

# FUTUURI

3|2019

## FUTURES RESEARCHERS CONSTRUCTING SOCIAL FUTURES

Futures Conference 2019 focused on the concept of agency in action and research for futures. 'Constructing Futures – Sustainability, Responsibility and Power' was organized on 12–13 June in Logomo, Turku. The conference emphasized opportunities and challenges related to the need for building and critically evaluating capabilities necessary for sustainable futures.

We invited participants into this 20<sup>th</sup> Futures Conference to think of agency in different levels and contexts. Whether in a private commercial context, or in civil society, or in global or local communities, to what extent are futures being constructed through participation that reflects moral agency and leads to better futures for all? Can Futures Studies, as an applied practice, make a difference?

With these essential questions in mind we wanted to create a cross-disciplinary platform where participants could meet, share and discuss new ideas concerning social futures.

Together with 280 participants from 29 different countries we succeeded to generate multi-disciplinary, stimulating and critical discussions that promoted networking between people interested in futures issues from different backgrounds. These two conference days consisted of keynote lectures, parallel sessions, participatory workshops and chaired poster session.

During the two days the audience heard a group of high level keynote speakers, who all focused on social and cultural futures from different viewpoints. The keynote speakers were

Dr. **Ivana Milojević** (Metafuture, Australia), Professor **Ullrich Kockel** (Heriot-Watt University, Edinburgh, Scotland), Professor **Keri Facer** (University of Uppsala, Sweden & University of Bristol, UK) and Professor **Ted Fuller** (University of Lincoln, UK).

This Futuuri special issue includes articles giving insight to the keynote speakers on the basis of their speeches. Slides of the presentations both for keynotes and session speeches are available at the conference website.

Presentations during the two days were divided into six different sessions including the chaired poster session. All sessions had up to eight parallel workshops focusing on e.g. themes such as New forms of participative democracy and their consequences; The heterogeneity of actors and the many levels of analysis in social futures; Advances in methods in futures studies; Specific social futures – case studies on welfare, human relations, work, lifestyles; Foresight activities and their effect on sustainability transitions; Combining corporate foresight with corporate social responsibility, just to mention a few.

Participatory workshops were conducted on such themes as e.g. Using critique and utopias as analytic strategies and activism; Becoming future-oriented in the age of digitalisation; Envisioning and backcasting for sustainable futures and Security futures in the urban age. There were total ten participatory workshops in the conference, which might be the record in our series of conferences.

At this point we would like to thank warmly our masters student **Martyn Richards** for his invaluable work editing the articles in this issue and also for conducting video interviews with three of our distinguished speakers. You can find links to these interviews also on this issue. Special thanks go also to our whole conference team for all their hard work and good spirits.

We hope that those of you who joined the conference enjoyed your days in Turku. The next theme for the Futures Conference will be 'Learning Futures – Futures of Learning'. You can find more information as well as the Call for Papers in this Futuuri issue on page 11. We hope to see you all in June 2020 in Helsinki, Finland! ●



[www.futuresconference.fi](http://www.futuresconference.fi)

# POST-HUMANIST SOCIAL FUTURES?

Introducing the conference theme, Adjunct Professor **Katriina Siivonen** urged us to examine the different ways futures studies can foster agency. Such efforts need to begin with an understanding of what agency means.

Reflecting on the question on the meaning of agency over the two days of the conference, what struck me the most was an idea that recurred across presentations: that agency is distributed.

No actor acts alone. Rather, an actor is enabled to act through connections and collaborations with numerous other actors. The act of driving a car, for instance, is enabled by the street network and the socio-technical infrastructure behind it.

It is networks that act instead of individual entities. Distributed agency is a radical notion insofar as it questions the liberal idea of self-sufficient, independent individuals, and the humanist idea of the primacy of humans.

On the contrary, presenters often described distributed agency as an ability not exclusive to humans. **Milos N. Mladenovic** presented self-driving vehicles as actors that will have a significant effect on how cities will be planned in the future. The agency of city planners and dwellers will be in part enabled by these vehicles, as less city space is needed for transportation.

**Ivana Milojević**, in turn, described images of the future as agents of social change. Images of the future “act” by affecting how futures

are imagined and constructed in the present.

Professor **Keri Facer** suggested some possible ways for futures studies to foster agency in her keynote. She vouched for distributed agency and opening up to the world in fighting the dominant narrative of climate change. Facts-based, rationalized and technocratic approaches, while valuable and important in their own right, often prove counter-productive. This is because they rarely consider important social aspects, such as inequality. The agentic effects of inequality are, in other words, neglected. The agency of technocrats could be enhanced if they opened up to different worldviews and considered understandings and conditions that go beyond their current mental models.

The Yellow Vests movement, an example given by Professor Facer, is illuminating in three ways. First, it shows how “neutral” measures to curb emissions, such as tax increases on fossil fuels, can backfire if they do not take social inequalities and differences in life situations into account seriously enough. Such measures neglect the agency and perspectives of the significant number of people whose living conditions have become increasingly precarious. Second, it shows how non-

human matter, such as oil, also has agency. The Yellow Vest protests were initially triggered by increases in oil prices. As we figure out ways to accommodate in a post climate change world, acknowledging the agency of matter is a crucial step forwards. Third, the protests offer an inkling of the social unrest raised by the upcoming social, economic, technological and ecological changes.

Different groups of people suffer from climate change in particular ways. In curbing climate change, decision makers thus have to urgently consider new worlds of specific socio-material conditions. This entails rethinking agency as something much more complex than the previous individualistic and human-centric models assumed. •

2019  
**CONSTRUCTING  
SOCIAL FUTURES**  
12-13 JUNE 2019 | TURKU, FINLAND





# IVANA MILOJEVIĆ – POWER FOR, AGAINST, WITH AND WITHIN

How do we create better futures for all? That is the thematic through line Professor **Ivana Milojević** was interested in exploring while visiting Turku for 2019's International Futures Conference "Constructing Social Futures: Sustainability, Responsibility and Power". Talking to her in the Post-industrial venue of this year's conference, it was evident it was a great joy for her to be back to share her convictions on the potential of Futures Studies to make a difference for individuals and societies.

Some recurring themes in Ivana Milojević's research are the intersection between Gender Studies and Futures Studies, the role of language in creating future images, and how Futures Studies can contribute to creating peaceful, sustainable societies. Central to these themes is the role of power and how its different manifestations can obstruct or facilitate futures where everyone can realize their potential.

In her opening keynote presentation, "Power for, against, with and within: Futures Studies as practice", she challenged the techno-deterministic hegemonic discourses on the future, which she characterized as being androcentric, focused on technology, and excluding people from the envisioned future societies.

Power is exercised in the process of envisioning futures, as she explains in her Futuuri video interview; "Power is definitional, as well as practical, and those two are interlinked. One way of putting power in motion is by framing and reframing how we see the

world, how we understand our pasts, presents and futures". Because these frames enter the decision-making and policy-making spheres, those who wield power shape the discourse through the creation of hegemonic visions of the future. It is, then, a duty of Futures Studies as a field, via the envisioning of alternative futures, to challenge these dominant frames and sketch the pathways for emancipatory futures to emerge. For this, it is necessary to change the conception of power – from coercive power that imposes certain realities on others, to enabling power that allows the creation of positive change.

How, then, does Ivana Milojević understand power in Futures Studies as being capable of creating positive change? She identifies four manifestations:

1. Power for – consciously choosing certain futures which we stand for and strive to create;
2. Power against – identifying threatening visions and challenging them;
3. Power with – working with others from

a place of empathy, nonviolence and creativity to co-create visions of the future; and

4. Power within – staying in touch with our interior selves, our own ethics and authenticity. It is with these four manifestations of enabling power that alternative futures can be opened and better, more sustainable futures can be reached.

As evidenced by the response to her keynote speech, Ivana Milojević's vision and understanding of power for enabling positive change was a necessary message, an inspiration for those of us striving to leave this world in better shape than how we received it. It is the responsibility of futurists to challenge exclusive, coercive visions of the future, and together give voice to those who have not been heard to co-create better futures for all. •



**IVANA MILOJEVIĆ'S  
INTERVIEW:**  
<http://ty.fi/milojevic>



## DR. IVANA MILOJEVIĆ

Director, Metafuture, Australia  
[www.metafuture.org](http://www.metafuture.org)

- Co-Founder and Co-Director of Metafuture – an Australian based globally oriented foresight think-tank focused on the practical use of futures tools and methods through action learning approaches.
- PhD from the University of Queensland, Brisbane. Thesis: "Futures of Education".
- Former positions: Professorships in Australia, Serbia and Taiwan. Leader of the foresight unit at the Centre for Strategic and Policy Studies, Brunei Darussalam.
- Research work in the fields of sociology and education, interdisciplinary fields of futures studies, gender studies and peace and conflict studies.
- Author of over seventy scholarly journal articles and book chapters, as well as the author, co-author and/or co-editor of a number of academic books, e.g. CLA 2.0: Transformative Research in Theory and Practice (2015); Breathing: Violence In, Peace Out (2013); and Educational Futures: Dominant and Contesting Visions (2005, and 2011).

# HERITAGE FUTURES

Words shape the world, was the message of Professor **Ullrich Kockel** in his keynote speech, in accordance with other keynotes in the conference. Ullrich Kockel presented an analysis of the multitude of meanings and powers in the economic uses of cultural heritage. The role of heritage in forming sustainable futures is evident, and the conceptualization of Heritage Futures is thus highly relevant for futures processes.

In the European Union, cultural heritage has been considered as a resource especially for the “peripheral” regions. Professor Ullrich Kockel focuses in his lecture on the consequences of the uses of commodified cultural heritage as means of economic development in Europe.

Cultural heritage can be defined as selected cultural practices defined by words and stories as a something special for some purpose. Ullrich Kockel claims that economy conducts the way we are supposed to live. He analyses what kind of futures for instance the crowd of tourists build into the tourism destinations by consuming different tangible and intangible products and services.

Culture is always in progress. As a part of it, transcultural processes produce cultural hybrids.

In economic processes, like in tourism, cultural hybrids might become combinations of stigmatized peripheral areas and branded, exclusive commodities for modern and prosper tourists. However, these commodities do not guarantee prosperity to tourism destinations.

Ullrich Kockel urges on to investigate beneficiaries of commodified cultural hybrids, power relationships produced by cultural commodities, and the capacity of the economic using of cultural heritage to decolonize peripheral regions. He reminds that varied and contradictory cultural heritage support democratic societies. Furthermore, he asks if we can anticipate such future narratives that do not violate the ecological foundations of the resource’s renewability.

On base of his investigation, Ullrich Kockel perceives Heritage Futures starting from a close mapping of place (topography), leading to a hermeneutic understanding of it (topology) and further towards insights into the “wisdom that sits in places” (toposophy). This could support local agency to produce local socio-ecological benefit from the added cultural value of cultural heritage as commodities. ●

## PROFESSOR ULLRICH KOCKEL

**Heriot-Watt University  
Edinburgh, Scotland**

[www.hw.ac.uk](http://www.hw.ac.uk)

- Professor of Cultural Ecology and Sustainability.
- Visiting Professor of European Ethnology, Vytautas Magnus University, Kaunas.
- Emeritus Professor of Ethnology, University of Ulster.
- Editor-in-Chief, *Anthropological Journal of European Cultures* (2007–2018).
- President, *Société Internationale d’Ethnologie et de Folklore* (2008–2013).
- Overarching research interest is sustainable local/regional development, especially the appraisal, planning and management of cultural resources, approached from an interdisciplinary perspective rooted in ethno-/anthropology, cultural ecology, political economy and philosophy.
- Member of the Royal Irish Academy (2012) and an Academician of the Academy of Social Sciences (2003).
- Author and editor of e.g. "Heritage and Festivals in Europe: Performing Identities", ed. with Cristina Clopot, Baiba Tjarve and Máiréad Nic Craith (Routledge 2019) and "A Companion to Heritage Studies", ed. with William Logan and Máiréad Nic Craith (Blackwell Publishing Ltd 2015).



*Professor Ullrich Kockel's keynote presentation was titled 'Heritage Futures: Tradition, Gain, Sustainability'.*





# IMMERSIVE FUTURING: GHOST FORESTS IN 2075

*"Future 'Ghost Forests' have very little natural biodiversity of their own, being genetically enhanced to grow fast to the specific industry needs of 2075. In fact, wildlife cannot sustainably live there. As a consequence, animals are frequently pushed further and further away to the remaining few wild areas that are left to store carbon. Between an immediate threat of extinction facing the remaining animal population, and the need to produce more sustainable materials, the situation needs hard decisions.*

*One green-entrepreneur sees opportunity in shifting away from 'Ghost Forests'. A forest hippy finds solitude in the natural forest, and just wants to enjoy the harmony of the place. An activist wants to create more forceful action to make things change quickly.*

*Each are quite different; however, all are in agreement that they dislike these ghost forest, even though there is no clear solution available and natural forest biodiversity is at critical risk.*

*Nevertheless, each are in staunch disagreement and distrust each other's positions and approaches. In fact, they seem to find it difficult to communicate at all about this situation without compromising their very being.*

*How and what will they decide to do? "*

This situation perhaps is all too familiar in society, where everyone knows that there is an impending future threat but are unable to move beyond their immediate needs to find and act upon a viable solution.

It was the second conference day at Lomomo, in a 3<sup>rd</sup> floor back room, small groups of participants were seated intensely considering how actors would make ethical choices about the year 2075. Their situation was tough, near impossible even, with no clear answers or straightforward solutions. Imagination is flowing. In a very short space of time the participants had developed their characters, drawn from random constraints, and brought them to life through imagination. Going around the table as each introduces themselves, there is quickly a sense that tensions and camaraderie are emerging between them.

Next, the game takes a shift as the central metaphors that so far have guided the game, are changed. These new metaphors, produced by the group for their own characters, then started to bring about a more holistic transition in the relation between the characters, and

a potential reframing of the entire situation. Quite quickly all hippies, green entrepreneurs and activists seem to convene in an agreement that they 'are not so different from one another after all', and even could work together, with a little personal change... It is these types of value-based discussions on critical issues that can be interpreted as expressing future ethical frameworks. And those dynamics are exactly what the BioEcoJust team hope to discover.

This short provocative scenario 'Ghost Forest', is part of the role-based game piloted by the BioEcoJust Bioeconomy and Justice project, aiming to explore the future ethical implications for the next 100 years of the bioeconomy. The game is based on the Metaphor Molecule Game that was designed to fit the research needs of the project (Balcom Raleigh & Heinonen 2018). Adapted from CLA, It promotes immersive futuring, rigorous imagining and criticality to question a possible future. The game originates from **Nicolas Balcom Raleigh's** UTU Futures Studies MDP graduate's thesis that has also been part of a UNESCO Futures Literacy Lab simulation.

The themes at play here in this role-game in the third-floor room, echoed the surrounding atmosphere of the Constructing Social Futures conference, being highly participatory, actor oriented, transformative and engaging hard critical situations. ●

## BIOECOJUST - BIOECONOMY AND JUSTICE

Exploring Coming Ethical  
Challenges through Year 2125

An Academy of Finland project

[bioecojust.utu.fi](http://bioecojust.utu.fi)



Project Researchers **Amos Taylor** and **Sofi Kurki** from the FFRC facilitated the workshop 'Role-Based Game on Bioeconomy and Justice Year 2125'.



# PENTTI MALASKA FUTURES AWARD TO SOLAR FOODS PRODUCING FOOD FROM AIR AND ELECTRICITY

The **Pentti Malaska Futures Award** is given to a research-based and groundbreaking visionary innovation that can help with building a more sustainable global future. In 2019, the Award €30,000 was granted to the Finnish food tech company Solar Foods Oy that is developing a new kind of nutritious protein by utilising air and electricity.

The winning solution of the Pentti Malaska Futures Award tackles one of the greatest global challenges: how to secure sustainable food production to the increasing population with the Earth's limited resources.

– The solution has a strong scientific basis in the research conducted at the VTT Technical Research Centre of Finland Ltd and Lappeenranta-Lahti University of Technology LUT. The solution utilises the newest industrial biotechnology and energy technology and it has the potential to transform global food production. The winner continues Professor Pentti Malaska's interdisciplinary future philosophy by combining visionary thinking, innovative technology, and boundary-crossing collaboration for building a sustainable planetary future with radical solutions, says chair of the panel deciding the winner, Director **Juha Kaskinen** from the FFRC.

In addition to the first prize, the panel also awarded an honourable mention to *Compen-*

*sate* that offers the public an opportunity to compensate their own carbon dioxide emissions. According to the justifications provided by the panel, Compensation brings our planetary responsibility to our daily lives. Compensation enables a grass-roots level change by offering people the opportunity and responsibility to compensate their carbon dioxide emissions. Compensation increases general future and environmental awareness, and it has the potential to serve as a catalyst for a more extensive systemic change. The solution has a solid global applicability and scalability.

The Pentti Malaska Futures Award was distributed during the dinner of the international Constructing Social Futures conference in Turku on the evening of the 12 June.

In addition to chair Juha Kaskinen, the members of the panel deciding the winner were: **Toni Ahlqvist** (Research Director, Finland Futures Research Centre, University of Turku), **Sirkka Heinonen** (Professor, Fin-

land Futures Research Centre, University of Turku), **Kaisa Leiwo** (Managing Director, Turku Chamber of Commerce), **Saara-Sofia Sirén** (Member of Parliament, Parliament of Finland), **Kalervo Väänänen** (Rector, University of Turku), and **Thomas Westerholm** (Director, Centre for Collaborative Research, University of Turku).

The next Pentti Malaska Futures Award will be distributed in 2021. ●

**Solar Foods:** [solarfoods.fi](http://solarfoods.fi)  
**Compensate:** [compensate.com](http://compensate.com)  
**Pentti Malaska Futures Award:**  
[ty.fi/pm-award](http://ty.fi/pm-award)



PENTTI MALASKA  
FUTURES AWARD

*CTO Juha-Pekka Pitkänen (in the middle) of the Pentti Malaska Futures Award winner Solar Foods Oy with the competition's coordinator Laura Pouru and chair of the panel deciding the winner Juha Kaskinen.*





# FINLAND FUTURES ACADEMY'S SUMMER SCHOOL 2019: AI AND SOCIAL FUTURES

Finland Futures Academy (FFA) organized its annual summer school already for the 20<sup>th</sup> time. The summer school concept was originally created during recession for students who needed summer credits because they did not have summer jobs. Nowadays it has become a popular sold out summer course where students around Finland and abroad gather together to meet like minded future futurists. And of course to learn more about various fascinating future themes, state of the art futures research projects and methodological developments within the field.

The summer school concept is simple and even light, almost old fashioned with introductory learning materials, online conversations, tailored lectures and reflective learning diary. But the true idea is to engage participants into the academic futures community.

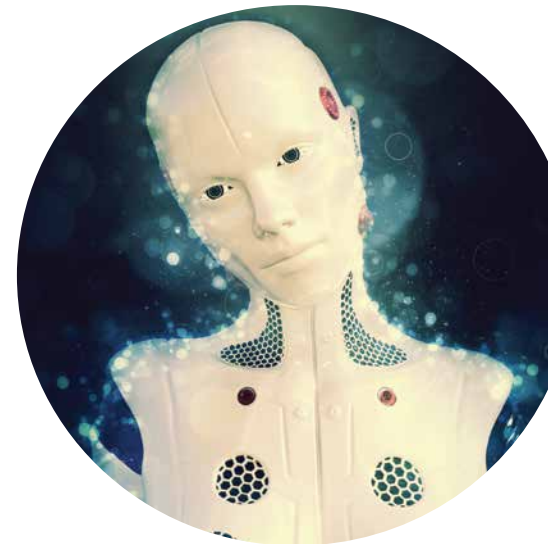
As part of summer school programme students participate into academic futures conference organized by the Finland Futures Research Centre and Finland Futures Academy. Students are warmly welcomed to be part of the academic research population and they can start building their personal futurist network quite early on in their emerging future oriented careers. One could even argue that this is one of the secret ingredients of strong

Finnish futurist community and high futures oriented knowledge base in our public and private organizations.

This summer the theme was 'Artificial Intelligence and Social Futures'. Topic is wide and we tried to illuminate it from various perspectives. FFA's long time partner Shaping Tomorrow and its founder PhD **Michael Jackson** guided students through the amazing service ST has created. The amount of data, tools and various strategic components not to mention ethical awareness and use of AI and algorithms astonished. And of course raised lots of questions.

The second summer school day we heard interesting presentations from Research Manager, PhD **Milla Wiren** (Centre for Collaborative Research, Turku School of Economics) and Project Researcher **Mikkel Stein Knudsen**

*Dr. Michael Jackson's lecture took place at the Turku School of Economics.*



(Finland Futures Research Centre) about the concept of Big Data and strategic utilization of Big Data.

In order to get deeper into the summer school's theme we watched the provoking movie 'Who made you? - Exploring the Uncanny Valley' by **Iiris Härmä**. The film asks what the development of AI means to us as human beings. What does it mean for humanity, community, and how it will affect our perception of human? What are the values we want to hold on to?

After almost an overwhelming load of information and materials the only solution was to organize a futures workshop. PhD Student **Juho Ruotsalainen** (Finland Futures Research Centre) organized a group activity with futures wheel. The workshop was set out to discuss the development of AI under specific topics, and to map out the different actors that shape the different ways AI can manifest in the future.

After two long days and evening activities it was time to move to conference venue Logomo to participate into the conference.

Based on feedback and reflections the summer school was once again a huge success. We would like to warmly welcome you to our next Summer School and Futures Conference 2020 during the week 24 in Helsinki. The theme for the event will be 'Learning Futures - Futures of Learning'. ●

**Further information about Finland Futures Academy and Summer School:** [www.tvanet.fi](http://www.tvanet.fi)

**'Who made you?' movie trailer:** <https://youtu.be/hjRbnldarls>



**MICHAEL JACKSON'S INTERVIEW:**

<http://ty.fi/jackson>

# OPENING ALTERNATIVES FOR NATIONAL FORESIGHT

In this piece, we would like to share some methodological insights from the workshop “Sharing knowledge on networked foresight” that our National Foresight 2020 project team conducted at the Constructing Social Futures conference.

**What futures studies is at its best: Opening and reflecting on alternatives, rather than perceiving a determined trajectory.**

The workshop facilitators, in addition to myself, were **Christopher Rowley** and **Maria Malho** from Demos Helsinki and **Laura Pouru** and **Burkhard Auffermann** from Finland Futures Research Centre. The full name of our project is “National Foresight 2020 – Mapping of the ecosystem, evaluation of foresight maturity and future recommendations”. The aims of the project, funded by the Prime Minister’s Office, are to analyse and develop national and regional foresight in Finland.

Our intention with the workshop was to encourage open discussion and ideation through a simple workshop format. We first provided some context and then gave time for participant discussion in small facilitated groups, concluded with a summary of the key points. Our first hurdle when designing the workshop was that we did not know what kinds of people would attend. How, then, to best spend our

valuable one and a half hours together? For instance, it might be wise to ask different questions of a global group of national foresight experts than a group composed of primarily Finnish academics.

In the end, we decided to challenge our participants to imagine alternative kinds of foresight systems. The resulting systems should be coherent and participants were to draw on their knowledge, but the imagined systems need not exist anywhere in the world. This approach had two benefits: it adhered to the basic principle in futures studies that there are alternatives, and it gave equal standing to foresight experts and less experienced participants.

Drawing on a report by **Mikko Dufva** and **Toni Ahlqvist**, our research team designed a simple fourfold matrix of foresight systems based on two axes: 1) consensus-seeking or pluralistic discourse and 2) hierarchical or emergent systems. In the workshop, each small group was instructed to design a foresight system for one quadrant of the matrix. Thus, there were four groups: consensus-hierarchical, pluralistic-hierarchical, consensus-

emergent and pluralistic-emergent.

How well did the workshop succeed in its objectives? First of all, most participants were from Finnish public organisations, which allowed reflection on where Finland stands in our matrix, but it may have made the discussion somewhat narrower in terms of alternatives. The basic types of foresight systems worked well for triggering initial discussion, however, the creative design of possible foresight systems required active facilitation, for instance asking participants to think further about the implications of suggestions. Based on my discussions with the team and participants, the most important outcome of the workshop was increased understanding of the potential benefits and vulnerabilities of each type of foresight system. In my view, this is futures studies at its best: opening and reflecting on alternatives, rather than perceiving a determined trajectory. ●

**National Foresight 2020 project**  
[www.ennakointi2020.fi](http://www.ennakointi2020.fi)



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Valmennuksen jälkeen voit halutessasi suorittaa Certified Foresight Professional -sertifikaatin.

Seuraava valmennusohjelma käynnistyy joulukuussa 2019.

Ilmoittaudu mukaan: [utu.fi/cfp](http://utu.fi/cfp)





# ALL OUR FUTURES? CLIMATE CHANGE, DEMOCRACY AND MISSING PUBLIC SPACES

In her keynote speech, Professor **Keri Facer** explored the relationship between our language about climate change and our capacity to imagine possible futures.

How do you feel when you think about climate change? In the 21st century, existential dread is a not uncommon answer. For many of us, the spectre of climate change looms large over all political and social activity. The prevailing media narrative provides a clear, underlying message that humanity holds only two options: take immediate action, or face inevitable doom. In her passionate keynote speech, Professor Facer rejected this binary distinction, instead calling for a reframing of climate change discourse, which she argues currently limits our capacity to imagine possible futures, and subsequently take action.

Current narratives about climate change involve a language of prediction within the terrain of science. However, according to Professor Facer, accepting the science behind climate change does not entail acceptance of a purely scientific solution.

Many proposed action plans to combat climate change are technocratic solutions devised by those holding power at the expense of the poorest members of society, who are rarely invited to participate in the discussion.

The concern of imminent collapse also threatens to facilitate disaster capitalism, whereby radically damaging policies are swept through a shell-shocked public who are only aware that something must be done.

We receive contradictory messages about our own agency, leaving us paralysed – ‘climate change is inevitable’, but somehow ‘we can fix things’. As the poet and philosopher **Bayo Akomolafe** suggests, our need to save the world (and thus seek dominion over it) brought us to this position in the first place.

Professor Facer asserts that ‘climate change’ should be reimagined as a process, rather than an as-yet-unrealised state; we cannot ‘avoid’ climate change, it is part of the new reality already in progress. The language we use to describe ourselves should also be critically examined. There is no single ‘we’ that can speak for all living creatures; instead, multiple, global voices should be added to the debate.

The importance of language is starting to be recognised by the media. In May 2019 The Guardian newspaper announced it would be using terms such as ‘climate emergency’ over

‘climate change’, to more accurately represent our present situation. Although this terminology may actually support the narrative of apocalypse, it also places us firmly within the new climate reality.

In her video interview, Professor Facer describes the aim of her career as “building connections across difference”. Whilst there are several ideas for tackling climate change, these conversations rarely occur within the same space.

Our challenge is to develop inclusive, shared forums where climate change discussion can be a participatory exercise. Here, conversations are motivated by the knowledge that we have to work together to navigate our new reality, which remains unfinished.

Assembling a truly diverse community of conversation is a difficult task. However, only through building alliances and ‘political friendships’ can we work towards a better future for all of us. This journey starts with the shared language we use. “The stories that we tell – and that we pay attention to – shape our reality as much as our science.” ●

## PROFESSOR KERI FACER

Zennström Chair in Climate Change Leadership, University of Uppsala, Sweden

Professor of Educational and Social Futures, University of Bristol, UK

- Professor of Educational and Social Futures, Graduate School of Education, University of Bristol (2012– ongoing);
- Research Professor, Education and Social Research Institute, Manchester Metropolitan University (2008–2012);
- Visiting Professor, Graduate School of Education, University of Exeter (2008– ongoing);
- Head of Learning Research & Research Director, Futurelab (2004–2008)
- Editorial Board Member for Futures, Journal of Media and Technology, Research for All and British Journal of Sociology of Education.
- Advisory Board Member for NCVO, for the Imagine Project and for the Voices of War and Peace Centre.



**KERI FACER'S  
INTERVIEW:**

<http://ty.fi/facer>

# RESPONSIBLE FUTURES, IN THEORY

Professor **Ted Fuller**, of the University of Lincoln, concluded the 2019 futures conference with the placement of a conceptual keystone, his presentation linking together the themes of sustainability, responsibility and power within the arch of constructing social futures.

## Anticipatory Systems

**Robert Rosen's** anticipatory system proved to be a central concept that brought together these themes. Professor Fuller highlighted the importance of anticipation for our understanding of social change. This is because the operation of anticipatory systems involves constant judgements about whether an action would produce future value through the introduction of stability or instability into the system state. A predictive model assumes an ethical character as these judgements about whether to change or not require a sense of value – good or bad, right or wrong.

## Sustainability

Although Robert Rosen's anticipatory systems have their roots in biology as an explanation for how living beings sustain their existence in the face of changing external conditions, they have since been applied to emergent social phenomena. Traditional cultures constructed certainty through circular ritual practices that existed outside the cycles of their unpredictable environment. With the enlightenment, the future has been emptied, made open, and be-

come a tradeable commodity. Rich with possibility and empty of predetermined religious or cultural ritual, the anticipation of greater value has enabled a trend towards the destabilization of the norm in order to transform into another stabilized state. The emergence of change within social structures is interconnected with agency, ethics and power, claims Professor Fuller.

## Power

The power to bring about change – destabilization – on an unprecedented scale has as much to do with social innovations as technological. Professor Fuller linked issues of inequality to the capability to aspire, or in other words, to anticipate greater value and recognise ways to destabilise the present state. Those on the lowest rungs of society, on the other hand lack the capability to aspire or challenge the status quo, they are powerless. Inequality between societies was also presented as the result of different levels of adoption and maintenance of the norms of aspiration, as well as the degree to which a community shares a sense of their shared future. **Ivana Milojević** would view the

framing of the future as another application of power, a norm that could be established and maintained to derive further power. This self-reinforcing act is something that must be applied with great caution, as global ethical norms will inevitably prove to be suboptimal for a given local community.

## Responsibility

The ethical application of power is a concern of all futurists. The act of anticipation, of framing futures is one form of power; another is making ethical judgements about futures. Professor Fuller calls on the need for a duty of care, invoking **Barbara Adam**, for futurists, caring for the future is an imperative, it is our moral duty, yet we care for an unlimited realm of beings and organisms unborn and unknowable.

As Ted Fuller quipped at the beginning of his presentation, “we have seen many things working in practice” at the conference over the last two days “now to make them work in theory”. ●

## PROFESSOR TED FULLER

Professor, UNESCO Chair  
University of Lincoln, UK

- Professor of Entrepreneurship and Strategic Foresight, University of Lincoln, UK.
- UNESCO Chair on Responsible Foresight for Sustainable Development, 2019–.
- Editor-in-Chief of Futures, the journal of policy, planning and futures studies.
- Former Head of the Business School and Faculty Research Director at the University of Lincoln.
- Founder of two business ventures and two research centres at the University of Durham Business School.
- Has held numerous appointments in national and international academic networks including Chair of the five-year Cooperation in Science and Technology (COST) Action on foresight methodologies.
- Research areas: Foresight, Anticipation, Responsibility and Emergence.





# LEARNING FUTURES – FUTURES OF LEARNING

10–12 June 2020, Helsinki, Finland

As we move further into the 21st century, we need to renew our understanding of what it means to learn, teach, and develop new knowledge. Education systems and learning processes for people of all ages are needed to navigate uncertainty, address known problems, identify new ones, and be able to detect and make the sense of emergent issues and opportunities. The roles of education and learning are also becoming more essential in solving the pressing global ecological, cultural, societal and economic challenges. One pathway for renewal is the development of futures learning at all levels of education and in wider society.

The forthcoming Futures Conference 2020 will focus on questions such as: How can the field of Futures Studies contribute to rethinking learning? How do we teach and learn about futures? What are the images of the future that shape current conceptions of the systems that generate and diffuse knowledge? What are the images of the future that inspire a reimagining of the attributes, role and functioning of learning? What are the new motivations, means and approaches to learning? What kinds of learning settings could there be in the future and what infrastructures and resources will be required? In which way are education policies changing within the future? What human capacities will be needed to enable sustainable futures within the limited boundaries of our planet?

**We welcome you to share your findings, ideas, results and thoughts on (but not limited to) these key topics:**

Rethinking learning in societal transformations
Futures research in learning and education
Futures literacy and anticipation
Critical and emancipatory education: theoretical and empirical research on learning
Futures education and learning: pedagogy, skills and competences, forms of learning
Digitalisation of learning environments
Learning as a systemic capability: learning regions and innovation systems
Nature and environment in education: addressing sustainability and ecological pressures
Equality of education
Biographical learning, peer-to-peer learning, and the narratives of the future

## Call for Papers and Posters

The 'Learning Futures' conference will create a cross-disciplinary platform where participants can meet, share, and discuss new ideas concerning futures and learning. The conference program will consist of keynote lectures, parallel sessions, participatory workshops and chaired poster session. The conference will aim to generate multidisciplinary, stimulating and critical discussions that promote networking between people interested in futures issues from different backgrounds.

We invite interested contributors from universities, research institutes, companies, governmental and non-governmental organisations to submit your abstract (max. 250 words) to <http://ty.fi/futures2020>.

## Important Dates to Remember

Abstract submission starts:  
October 2019

Deadline for the abstracts:  
31 December 2019

Notification of acceptance:  
30 January 2020

## Conference Organizers

'Learning Futures – Futures of Learning' is the 21<sup>st</sup> International Futures Conference of the Finland Futures Research Centre and Finland Futures Academy of the University of Turku. It is organized in association with the Finnish National Agency for Education (EDUFI).



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## FFRC STAFF'S LATEST PUBLICATIONS

Heinonen, Sirkka & Karjalainen, Joni (2019) *Electrification in Peer-to-Peer Society. A New Narrative for Sustainable Futures*. FFRC Publications 1/2019, 133 p.

Siivonen, Katriina – Heinäjärvi, Henna & Tuittila, Satu (2019) *Historian museon toiminnan tulevaisuuskuvat*. Tutu e-julkaisuja 11/2019, 24 s.

Silvonen, Essi & Kaskinen, Juha (2019) *ICLEI Green Circular Cities Coalition. Feasibility Study to Build an Active Network of Circular Economy Actors in the Turku Region*. FFRC eBooks 10/2019, 51 p.

Silvonen, Essi & Kaskinen, Juha (2019) *ICLEI Green Circular Cities Coalition. Toteutettavuustutkimus aktiivisen kiertotaloustoimijaverkoston rakentamiseksi Turun seudulla*. Tutu e-julkaisuja 9/2019, 51 s.

Lakkala, H. – Birmoser Ferreira-Aulu, M. – Del Carpio Rodríguez, A.O. – Kaskinen, J. – Morales-Soriano, E. – Repo-Carrasco-Valencia, R. – Vargas Del-gado, L.F. – Vidaurre-Ruiz, J. & Vähäkari, N. (2019) *A Scenario for the desirable future of the Peruvian agrifood sector 2030, focusing on andean native crops. Results from the 1<sup>st</sup> and 2<sup>nd</sup> futures workshops of the PECOLO project*. FFRC eBooks 8/2019, 33 p.

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## Award Winning Research and Student Works

### The Emerald Literati Awards

FFRC's Research Director, Ph.D. **Jari Kaivo-oja** won the Emerald Literati Award in August 2019 with professors **Steffen Roth**, **Vladislav Valentinov** and **Leo Paul-Dana**.

Their article "Multifunctional organisation models: A systems – theoretical framework for new venture discovery and creation" was published in *the Journal of Organizational Change Management* in November 2018.

The full article is open for all readers during next six months: <https://doi.org/10.1108/JOCM-05-2018-0113>.

### APF's Most Significant Futures Work & Student Recognition Awards

Association of Professional Futurists (APF) announced its 2019 awards in June.

FFRC's PhD Students **Sanna Ahvenharju** and **Matti Minkkinen** with **Fanny Lalot** won 'the Most Significant Futures Works' award in the category "Advance the methodology and practice of foresight and futures studies". Their article "The Five Dimensions of Futures Consciousness" was published in *Futures* in December 2018.

Sanna and Matti also won the APF's PhD Awards category. FFRC's masters student **Martyn Richards** came the 3<sup>rd</sup> in the Masters Individual Awards category.

Read more about the Student Recognition Awards: [www.apf.org/page/AwardWinners](http://www.apf.org/page/AwardWinners) and the Most Significant Futures Works Award: [www.apf.org/page/MSFW](http://www.apf.org/page/MSFW). ●

## Are You the Next Expert of the Futures?

The Master's Degree Programme in Futures Studies is designed to educate foresight experts who help organisations to harness future opportunities and avoid unnecessary risks. The programme trains students to become professionals who are competent to choose from various methods when facing a particular development challenge.

The students enrolled in the programme will take a Master of Arts degree, the size of 120 ECTS credits. The two-year programme is instructed in English. The application period for the Master's Degree Programme in Futures Studies is 8–22 January 2020. Read more: <http://ty.fi/fs-masters>

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 50 experts.

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

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