

FUTUURI

2017



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FINLAND FUTURES RESEARCH CENTRE - 25 YEARS OF EXPLORING FUTURES

Usually, these types of stories are constructed so that first the difficulties of the beginning are told, followed by the part that describes how they have been solved (the success story part), and in the last part everyone is waiting for the bright future. In the case of FFRC's story is not that straight forward.

I have no personal experience of the first six years of FFRC's story, but the names of first research topics sound familiar: Work and Transition, Scenarios for City of Turku, Scenarios of Environmental Decision-making of Municipalities, Energy and CO2 taxation in Finland and European Union. Work, energy, environment and local and regional co-operation are still important aspects in our current research portfolio of the FFRC.

Building up a new organisation requires enthusiastic people. Unfortunately the driving forces of the first years, Professor Pentti Malaska, Senior Researchers Mika Mannermaa and Anita Rubin have all passed away. All of us at the FFRC honour their achievements and work for futures studies and the Centre.

The numbers of projects, funding and staff increased steadily between 1993–2012. Futures education started in Finland in 1998 when Finland Futures Academy was established.

First EU funded project begun in 2001. Master's Degree Programme in Futures Studies saw daylight in 2005 and in 2011 it was developed into an international program. The academic discipline of futures studies that became reality in 2013 would not have happened without strong support of Rector of University of Turku Kalervo Väänänen and Dean of Turku School of Economics Markus Granlund.

The last four years have been challenging, not only to FFRC but for all universities in Finland. The long economic recession and harder competition for research funding has meant that the growth of the Centre turned into a decrease during 2013–2015. The current situation is slightly improved, so we have hired new (and old) people, have new projects in areas of food, education and training, environment and energy to mention just a few examples. The first new doctors of futures studies are expected to finalize their work this year.

“Our future existence rests on scientific and critical futures knowledge formation, futures education, and development.”

In this newsletter you can read a few of the insightful future expectations of our staff. Personally I think that our future existence rests/relies on scientific and critical futures knowledge formation, futures education, and development; together with new and old partners and customers in the global, connected, changing and international environment.

We have huge challenges to face like digitalisation and big data, environmental problems and climate change, scarcity of resources, the future of work and so on. I hope that we can do this work together. It might be possible that someone utilising AI, invents an algorithm that can anticipate our future; and our staff and I will have to do something else. I myself have thought of the possibility to become a biomass producer. Well, in the longer run I most probably will 'turn into biomass' anyway. Before that happens I want to thank our staff, our partners and friends for the last 25 years, without you there would not be a Finland Futures Research Centre. ●

Juha Kaskinen

Director

Finland Futures Research Centre

“IN 2042 FFRC is a key global hotspot of futures studies employing 80 people. It has just educated the fiftieth Doctor of Future and 400th Master in Futures Studies. Around 2030 diversity of action was finally acknowledged as a profitable strategy and the FFRC became acknowledged of being a forerunner of combatting too narrow specialisation. The administrative officers being centralised to the University headquarters in 2016–2017 were placed back to the centre. The Golden Age of the FFRC began after these periods.

In 2042, the FFRC is still the supermarket of futures studies including shelves for both academics and practitioners. Only luxury products.”

Professor Petri Tapio



FFRC staff having development days at the Radisson Blu Marina Hotel on March 2017.

DELIBERATIVE FORESIGHT

- Co-Operation Experiences from China and Chile

Energy transformations are technological and socio-cultural by nature. Foresight can even be used to study radical changes. Deliberative foresight calls forth all relevant stakeholders.

The rapid pace of technological change accentuates the need for interdisciplinary foresight initiatives across borders. The costs of solar and wind have been falling rapidly in recent years, and by 2050, they may be the cheapest energy sources available. In a 100% renewable energy system, very high shares of solar and wind energy, as well as energy storages, may be in use. Such renewable energy futures can be envisioned for a whole country level and for liveable eco-smart cities.

China - Mission for Clean Urban Futures

China needs solar and wind energy to tackle air pollution, and clean its economic growth. Professor Sirkka Heinonen delivered a Guest Professor lecture in the University of Science and Technology of China USTC in Hefei on "Our Urban Futures through Weak Signals of Media City". Cities are places for promoting renewable energy solutions and mediating citizens' well-being.

The emerging issue of peer-to-peer do-it-yourself society was also discussed within the International Urban Transitions Global Summit in Shanghai in September 2016. The conference gathered researchers, policy-makers and practitioners to discuss the challenges and opportunities of urban futures in transition. Sirkka Heinonen and Marjukka Parkkinen's contribution highlighted the principles of peer-to-peer networks. Decentralised renewable energy invites citizens to produce their own energy, so rigid urban planning systems may have to be reinvented. Interview of Herbert Girardet, member of the Club of Rome, added the concept of resilient cities to this deliberative foresight prospective.

Chile - Pioneer in Latin America

A Futures Clinique was organised at the Chilean Intellectual Property Institute INAPI in Santiago de Chile by Finland Futures Research Centre and Consejo Chileno Prospectiva y Estrategia (CChPE). The Clinique was moderated by Professor Sirkka Heinonen and Project Researchers Joni Karjalainen and Noora Vähäkari, Linda Nerg (Universidad Viña del Mar) and Paula Castro (CChPE).

The event was opened by Sergio Bitar. Small groups of energy and innovation experts worked on the Neo-Carbon Energy project's scenarios Radical Startups, Value-driven Techemoths, Green DIY Engineers and New Consciousness to reflect their significance for Chile in 2050.

Until now, Chile, a pioneer in Latin America, has not featured for its robust renewable energy resources. However, a conducive policy environment has increased investment into solar photovoltaics and concentrated solar power (CSP), and next, the country is looking to transform its electricity grid.

In addition to organising the Futures Clinique, Professor Heinonen was invited to give a keynote in the Chilean Foresight Conference October 2016 to present Finnish experiences.

Toward a Culture of Collaborative and Deliberative Foresight

Digitalisation is stimulating radically new innovations, services, and energy sector practices. The uptake of renewable energy is also expected to generate novel business opportunities from on-grid integration to off-grid solutions.

Our foresight focus in China and Chile is in the study of how economies and energy systems are transforming. Finland Futures

Research Centre is positive towards future foresight and innovation-related initiatives in Asia, Latin America, and even further across borders. Companies and countries can aspire for preferred futures, facilitated by our hybrid foresight processes. ●



NEO
CARBON
ENERGY

The foresight part of the Neo-Carbon Energy Project explores futures based on a renewable energy system through transformative scenarios 2050.

Read more: www.neocarbonenergy.fi/impacts and ty.fi/neofore-en



University of Science and Technology of China USTC in the city of Hefei and University of Turku have a co-operation agreement.



Neo-Carbon Energy World - What Opportunities for Chile? Futures Clinique was organised at the Chilean Intellectual Property Institute INAPI in Santiago de Chile 24th October 2016, jointly by Finland Futures Research Centre of the University of Turku and Consejo Chileno Prospectiva y Estrategia (CChPE).

An Emission-Free Energy Alternative based on Renewable Energy

In a future emissions-free energy system, only carbon neutral energy production can be allowed. Until now, no technical design for a 100% renewable energy system has existed.

Neo-Carbon Energy proposes a set of principles to design a future energy system through the use of solar, wind, short-term and seasonal energy storages. From the electricity generated by renewables, synthetic products can be generated. This solution, neocarbonisation, opens up new options in energy storage, transportation, heating, cooling and the chemical industry.

Explore the Internet of Energy and the technological set-up to learn more at:

www.neocarbonenergy.fi/solution
www.neocarbonenergy.fi/internetofenergy/

DEVELOPING ENERGY EDUCATION IN THE MEKONG AREA

- Finding new pedagogical approaches

With the continuously increasing impacts of changing climate in Laos, Cambodia and Myanmar, there is a strong need to support building sustainable energy pathways in these least developed countries.

Responses to the challenges present in the energy-poverty-environment nexus call for multidisciplinary and situated knowledge and capacities, which are currently lacking in local decision making and research.

Higher education institutions (HEIs) have crucial roles in providing expertise to meet the locals needs in a sustainable manner.

In the Mekong region, the national energy and education policy documents acknowledge a gap in skilled labor, and quality of national level higher education is hindering the economic development of the countries. This manifests especially in energy engineering where research laboratories and teaching methods are largely outdated. Through updated expertise the countries can address both energy access, regional connectivity issues, and climate change mitigation while fostering the local economy and entrepreneurship.

Building Sustainable Energy Pathways

Finland Futures Research Centre coordinates a Erasmus+ funded capacity building

for higher education project "Development of Energy Education in the Mekong area" (DEEM) up until the end of 2019.

Partner universities in Laos, Cambodia and Myanmar are the key beneficiaries of the capacity building action and knowledge transfer delivered from Germany, the Netherlands and Finland.

DEEM project aims to integrate current energy-environment-development nexus questions, such as 100% renewable energy models, drivers of climate change and renewable energy revolution, sustainable energy planning and tools, RE technologies and applications, and transdisciplinary analysis of the causes and consequences of new investments into the current energy education curricula of the partner universities.

The project also aims to enhance partners' capacities in internationalisation of studies and research, scientific publishing and collaboration, and institutional support for project management. New topics and courses are introduced together with participatory pedagogics and novel approaches to teaching, and

in this way ensuring a more sustainable take on the conventional "training the trainers" method.

Quality Research Implemented by a Wide Consortium

Most of the partner universities in the Mekong region have collaborated with FFRC for several years; Royal University of Phnom Penh, Institute of Technology of Cambodia, National University of Laos and Yangon Technological University. Our new partner in Myanmar is the University of Yangon.

European experts to provide training in the project together with the FFRC are Wageningen University in the Netherlands, Europe University of Flensburg in Germany, and Tampere University of Technology in Finland. The first training took place in February-March earlier this year.

Mr. Mika Korkeakoski is the Director of the project, Mrs. Noora Vähäkari acts as the Project Manager, and Dr. Jyrki Luukkanen as the Senior Trainer of DEEM. ●

Piloting Futures Studies in Solapur, India

FFRC and Solapur University in Solapur, Maharashtra, India, have co-operated for "Future Sustainable Energy Challenges", a joint pilot course, for the past year. In February, the plans actualized as an intensive course was held in Solapur over five days of participative methods on understanding futures studies and their application to current global and local energy issues.

The FFRC delegation was greeted with a heartwarming welcome. In the coming August the course will continue with case study analysis and further introduction of the novel energy modelling methodologies.

Further cooperation is also ensured as Solapur University has also inaugurated a Centre for Foresight Studies (CFS) with the institutional support of the FFRC. ●

Students at Solapur University, attending the pilot course.



FFRC CITATION METRICS

Economics, business administration and other social sciences are now increasingly following medical and natural sciences in their publication policies and standardised ways of measuring success. A good paper is supposedly the one that gains lots of citations, right?

It is difficult to compare citations in different fields in a reliable way, as some fields are much more focused in publishing in academic journals than others. Also, articles published several years back have had more time to gather citations than more recent papers. The Scopus database takes these two aspects into account and gives a percentile for each paper based on how well the number of the paper's citations compares to other papers published at the same time on the same field.

FFRC's Top 10% Cited Papers

The following list displays the 23 articles authored or co-authored by FFRC researchers belonging to the top 10% cited papers (in May 2017). Nine of them belong to the top 5% cited. The Scopus database was used as it includes a greater number of social scientific journals than the Web of Science. Google Scholar was not used here as it counts also citations by and to other publications than peer-reviewed papers. Sometimes the fields

attached to specific papers seem a little funny and not entirely convincing. Naturally, the categories are much larger than futures research, typically something like Engineering, Social sciences, Economics, Business administration, etc.

What does the list tell us about core research activities of the FFRC? To me it reflects three major themes in our research: 1) Futures research concepts and methodology, 2) Linkages between the economy and the environment, especially related to energy production and consumption, 3) Corporate social responsibility issues.

These major themes are brought to the context in various empirical settings, such as food, agriculture, regional development, transport, energy production technology, forest industry, social media, ICT and innovation.

Wide Variety of Topics

When I started to go through our researchers' records in Scopus I wondered whether

we would have more than just a few papers in the top 10% cited list or whether I should just list top 20% cited ones, but the list of top 10% kept growing fast. Very many publications had a score between 10–20% and possibly this page would have been filled with references if top 20% would have been listed.

I am impressed about the variety of topics and especially happy about some junior researchers, who start rapidly building their publishing record. Former employees of the FFRC were also checked as long as FFRC was mentioned as their affiliation in the articles. Some recent papers scored well although at first hand the actual number of citations was not that high.

Academic publishing in our field still represents rather long publishing cycles and the potential for gaining citations rapidly is not equal to medical or natural sciences. So, patience my friends – if your paper is not cited the first two years after being published, it might still become a best-seller. ●

TOP 1%

Sun, J.W. 1998. Changes in energy consumption and energy intensity: A complete decomposition model. *Energy Economics*, 20(1), pp. 85–100. [Energy]

Tapio, P. 2005. Towards a theory of decoupling: Degrees of decoupling in the EU and the case of road traffic in Finland between 1970 and 2001. *Transport Policy* 12(2): 137–151. [Geography, planning and development]

TOP 4%

Kourula, A. & Laasonen, S. 2007. Nongovernmental organizations in business and society, management, and international business research: Review and implications from 1998 to 2007. *Business and Society*, 49(1), pp. 35–67. [Social sciences]

Lyytimäki, J., Tapio, P., Varho, V. & Söderman, T. 2013. The use, non-use and misuse of indicators in sustainability assessment and communication. *International Journal of Sustainable Development & World Ecology* 20(5): 385–393. [Social sciences]

Friedewald, M., Da Costa, O., Punie, Y., Alahuhta, P. & Heinonen, S. 2005. Perspectives of ambient intelligence in the home environment. *Telematics and Informatics*, 22(3), pp. 221–238. [Social sciences]

TOP 5%

Mendonça, S., Cunha, M.P., Kaivo-oja, J. & Ruff, F. 2004. Wild cards, weak signals and organisational improvisation. *Futures*, 36(2), pp. 201–218. [Social sciences]

Varho, V. & Tapio, P. 2013. Combining the qualitative and quantitative with the Q2 scenario technique – The case of transport and climate. *Technological Forecasting & Social Change* 80(4): 611–630. [Engineering]

TOP 6%

Hiltunen, E. 2008. The future sign and its three dimensions. *Futures*, 40(3), pp. 247–260. [Social sciences]

Lyytimäki, J., Tapio, P. & Assmuth, T. 2012. Unawareness in environmental protection: The case of light pollution from traffic. *Land Use Policy* 29: 598–604. [Social sciences]

Rikkinen, P. & Tapio, P. 2009. Future prospects of alternative agro-based bioenergy use in Finland – Constructing scenarios with quantitative and qualitative Delphi data. *Technological Forecasting and Social Change* 76(7): 978–990. [Engineering]

TOP 7%

Kuhmonen, T., Kuhmonen, I. & Luoto, L. 2016. How do rural areas profile in the futures dreams by the Finnish youth? *Journal of Rural Studies*, 44, pp. 89–100. [Sociology and political sciences]

Koskela, M. & Vehmas, J. 2012. Defining Eco-efficiency: A Case Study on the Finnish Forest Industry. *Business Strategy and the Environment*, 21(8), pp. 546–566. [Social sciences]

Ahlqvist, T., Bäck, A., Heinonen, S. & Halonen, M. 2010. Road-mapping the societal transformation potential of social media. *Foresight*, 12(5), pp. 3–26. [Economics, econometrics and finance]

TOP 8%

Koskela, M. 2015. Measuring eco-efficiency in the Finnish forest industry using public data. *Journal of Cleaner Production*, 98, pp. 316–327. [Business, management and accounting]

Oksanen, K. & Stähle, P. 2013. Physical environment as a source for innovation: Investigating the attributes of innovative space. *Journal of Knowledge Management*, 17(6), pp. 815–827. [Business, management and accounting]

Tuominen, A., Tapio, P., Varho, V., Järvi, T. & Banister, D. 2014. Pluralistic backcasting: Integrating multiple visions with policy packages for transport climate policy. *Futures* 60: 41–58. [Political science & sociology]

Tapio, P. 2003. Disaggregative Policy Delphi: Using cluster analysis as a tool for systematic scenario formation. *Technological Forecasting and Social Change* 70(1): 83–101. [Engineering]

TOP 9%

Stähle, P., Stähle, S. & Lin, C.Y.Y. 2015. Intangibles and national economic wealth – a new perspective on how they

are linked. *Journal of Intellectual Capital*, 16(1), pp. 20–57. [Education]

Akgün, O. & Luukkanen, J. 2011. Extension of rice husk gasification technology for electricity generation in Cambodia. *Energy Procedia*, 14, pp. 1244–1249 [Energy]

TOP 10%

Joensuu, K., Koskela, M. & Onkila, T. 2015. Social proximity and environmental NGO relationships in corporate sustainability reports. *Sustainable Development*, 23(1), pp. 26–40. [Social sciences]

Roth, S., Kaivo-oja, J. & Hirschmann, T. 2012. Smart regions: Two cases of crowdsourcing for regional development. *International Journal of Entrepreneurship and Small Business*, 20(3), pp. 272–285. [Economics, econometrics and finance]

Vinnari, M. & Tapio, P. 2012. Sustainability of diets: From concepts to governance. *Ecological Economics*, 74, pp. 46–54. [Economics, econometrics and finance]

Vinnari, M. & Tapio, P. 2009. Future images of meat consumption in 2030. *Futures*, 41(5), pp. 269–278. [Social sciences]

Source: Scopus 8th May 2017

"In 2042 FFRC became known as a coordinator of consortia where academic research and change-oriented action were carried out in collaboration with practitioners and citizens. From 2025 onward, FFRC's efforts were boosted by combining own methodological development with AI-assisted tools to crowdsource cognitive and financial input of different social groups. During the 2030s, FFRC was involved in launching a handful of ambitious cross-disciplinary research/social movement initiatives, some of which withered away, others survived. By 2042, art-oriented "Futures Pasts" and teaching-oriented "Futures Minds Initiative" have gathered the most vibrant international community of participants."

Senior Researcher Maria Höyryä

FINLAND FUTURES ACADEMY – a Distinctive Coalition of Futures Studies Experts, Researchers, Teachers and Students

The story of FFA is not a story about structures and organisations, but rather a story about people and futurising minds. The story tells about connecting future-oriented human beings and ideas together. It took some time for us to fully understand the power of networks.

The Finland Futures Academy (FFA), a national university network, was established on February 2, 1998. Our task was to make a change among academic sciences and launch a new scientific discipline called Futures Studies (FS). The entrance was planned to be carried out through presenting FS education in Finnish universities. To reach the target, a strategic collaboration was built up and the Finland Futures Research Centre (FFRC) was selected as the place to be a coordinating unit.

Multiform Learning

In FFA, hierarchical and bureaucratic limits are swept away from collegial and equal co-elaboration when writing up thoughts and ideas about FS and designing challenging new contents for learning. Novices and supervisors work together in searching and finalising the contents that we want to learn and explore.

In 1998 our work materialised as study guides and education plans. Today, we plan, pilot and demonstrate complicated and multiform learning surroundings. Expert interaction is organised for high-quality futures research courses and elective seminars, and research and education training programmes

for graduate and postgraduate students.

The Power of Networks

From the beginning internationalization was always in the picture. Professor Pentti Malaska, the grand-old-man of Finnish Futures Studies dreamt about establishing an international scientific FS organization, the World Futures Academy (WFA), through which the FFA still lives on.

If we stop weaving nets we are dead. The history of FFA is a story of reinforcing national and international connections for the purpose of quality assurance, shared knowledge and concrete co-creation. Weaving nets will never be finished, but – instead – the shape and design of the final product evolves. Increasingly, we believe in network co-operation and have – gradually – become driven by it.

Creating Better Futures

In 2017 FFA is a distinctive coalition of futures studies experts, researchers, teachers and students as network nodes. It is a fragile cooperation facing needs of the members and in meeting the high expectations of even most demanding partners. The focus is on generating better futures by liberating individual

HIGH-QUALITY FUTURES STUDIES RISE CREATIVITY

– Stretch the time scale of futures, and take surprises seriously!

competences. Network actions are driven by future expectations. And flows in the network sometimes turn around: learning is a complicated setting of learners and learning targets. We want to be there for future generations and we want to help students, teachers and researchers in further reinforcement of their potential for creating better futures.

In 2017 FFA makes efforts to keep “all the eggs in the same basket”, just the opposite to our grandmothers’ advice. Hereby, we take a risk by exposing specific values. In 2017 we continue loving nets and networking. We enhance expertise and shared knowledge on all levels and firmly believe in universities with openness, holism and wisdom. There is a world-wide spectrum of ideas that wait for being detected, utilized and shared as collective intelligence. In the world of networks everybody is a winner. ●

BLACK SWANS – Futures Studies Students of Turku

Black Swans – Futures Studies Students of Turku is a student association founded by students of the international Master’s Degree Programme in Futures Studies at the University of Turku. The members of the association are multi-academic, enthusiastic group of highly skilled future futurists. One of the main purposes of the organisation is to build bridges between students, staff and wider networks in the field by arranging meetings, discussions and other leisure activities.

Cooperative Providing Consulting Services

In the beginning of 2017 the Black Swans established a cooperative that provides consulting services as Futures Research Consulting.

– You can learn most about being a consultant by being one, Nick Balcom-Raleigh, one of the founding members explains. This cooperative is a way to cumulate working

experience and to apply those skills and expertise gained through the program, already during the studies.

– We have multidisciplinary educational backgrounds and on-the-ground experience with start-ups, foresight experts, futures research projects, and other key actors in the futures field. Through our cooperative we get to profit from the vast expertise, Balcom-Raleigh continues.

The aim of the cooperative is to help organisations to shape desirable futures.

– We facilitate change, offer new insights and fresh ideas based on our up-to-date knowledge on academic futures research. Let us know what you need and we will help you to solve your futures related problem! ●

CONTACT BLACK SWANS TO LEARN MORE:

blackswansfsst.wordpress.com

[blackswansfsst\(a\)gmail.com](mailto:blackswansfsst(a)gmail.com)

WILL YOU BE THE NEXT EXPERT OF THE FUTURE?

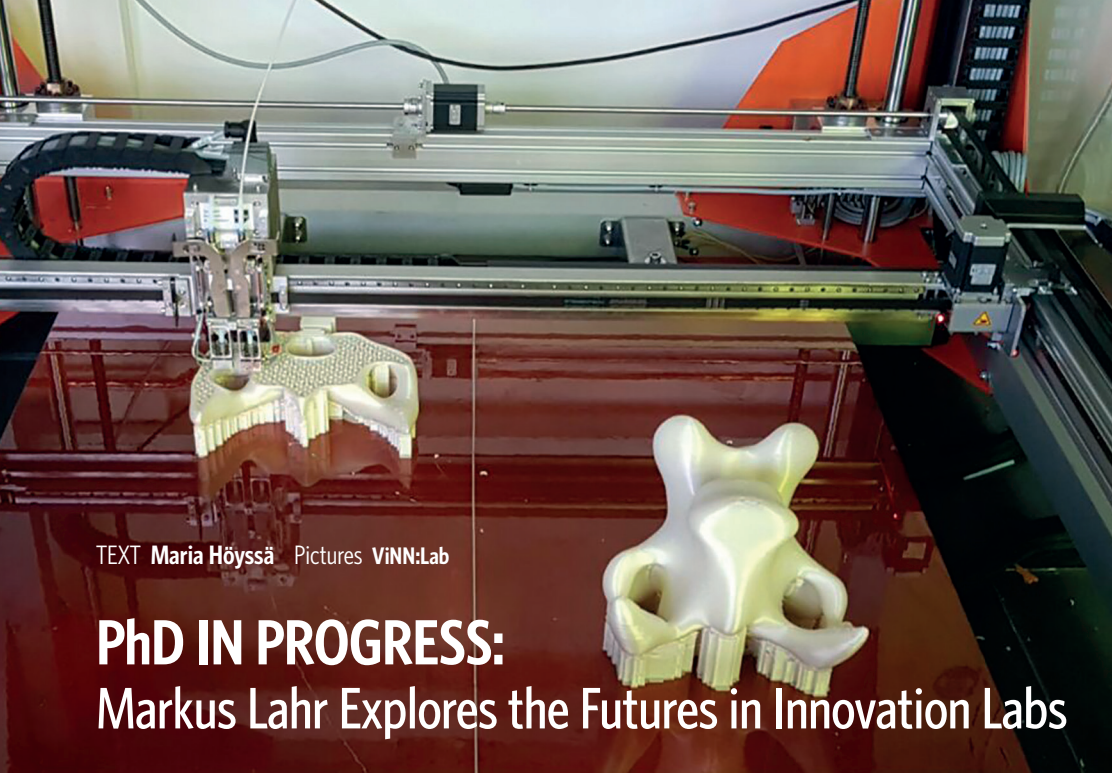
The Master’s Degree Programme in Futures Studies provides comprehensive, multidisciplinary and practical education in the field of futures studies. It is designed to educate foresight experts who help organisations to harness future opportunities and avoid unnecessary risks.

The Programme includes plenty of rehearsal, case-studies and real-life experiences on using foresight methodology. These range from quantitative and qualitative methods to innovative and creative futures design techniques.

Here you will get a versatile toolkit for implementing foresight thinking for the benefit of a given organisation.

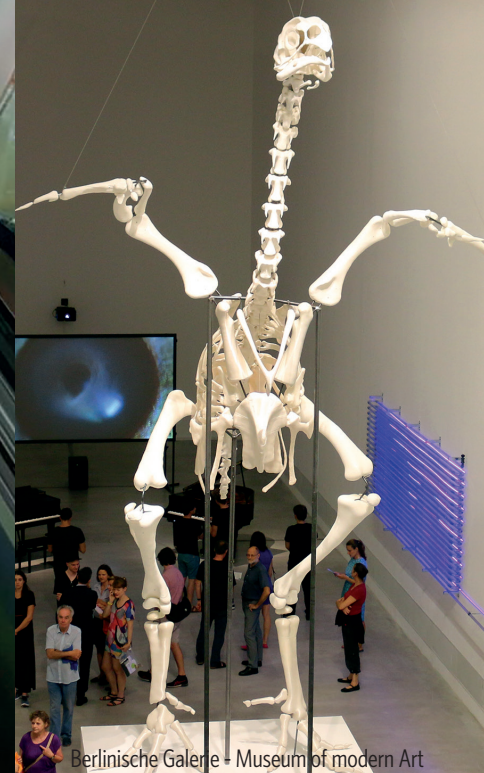
You will qualify to a wide array of expert positions in the strategic and foresight units of private companies and public institutions. The Programme also serves as an excellent basis for building a consultant business.

UTU.FI/FFRC/MASTERS



TEXT Maria Höyssä Pictures ViNN:Lab

PhD IN PROGRESS: Markus Lahr Explores the Futures in Innovation Labs



Berlinische Galerie - Museum of modern Art

Markus Lahr answers the skype call at the ViNN:Lab innovation laboratory that he manages at Technische Hochschule Wildau, Germany. In his other role, Markus is a research associate at Wildau and a doctoral student at Finland Futures Research Centre, Turku. We usually use Skype to have a PhD supervisory discussion, but today I call him to make an interview about the future of innovation labs, the topic of his work and research. As we open the video call, I hear Markus giving some final instructions to one of the ViNN:Lab student employees, before he shifts from managerial to research mode. I ask him to start by telling why futurists should care about his topic.

Versatile Prototyping Technologies

– Well, to give a practical example, laboratory-based methods are a powerful tool to enhance the creativity of the scenario method.

Markus explains that open innovation laboratories are a relatively recent phenomenon. They can be used to develop new practices of participation and co-creation. Doing things with shared tools in a shared space enables interaction between very different groups of people, such as developers and users of innovative products.

– At our lab we are right now experimenting with “mental time travel” methods. We develop a workshop setup that brings you to very

relaxed state of mind. There your envisioning of the future is guided by a moderator posing questions. Another particularly nice recent project was the collaboration with an artist who wanted to raise awareness against industrial livestock farming and genetic manipulation. For my team, this became a practical task to extend the physical boundaries of 3D printing – we tried how big an oversized statue of a chicken skeleton could be. It became seven meters high. We were working together with the artist to translate abstract, conceptual ideas to something that everyone understands.

Participating PhD Studies Virtually

As he lives in Germany, Markus participates some doctoral courses in Finland, joins others virtually and replaces some Finnish courses with respective German ones. His studies have unfolded surprisingly smoothly.

– As I’ve experienced it, the only drawback is missing the spontaneous peer discussions that other doctoral students enjoy. But in terms of guidance, the intensity of PhD seminars and supervisory meetings is more than I expected. And participating to courses, lectures and individual tasks is obviously helping me to process the connections between innovation lab based methods and the methods of Futures Studies. For example, on the course “Futures Research, Methods and Practice” it was really stimulating

to see how and why our group’s Futures Table results differed from the results of groups using Delphi and CLA, as we explored the futures of migration in the Baltic Sea region.

Innovation Labs’ Potential in Developing Futures Studies as a Field

As a researcher, Markus sees two options to proceed with his PhD. – I see new types of labs and creative spaces emerging constantly. Through interviews with some 35 lab managers around Europe, I’m creating a typology of different types of labs based on how they link with different evolving innovation paradigms. This provides an interesting basis to consider the future forms of innovation. However, from the methodological point of view, I’m increasingly excited to explore the potential that the tools created at innovation labs hold for developing Futures Studies as a field. I hope being torn between two research avenues is not uncommon for a PhD student?

We’ve hit the crux of PhD process: making informed decisions in research fronts where knowledge is in-the-making. Markus plans to win the wrestling with himself by writing:

– I’m taking time to finalize a paper from both perspectives this year. This world develops now so fast that the writing process should provide the time and the context to decide which direction shows most promise for the rest of my doctoral work. ●

“In 2042 the Scientific Enterprise of Futures Research (SEFR) has done significant progress in the search for alternative answers to the Ultimate Question of life, the universe, and everything. The Buridan’s Ass Syndrome (BAS) of the University – to be a Business Or a Bureaucracy (BOB) – was resolved in 15th of May 2019, when the lost identity was found in men’s toilet at the University headquarters. The FFRC-starship, a part of the SEFR, started to cruise with three cylinders called Science, Art and Practice (SAP) and all these cylinders were well lubricated by the University Finance and Bureaucracy (UFB). While most parts of the Multidimensional Possibility Space (MPS) have now been investigated, the answers have started to iterate toward a specific node, which is 42.”

Research Director Tuomas Kuhlmonen

“In 2042 FFRC is a meeting point for co-creation of everyday futures and societal and economic futures processes. These are co-produced together with people in networks of museums and libraries, NGOs, authorities and companies. Futures images, memories, diversity of meaning making and cumulative knowledge are essential in scenario processes. FFRC integrate education of futures research in all of these networks and activities.”

Vice Director Katriina Siivonen

In 2042 FFRC is a modern academic research centre where research and education are intertwined, up to date, breaking all the boundaries and ivory towers. It is a global, active actor in the Society reachable to all citizens and organizations. FFRC is a bold forerunner and intellectual challenger.”

Education Manager Leena Jokinen

“In 2042 scholars at FFRC were not only integrated to international networks of futures studies community, but they also created new brilliant research teams and networks in the critical frontiers of sustainability science, SME and corporate foresight and digital futures research. Such scientific topics like futures of disruptive economics, Industry 5.0, business models based on radical and disruptive innovations, AI based dynamics of global economy and Big Data foresight methodologies were studied in this AI-based scientific mega laboratory.

Research Director Jari Kaivo-oja

“In 2042 foresight will be added to the food, water & energy nexus – it will be a necessary skill and commodity for survival of companies, countries and individual citizens. FFRC will be happy to help all organizations and citizens in this critically important endeavor.”

Professor Sirkka Heinonen

INTELLECTUAL BIOGRAPHY EXPLORES THE VISIONARY LIFE'S WORK OF PROFESSOR PENTTI MALASKA

The long-awaited intellectual biography of Professor Pentti Malaska (1934–2012) *Pentti Malaska – Foreseer, forerunner* (*Pentti Malaska – ennalta näkijä, edellä kulkija*) was published in March 2017.

Professor Pentti Malaska was the founder of the Finnish Society for Futures Studies (1980) and the Finland Futures Research Centre (1992). He played a significant role in the establishment and development of the academic discipline of Futures Studies internationally and particularly in Finland.

Pentti Malaska was a radical visionary thinker whose research interests widely crossed academic disciplines from mathematics and electrical engineering to philosophy, ecology and strategic management.

Through his interdisciplinary research Pentti Malaska was able to develop a unique understanding and analysis of the world and the future. For example, he created a theory of circular technology that follows the cycles of the planet, and due to this idea he was the first Finnish person to get invited to the Club of Rome in 1972.

A Tribute to the Pioneer of Futures Studies

The biography is written in Finnish but it includes an English synopsis that consists of three academic articles that introduce the reader to Pentti Malaska's futures thinking. In addition, the biography contains a collection of Pentti Malaska's future-related poems written in English and a few texts from Pentti Malaska's international colleagues looking back on their collaborations with him.

The biography is edited by Laura Pouru, Markku Wilenius, Karin Holstius and Sirkka Heinonen and it is published in the Futures series of the Finnish Society for Futures Studies.

– The book is compiled as a tribute to the pioneer of Futures Studies. Without Pentti Malaska's contribution to the establishment of the field we would not have such a strong culture of futures thinking and foresight in Finland as we have today. We wish that with this book his timeless ideas will stay alive and keep inspiring the next generations of futures researchers and other readers interested in building a better tomorrow, explains Markku Wilenius, one of the editors of the book.

Pentti Malaska Futures Award: Looking for research-based, visionary solutions for global challenges

In 2017 University of Turku is also granting for the first time the Pentti Malaska Futures Award (€30 000). The award is given to a research-based invention, concept, model, method, or other form of an innovation that can help to build a more sustainable future for our planet.

The purpose of the award is to support future-oriented research and continue Professor Malaska's pioneering life's work in the field of futures research. The winner will be announced at the FFRC's 25th anniversary summer conference on June 12–13th in Turku. ●

The Power of Ethical Self-Awareness

*The mission of a human being
is not to confirm
his or her own existence,
because it
doesn't necessarily mean anything really essential.*

*The mission of a human being
is not to secure life,
because life has its own means of
taking care of itself.*

*Life wins,
whatever we do.*

*Life wins,
either with humans, or
without.*

*The mission of a human being is to prove
that human life
is a valuable part of life in general;
that life
is richer and more precious
with humans than
without.*

*Making life full of dignity
and worth experiencing
requires special human quality, it means
the awakening of ethical self-awareness.*

*The power of self-knowledge!
It raised up some,
some even above the ground.*

*But those who were left on all fours
did not approve.*

– Pentti Malaska –

The biography can be downloaded
free of charge from
the website of the FFRC:
<http://ty.fi/pentti-malaska>

PENTTI
MALASKA

Ennalta näkijä,
edellä kulkija

English synopsis included

Laura Pouru • Markku Wilenius • Karin Holstius • Sirkka Heinonen (toim.)



“I met Pentti in Dubrovnik where he gave a lecture that was absolutely mind-blowing. It was one of the few truly futures-oriented lectures that were given there in this course on futures studies. And I said this is a tremendous intellect, and a warm person who is able to combine both – the mind and the emotion very well.”

– James A. Dator, Director, Professor of the Hawaii Research Centre for Futures Studies

“We were two committed futurists, doing our best to understand and help create futures studies, encourage others to do so too, and even hoped the results of our work might help create a better world.”

– Wendell Bell, Futurist, Professor Emeritus of Sociology at Yale University

It's time to stop searching solutions through a rear-view mirror and understand that the future is built from different elements than the past.

PATTERNS OF THE FUTURE

Understanding the Next Wave of Global Change

By **Markku Wilenius**, Professor of Futures Studies, University of Turku, Finland
Foreword by **Tarja Halonen**, former President of Finland

Patterns of the Future explains the current world using the theory of long-term development waves (Kondratiev waves). Markku Wilenius, Professor of Futures Studies, argues that we are now entering the sixth wave: the age of intelligent, integrated technologies, helping to restore the balance between humans, technology and nature by radically improved material and energy efficiency and a wiser use of human potential.

The unfolding sixth wave will challenge our current values, institutions and business models. Using a systems-based approach, *Patterns of the Future* analyses how corporations and the public sector can navigate in the sixth wave. Case studies look at specific examples of this, using high-profile companies to demonstrate both the best- (and worst-) case scenarios of innovation for change.

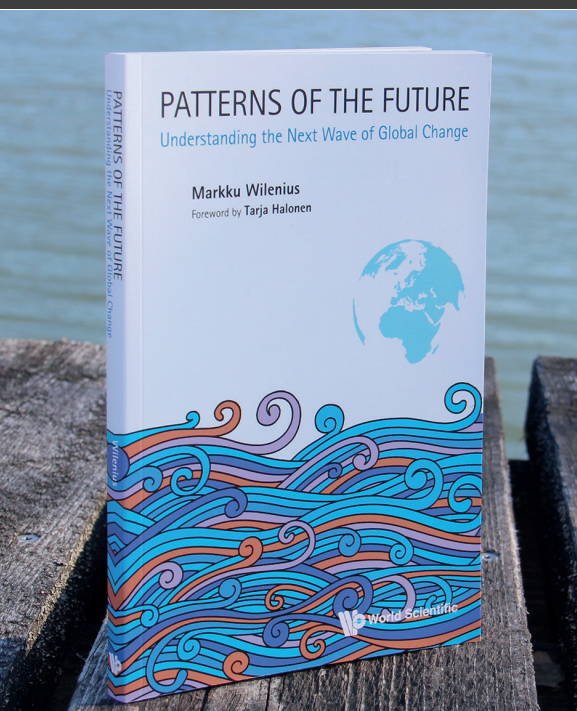
This book spans concepts from multiple disciplines in the social sciences, making it relevant not only to undergraduate and graduate students in futures studies, environmental studies, economics, and business, but also national policymakers, think tanks, corporate operators and indeed anyone seriously interested in future.

www.worldscientific.com/worldscibooks/10.1142/q0083 for orders and more information.

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Welcome to our forthcoming Futures Conference 2018:

ENERGIZING FUTURES – SUSTAINABLE DEVELOPMENT AND ENERGY IN TRANSITION

13-14 June 2018, Tampere, Finland

The forthcoming 19th Futures Conference in June 2018 in Tampere, Finland will focus on the futures of sustainable development and energy issues under a title 'Energizing Futures'.

To understand the governance challenges of sustainable development and energy, we need multidisciplinary, multi-level and time-variant analysis of various issues. Renewable and non-renewable primary energy sources, their transformation into useful energy carriers (such as fuels, electricity, and heat), environmental impacts of energy transformation processes during the whole value chain, energy exports and imports, energy markets and the price of energy carriers, energy end-use patterns and consumer behavior, energy and resource efficiency, as well as energy policies are important elements of local, national and international energy systems.

- What are the main challenges of sustainable futures in an era of increasing uncertainty?
- How to create sustainable energy policies in Europe and elsewhere in the World?
- What is the role of futures studies in sustainable development and in identifying opportunities for a fair, efficient and resilient energy system?

'Energizing Futures' conference aims to generate multidisciplinary, stimulating and critical discussions that promote networking between people interested in energy issues from different backgrounds. We are looking forward to meet you in Tampere, Finland on 13–14 June 2018!

www.futuresconference.fi/2018

The Finland Futures Research Centre is a department at the Turku School of Economics, University of Turku. The FFRC specialises in futures research and foresight. It refines visionary knowledge regarding alternative futures and the challenges and possibilities included in them. The FFRC has offices in Turku, Helsinki and Tampere, and employs around 60 experts.

Futuuri is the FFRC's newsletter, published four times a year. Except for this special 25th anniversary issue, Futuuri is usually published in Finnish.

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