

INTERVIEW WITH DR KARLHEINZ STEINMÜLLER BY PROF SIRKKA HEINONEN ON THE DEEPENING VUCA WORLD AND SURPRISES On Futures Day 6th March 2020

In recent times, companies, governments and organizations are forced to pay increasing attention to risks and vulnerabilities. For good reasons, disruption and discontinuities have become some of the key terms in discussions about innovation, economic and societal change. We seem to live in a world of permanent and profound change -> and what's more in a VUCA world of volatility, uncertainties, complexity and ambiguity.



Dr Karlheinz Steinmüller is Chair of the German Node of the Millennium Project (<http://www.millennium-project.org/>), futures researcher with expertise in risks and wild cards, and a sci-fi reader and writer. We had a chance to have a similar discussion three years ago within the Neo-Carbon Energy Project when you visited Finland and attended one of our Futures Cliniques (Heinonen et al. 2017b). It is nice to have now some time perspective on those topics we addressed (e.g. energy security, discontinuities...). Welcome to this discussion at Helsinki Office of the Finland Futures Research Centre (FFRC), University of Turku.

1. Would you agree in saying that the **VUCA is deepening?** **And how do you see its place in foresight?**

Has VUCA been given sufficient consideration in foresight work?

(Remembering our pioneering hybrid methods experiment a few years ago within the Neo-Carbon Energy project “Post-Futures Clinique cross-impact analysis with black swans”, report+journal article+interview, see references below)

I can only speak for Germany but in the recent years I have seen that VUCA has taken a bigger role in many projects. We talked about megatrends and small trends but in all cases we talked about possible disruptions and about ambiguity. Perhaps I should focus on ambiguity. It means that phenomena are not so easily integrated and there are **different and contradicting interpretations**. In Germany we have, at least among the younger researchers, a certain inclination to do **more hermeneutic foresight work**. And also in some cases to do causal layered analysis (CLA). It has been given consideration. We will have to see in the coming years whether it was sufficient. In addition, we now have new more efficient formats for workshops. We discuss more wildcards and combine almost any seminar on foresight methodology for the German government with wild card exercise. Perhaps we are on the right way. But whether we already have sufficient results, I am not sure about that yet. There's uncertainty.

S: The way I see it there is a big need for VUCA reflections and considerations. It is obvious that we have to take them into consideration.

K: We are also more open-minded than in the earlier years as we now **not only think about the unthinkable but also taking into consideration the unpalatable** - things we do not like.

S: How about taboos?

K: Taboos are so important. I am always thinking which taboos I have myself and how can I overcome them. I have a **typology of taboos**; there are three or four types. The first is the usual type like when in a project you are being told that something is a “no-go” area or something similar. This is a direct sign that perhaps you should go there anyway, even if your client doesn’t like it. Then there are taboos of the second order. These are concerned with political or scientific correctness – e.g. when thinking whom to invite to a workshop. For example, when you exclude a person whose behavior does not fit you or when you have assumptions about certain religions or ideologies. Then there are the third order taboos. These are the things you are not able to think about, simply because you lack the concepts. You lack the images and words to think about them or talk about them. These are the **unspeakables**. Perhaps somebody should develop new terms, words, narratives and images for it, to break out from the conceptual framework. I usually make a small exercise with my students. I ask if some of them are Christians, and if yes, I tell them that according to your religion, the Christ should have a second appearance on earth. Then I ask when they are expecting this to happen. Then you see that they are experiencing a clash inside their heads. I can also put the same question to use for Muslims. These are also sort of taboos. Also stupid things such as unicorns and fairytales. But you could look for “unicorns” that are challenges to the current scientific worldview.

S: I like that concept of taboos, it is very intriguing and also close to the CLA method, because it is all about **shattering existing assumptions**.

K: I recently ran a CLA for some colleagues and the main point was to find out if we have some taboos and if yes, how to overcome them, focusing on the deepest levels of thoughts – the myth level. The litany level is clear but the mythic level contains taboos. We found some of them.

S: It is also related to the question of timing. As you mentioned unspeakable things. There will come a time when all taboos will be put to the table.

K: We as foresight people should be the first ones to do so. Timing is crucial in projects as well as in general. When I started in foresight 30 years ago, we had no trends in respect to religion and we lived in a secular society. We would not have dreamt of religion coming back and having an important effect on us and our society. But as times are changing, we have to change with them.

2. How could governments, companies and all organisations learn to cope with this VUCA world?

S: What are the concrete steps you would recommend for governments, companies and organisations to address the VUCA world? How can they learn to cope with it?

K: They should of course start from the beginning. I know some companies that do not even take megatrends into account. There is no use going to them to speak about signals, for instance. But in general, there are many possible steps that can be taken. In former times one tried to **cope with uncertainties by keeping stocks**. Merchants have traditionally built up their stocks to get money and to have more resources - to be on the safe side. This does not work any longer. Nowadays we need to be more flexible. We talk about the agile age and agile company. Perhaps it’s not enough. We should **include foresight or anticipatory mechanisms into the organizations**. There should be employees who are **anticipating upcoming events, thinking outside of the box and even considering things**

which are usually not on the table. These measures can help in making the company “**futureproof**”, meaning that foresight is embedded in their actions. The question is how to do it without harming the existing structures and what does it mean for the people etc. People need stability. **How to provide stability during a time when everything seems to change?** It is really difficult because it is out of the human character. There are no solutions which fit all.

S: There are some positive examples of organizations which are willing to hear and address this VUCA world idea and concept. I have an example from Finland; the Finnish Association of Consulting Firms SKOL. They were willing to have me ten years ago conduct a workshop which focused only on surprises and black swans. All we discussed was these unexpected events and their consequences. And it turned out to be very successful.

K: We always encourage private clients to combine megatrends in scenarios with at least some wildcards etc., but it is usually rather complementary and not the sole focus.

3. There are more and more surprises, globally and in each of the countries. We could even phrase that “**Surprises are the new normal**”. **Should we change our approach to surprises accordingly?** Not to be shocked by them but remain Stoically calm and agile to them? Is a proper process this: to imagine and identify what kind of surprises may happen and how can we prepare to their arrival? Or should we prepare ourselves more actively to try to prevent certain surprises to happen at all?

K: I quoted today on the Foresight Friday event about this common article we wrote (Heinonen et al 2017). A little bit of Stoicism is always fine. First we should consider that **it is impossible to map all surprises**. We would always get surprised by something even if we committed our whole lives to catching uncertainties and complexities. The question is even if we are surprised, that they should not take us “in the cold”, “take us napping”. We must at least to certain degree **be prepared for surprises by creating general strategies**. This means more agility, better resilience, in order to have the **mental and at least part of the physical capacity to deal with the issue**. Surprises are not the same. There are quite **different kinds of surprises**. I am currently involved in a study focusing on existential risks to mankind. These are really large surprises and of course one tries to do something so that these wouldn't happen at all. The thing is that we should not only be reactive but proactive, meaning that we should **counter surprises by ourselves and not simply wait for them**. By doing this we should **enlarge our room for maneuver**. We should try to invent and develop new futures. **Transformation research and transformative action is the counterpart for passively waiting for surprises**. We have to combine these both things and then we are perhaps on the right track. We should always also consider that most people do not like being surprised. They do not say: “Wonderful, surprises!”

4. With the current **coronavirus (covid19) epidemic** we have an illustrative case at hand. **Would you consider it as a risk that just has been realized or as a wildcard? And is there something surprising to you in its spreading or in the responses to its spreading in so many countries?**

K: I regard it as a quite well-behaved virus. It is not too lethal and can be contained. When having a pack of wildcards, pandemic is always one of them, since the beginning of the 90s. As a wildcard, it should hit mankind much harder. It should have a higher mortality rate and even more elaborate spreading mechanisms. Therefore, I say it is “well-behaved”. It is not exactly harmless, but I can imagine of worse viruses. Luckily I'm not a virus designer. And, in a way, it is one of the usual risks that are already taken into account by the World Health Organizations. They have their outbreak

network and mechanisms to react to it and to define it. Moreover, at least in the Western World, we have a healthcare system which is designed to handle a pandemic. We have countermeasures against it. That is the healthcare aspect. Nonetheless, it has been a wildcard economically. It hit one of the manufacturing centres of the world. Manufacturing has stopped in some cases. This is the aspect I am impressed about. When compared to for example Ebola, which has similar mortality rates, but hit mainly underdeveloped poor countries and therefore, had rather no impact on the world economy. This is different with corona, which in this aspect has done a “good job” as a virus.

5. What is the **worst case scenario** that could be outcome of the coronavirus episode?

K: Corona has exposed us **weaknesses of the world economy; the global dependencies**. For example, some drugs are only produced by one of two companies, and some of them were in Asia. This is not resilient, not even robust. Corona tells us that **we should reorganize our infrastructure and our industries**. It is really food for thought. Of course we can imagine also a much worse scenario. A virus that is much more deadly, infects more people, is transmitted only by breathing for example and has a longer incubation period before showing symptoms, for example four weeks. In this case the virus would spread all around the world without anybody noticing it.

6. What would be the **best outcome of this incidence?**

K: The best outcome is that we are getting an understanding of how we can cope with infectious diseases and we are from now on focusing more on them. They have not been a main focus in medical research in the past few years. The other outcome is that we are **reconstructing our global economy** which will now become more resilient to similar shocks. This means **less centralization of production, less vulnerable supply chains** etc. Everything is dependent on everything but cannot be too dependent. This especially applies to the pharmaceutical field. We can learn lessons from it.

7. In Finland, we focus on security issues as the so-called **comprehensive security strategy**. That means that the safety and security of whole-of-society is of our topmost priority, not just concentrating on one of the sectors (such as housing, transport, industry, defence, education, health, religion/ideologies, natural resources, built infrastructure etc). We look at the big picture. Comprehensive security also means that the interconnections between different areas are highlighted, such as energy, food, water nexus. **What kind of other very important nexus could you raise as important topic for foresight in security issues?**

K: First of all, the German authorities have a rather similar approach. A blackout may interrupt water and food supply, the functioning of governmental institutions, and in the end, lead to a breakdown of society. Therefore, we have to look at all of these combinations. I always use the risk report of the World Economic Forum, in which they highlight all the connections between different fields. Political unrest in a country can effect neighboring countries, disrupt supply chains, impact the global economy, which effects the global stock markets. Then for example, in the next election the opposition parties will rise to government. Everything is interconnected in our societies. One has to **look at so-called spreading mechanisms of risks**. Usually they are combined risks. In my opinion, war is still underrated in almost all security studies with only little exceptions. There is a danger of great

war. Think about Syria. One of NATO Member States is in conflict with Russia. Such things can evolve into larger escalations. Therefore, I always include in my risk studies, the possibility of a thermo-nuclear war (as in the 1950s-1960s). It is not yet an abandoned risk, but we forget about it as we have so many other risks and challenges in our minds. In fact, **peace is a prerequisite to all others**.

8. Health is also a matter of security much influenced by the megatrends such as climate change, demographic change, migration, digitalization..... **How would you see the future of health systems? What are the most promising assets in attempting to create successful health (care) systems and policy?** Genetics, AI, big data, new service innovations...?

K: I would not start with health innovations but with **education, which is the most important aspect for the health system**. People who know how their body works, what food does to them, (at least some of them) behave in a healthy manner. We have to **raise consciousness about behavior, which effects wellbeing and health**. The most important point is to **help people being healthy**. Other aspects are **repair mechanisms**. Even if you stay healthy your whole life, you will get some of the elderly people's diseases and then you will need the health system to repair you. However, the most important thing is not the medicine itself but the **relations between people**. It is well known that if a couple is divorced, life expectancy drops mostly for the men, not so much for the woman. It means that **social relations are of crucial importance for health, for both mental and physical health**. People who are staying closer to each other are more resilient in their health. This means that in addition to blockbuster medicine, individualized specialized therapy should be more developed. The costs will of course be a problem. Overall, I am proud that in Europe, we have a rather **equalized health system, which in principle helps everybody** without looking at age, color, social status etc. It has to be an equal treatment system. That is of course my solidarity idea of a European society.

S: I was impressed by the education aspect – education and awareness. If you for example think about food, it is of course food for humans but it is also a health factor.

K: Yes. Most people do not understand what food does to them and how nutrition impacts their health and that they can even fight some diseases by eating differently. The problem is that all these ready-made foods are not healthy. The **biggest health reform would be a nutritional reform**. And I do not imply that this means vegan food. For me, vegan food is also unhealthy food.

S: In which way?

K: Because as we have it now it is mostly unbalanced and some substances that the body needs are not in the diet or you have to eat them additionally. It is mostly quite industrial food, which is processed through many stages. It is not the vegetable you pick up from the field and eat. That is healthy food. For example, the vegan burger is fake food.

S: I have to disagree here a little bit, because vegan food can be very delicious, but it doesn't have to be imitating meat. But if you are a vegan, you need to have much more information about nutrition.

K: We can agree on this.

S: You can self-impose diseases.

K: For example, when you go to extremes, or one-sided. Too much exercise is not good. Or Paleolithic food of our ancestors hunter-gatherer food, I think it's overdoing.

S: Food can also be medicine. You can get sick from food but you can also be cured with food.

9. What about the role of A.I.? For example, in Finland the population is aging and there will be increasing shortages in healthcare staff. Osmo Kuusi has talked about the possibility of everyone having avatar personal assistants. **What is your opinion on this?**

K: It depends on what you understand with AI. When thinking about A.I., we should think about the most important factors in the caretaking of the elderly. Usually you need human personnel to talk to them. To some extent, you can supplement it with A.I. For example, in Japan they have mechanical animals that react to elderly people and that is good for their mental development. Also, 20 years ago a friend of mine developed this scenario about A.I. only speaking with elderly people and helping them overcoming their deficiencies for instance after a stroke. They need days and days of training to regain their speaking abilities. This type of A.I. would be very good to them. However, what we would really need would be robots that could help elderly people to go to bed. Unfortunately, the development has not progressed enough. There are many tasks that could be completed by robots or A.I. or with their help but **human contact remains the most important**. We should **not count on A.I. to solve all or our problems**. A balanced combination of humans and AI.

10. It is very important for the youth to have hope for the future. Especially the youth are very concerned with climate change – climate emergency as existential risk – and harbouring pessimistic anticipations of the futures. **What is your key advice concerning *Futures Angst*?**

K: If you have too high hopes you will be too much disappointed, like in the Fridays for Future movement¹. That is their problem. My futurist colleagues always say: “you cannot forecast the future”. Why do you fear climate change - even the future of climate change is not yet written. There are surprises on the way. I hope not only bad surprises. And surely climate change is not the only risk for us. The problem with Fridays for Future is that they only focused on one issue. It’s right to try ride a political momentum but they should see that there also other risks out there and that only in a democratic society they can act to prevent the climate change. There are many interconnections. When it comes to me, a German magazine once wrote about me: “he is too much of a sceptic to be a pessimist”. I think this is a right attitude for a futurist. As I said today in the Foresight Friday event, I also have a lot of respect towards a French futurist Gaston Berger who invented the term *la prospective*. His fourth principle of futures thinking was that you should take risks – touch unpalatable issues. My answer to Futures Angst is therefore: “*du courage-du courage-du courage*” = “**be courageous**”!

S: Very encouraging message. I would also like to add hope here. Combination of sufficient courage and hope to have an impact on futures. Thank you very much for this interview - . I think we should make this a tradition to have these discussions!

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¹ Please note that Fridays of Future movement is different from Foresight Fridays.

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