opinion on planning and forecasts. The economy and industry of the Soviet Union—and Estonia as a member—was based on precise *prognoses* and plans. But the SU competed against the Western bloc, and refused to accept or implement Western knowledge and technology, mainly for ideological reasons. Only certain groups of ministers, officers and scientists were allowed to analyze Western thoughts (and find the weak points to beat them). In such circumstances, Western futures studies seemed an interesting and exciting science.

The interviewees mentioned two names who first introduced futures studies in Estonia to PhD students in psychology: "It was related to academic sciences, because Lembit Valt and today's mayor of Tallinn, [Edgar] Savisaar, they worked at the Department of Philosophy at the Academy of Sciences this time. So there was a study for... let's say in our sense, PhD students as a part of philosophy, they introduced also this global thinking stuff." Both respondents argued that they had first encountered futures studies during their university years (in university brochures, PhD courses etc.). But this science was never officially supported in the Soviet era, therefore it was institutionalized only after the economic-political change (shift to capitalist democracy) after the Soviet Union collapsed.

Figure 2. Gioia-diagram of education and practice of futures studies in Estonia



Source: author

The interviews revealed that it was not only its novelty that made futures studies interesting, but it also generated academic discussion about questions that had never been contemplated before. When I asked the interviewees what had made them choose futures studies as a profession, they both mentioned that their educational and professional background was in management and business strategy (and those areas have a lot in common); besides, they both found futures studies something special and mysterious. Therefore, they decided to accept the offered positions at the newly established Estonian Institute of Futures Studies: "And the IFS was established in 1991, and then I was invited to this institute from the beginning. Previously I was working in a management institute in Tallinn, but mainly... the main staff went to the FS, we all came from this management institute, actually. So, we started in 1991, and Erik Terk was the director of this IFS." This was their best choice to continue to work in futures studies, because the former, centralized academic institutes and research centers of the Soviet era were no more: "All the system of scientific work actually was centralized by the Academy of Sciences, which used to be in all socialist countries. But after getting independence, the system was restructured, and all science and research institutes, joined universities, and there is no Academy of Sciences as it used to be."

There were new challenges to face. In the new system, futurists were asked to elaborate scenarios for Estonia, in order to prepare the country for different realizations of future alternatives. Many scenarios had been written, and one of them (mentioned by both respondents) was particularly punctual, for almost all of its *predictions* came into reality in the way they had foretold it. The previously mentioned background elements, their personal interests and the early successes with the first projects highly influenced their scientific (theoretical) approach to futures studies. In Hideg's terms (2012), futurists in Estonia worked along the evolutionist paradigm, and considered it important which of the created scenarios would be realized.

Yet after the first years of independence, from 1993 onwards, politicians and managers were occupied with everyday problems, and tried to resolve tasks in the short run, as one of the respondents told that "nobody was interested in long-term future forecasts." According to the other interviewee, this distrust lasts ever since, and she highlighted the reason: "the environment is changing very fast, and it is very hard to foresee, to anticipate or to predict something, at least in longer perspective." Consequently, governmental support has diminished, and the Estonian

Development Fund finances were cut to futures studies projects. Less money and fewer forecasts led to a recurring political meanness. The following quote illustrates this crisis well:

In Estonia, there is not very much trust in those vision-like scenarios. And the situation in general, in 1997 or second part of 90s was actually quite different from today, because we also saw and was predicted [by] evolutionists that all those developments are becoming faster, and uncertainty is growing very rapidly. But this time it was not so obvious like it is now. Really, everything is changing so fast, that it is very hard to see forward. And in education this always is the question, how education can contribute to future development. The education systems are quite conservative, and they should be, because they keep traditions as well. And I think the scenario work today is much more difficult because everything is changing so fast and uncertainty is very-very big. And of course, globalization has developed deeper and deeper and faster and faster. Look at how the events far away from us influence us which wasn't the case in the mid 90s of course. Let's say those developments in Africa and Asia, China... this was not the case in this time.

The reduced budget in futures studies made it necessary to restructure, and although it started in 1991 as a separate and individual institute, the IFS was incorporated into Tallinn University in the 2000s. Furthermore, the institute that is working separately for the time being, is soon to be merged with other departments. However, projects did not stop, and even if some of the first members (futurists) had left the field of futures studies, many others wrote scenarios for ministries or private companies. An example told by one respondent is 'Estonia 2010,' in which 'peripheral Scandinavia' has been realized (it was the most probable scenario); another example is a longer-term task, a continuous risk financing and venture capital research for the Estonian Development Fund.

The respondents agreed on the role of futures studies for public missions. As one of the respondents stated, futures studies in politics is rather unofficial, "they wanted numbers, not options" (scenarios). The other interviewee felt it more to be a question of inner crisis, because futurists cannot provide evidence, but visions that are poorly beneficial in practical situations:

But I think the problem is that it is difficult to apply in the practice the results of those analyses which are partly based on historical data and partly on future visions. It's really difficult to say e.g. to the government "please, support us in building up scenarios for Estonia's future economy or culture or whatever, and you will certainly benefit from that!" I cannot see that! In our days, when everything is changing so fast, including governmental bodies and enterprises, how could they actually benefit? Especially because everything is changing so fast, and there are too many factors which affect the objects you can prepare scenarios on, whether it is my personal future or an organizational future or a country's future. It is very hard, or say impossible, to consider all those factors. Maybe something happened in China, and tomorrow there will be a change.

In regard to business, respondents were a bit contradictory whether futures studies were beneficial for any companies in the market or any ministries (government). One claimed that the cooperation between the practical world and science went very well and the business community—with and through the media—felt it fruitful, with a significant impact on real life. The other interviewee mentioned a lack of benefits as it was quoted in the previous paragraph. But the same interviewee later expressed that maybe companies could also utilize some methods if they owned enough analytical potential (data):

Those which are working globally and have real analytical capacity. I think they should have some visions at least, or alternatives. But what is important here is that they really knew everything about their global markets, and secondly, some of them are maybe so powerful that they can influence those markets. But it is not the case in our enterprises which are very small. And of course, future thinking and methods could be applicable to big companies, which should have some kind of visions and data, but it is really... it should be a very good analytical capacity ... But we don't have this kind of capacity. It is also problematic, we can ask: who could benefit from it?

The responses show some uncertainty in the present and near future role of futures studies in Estonia. Regardless, if it is derived from people's distrust or customers' lack of benefits (or both), apparently, this science needs some refreshment or a clarification about its fields of use and constraints. Undoubtedly, Estonian futurists are engaged with practical usage, which is a wise approach because researchers are forced to work out forecasts that most likely are beneficial in financial, economic or political sense. The objective of this paper is not to decide if a change from evolutionist to critical or integrated paradigm would be necessary. However, my personal opinion is that a wider scale of participatory methods—in which laymen are involved to the process of forecasting—would help to restore general trust in futures studies.

As discussed in the section on methods, scenario writing is one of the most popular futures studies techniques used in practice. Both respondents cited as an example a very correct and accurate *prognosis* in an early scenario work from 1993. Neither of them mentioned any other methods, and that is a sign of the level and the goal for all the forecasts they have ever prepared. Assuming that professional futurists use scenarios properly, and only in those situations where scenario writing is logical and reasonable to use, either the possibilities and resources were quite scarce, or there hardly were situations where creativity and knowledge would have been more important to be used than other types of forecast methods. (The examples they mentioned were scenarios for city development, fishing of the Baltic Sea, logistics and transport from Eastern to Western Europe, the impact of Rail Baltic railroad from South to North.)

However, scenarios may contain many other methods as elements, and some much more creative and reliable forecasts than *prognoses* and *predictions* of the earlier years. Retrospectively speaking, Terk (2013) highlighted in his case study of the 'Estonia 2010' project that complementary qualitative methods are always needed besides quantitative calculations in complex networks. More precisely, a qualitative scenario description based on calculations can be most useful for political or business decision makers. Since qualitative methods always contain personal views, and the essence of the scenario technique is to motivate people to choose their own preferred way of development, this again proves the Estonian futurists' evolutionist approach.

The analytical potential is a further aspect. According to one respondent, databases and capacity to analyze them are necessary for successful and continuous futures research. On the other hand, a sufficient number of data resources (companies, people etc.) must be used in order to make reliable forecasts:

Very big international analytical bodies like the OECD and European agencies, they're doing something like that. They try to forecast skills for example. And they are powerful in this sense, their analytical potential is really great. In Estonia, we don't have this kind of analytical capacity to add very much. Of course long term forecasting could be very problematic. And maybe in those exercises, more emphasize should be put on visions rather than on trend analysis or other quantitative parts.

[...] Here in Estonia, we mainly have smaller enterprises. Maybe bigger corporations have those kinds of scenarios. Those which are working globally and they have real analytical capacity. I think they should have some visions at least or alternatives. But what is important here is they really know everything about their global markets, and secondly, some of them are maybe so powerful that can influence those markets. But it is not the case for our enterprises which are very small. And of course, future thinking and methods could be applicable to big companies, which should have some kind of visions and data.

Although this idea suggests that "correct" forecasts can be created mainly by quantitative methods, the last sentence and what the other interviewee told indicates that futurists' role and tasks can and should be to combine quantitative and qualitative methods in real-life projects.

Critical futurists tend to consider "correctness" as *one* of the goals of forecasts, and not as the *only* or the most important objective (Nováky 2005). Furthermore, critical paradigm (as opposed to the evolutionist) highlights the importance of the forecast process and participatory foresight. According to this approach, to generate certain indices and "most-likely" trajectories of trends is secondary in exploring the future.

The education of futures studies in Estonia has changed much in the past two and a half decades. Previously, as it has already been shown, some future philosophy was taught for

doctoral students in the Soviet era. When the political system changed and certain forecasts seemed to be reliable and useful, different courses were organized for university students. Some of them focused particularly on futures studies (Futures Studies Methods, scenario building), some were built in other subjects (Strategic Management, spatial/city planning). The interviewees remembered that students had liked dealing with future questions. What is more, Futures Studies methods training took place in online environments: it was taught as an e-course in cooperation with Finnish Futures Research Center, situated in Turku, Finland:

We cooperated with the Finnish IFS, and we ran this course as an e-course. We had students also from Hungary. It was managed by the Finnish IFS. It was entirely an e-course. We had this course for many years. It ended because the curriculum for sociologists had been updated, and all this European standardization began, so I ended this course. And my workload was rising here, too, so... But that was quite many years ago, actually. I think I ran this e-course with Finnish colleagues altogether for maybe... 6-7 years. It is quite a long time, actually.

Yet with a general distrust and neglect of forecasts, it is difficult to look at futures studies as an applied (applicable) science. If people do not believe in long term planning any longer, what can be the role of futures studies?

I think all the way of thinking in the field of FS and these old methods like scenarios, I can see that it is still relevant for teaching, for students and in many ways, as I said, the way of thinking and behavior. And also it is a possibility to bind together global development centers and these kinds of things. [...] It is very hard, or say, impossible to consider all those factors [affecting possible objectives of scenarios]. Maybe something happened in China, and tomorrow there will be a change. That's why it could be a very good analytical exercise, maybe in our days for teaching in the first place, not for practice, especially for enterprises."

The other difficulty is that qualitative methods are hardly measurable and mainly indirectly valuable. By saying so, I mean that if futures studies have only one prosperous area of usage, which is educational exercises in social sciences, how will it prove its relevance to business, law or other fields' students, since they will never meet with it? If teachers concentrate on certain methods (that students do not accept or do not trust), will it shape their way of thinking towards a truly more future-oriented approach? It would require further research to give satisfactory answers to these questions. But the interviews reinforce the claim that futures studies in Estonia does not live its most glorious days for the time being: "[... the Estonian IFS] joined the university because of economic reasons. It is very difficult to find these kinds of

projects. And the market for these kinds of projects in Estonia is very-very limited, if it exists at all. Maybe the future of FS is really to come back to the university."¹

5. Conclusion

Estonia established an individual institute for futures studies as soon as the country gained independence from the Soviet Union. The scenarios and forecasts that were elaborated in the early years proved to be useful and reliable, but urgent needs of the economy and politics turned people's interest away from futures studies, and it started on a path to the crisis of mistrust and unreliability that futures studies are currently facing. In these circumstances, a change of behavior on people's side, and a change of paradigm on futurists' side would be desirable. These conclusions are drawn from the findings of online research and interviews with former futurists who were deeply involved in academic futures studies in Estonia.

The research questions asked at the beginning have been answered. Futures studies has become less significant in both teaching and research compared to the 1990s. There used to be more courses, more projects, but their reliability became questionable in time, and subsequently governments (through the Estonian Development Fund) and companies refused to support research—or at least they decreased the amount of funding. This decrease encompasses the answer for the second question, too: there was a peak in private and public projects for futurists and researchers, but now there is a trough with a lack of money and shrinking independence.

It is worth noting here that a similar decline of futures studies' reputation happened in Hungary as well. Once the soulful devotion and professional work of Géza Kovács, Erzsébet Nováky, Éva Hideg and other Hungarian futurists raised futures studies among the other sciences at the (Hungarian) National Academy, and created various courses and research centers at universities. This indicates significantly better scientific achievements in Hungary than in Estonia. But FS's role has been diminished slowly since the 2000s even in Hungary. Now it exists as a part of other research fields and departments, although still with fully managed courses and an independent Ph.D. specialization.

When I asked the interviewees about the futurists who had had the strongest influence on Estonian futures studies, they mentioned Masini (Italy), Dator (USA) and Malaska (Finland). Their close connection with the latter is self-evident, for the Estonian IFS has long been

¹ Since the interviews, the whole institute has been merged into different departments of the university.

cooperating with the Finnish Futures Research Centre. Besides, this theoretical background underlies the main paradigm of Estonian futures studies approach that was identified as evolutionist. Naturally, this does not mean that elements of other approaches (critical, constructivist etc.) would not be present, but the absolute dominance of scenario building as a forecast method shows Estonian futurists' major commitment to practice and application.

And what about the future of futures studies in Estonia? According to the interviewees, it is unlikely that it will regain its past importance in practical usage soon, as it is more of a shaping force to people's way of thinking. But if their participation in governmental and business decisions strengthens, and this future oriented *way of thinking* becomes an advantageous potential, perhaps *benefits* will make stakeholders rely more on futures studies again.

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