INTERVIEW

with/mit Andrea Vetter

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How to care about technology?

Wie können wir uns gut um Technik kümmern?

In her research, Andrea Vetter focuses on the role of convivial technology and forms of a caring economy, which tend to be made 'invisible' in today's prevailing neoliberal capitalism, despite being foundational for a good life for all. She is also an acknowledged critic of techno-fix beliefs, which perceive technology as the only way out of global socio-ecological problems like the climate crisis. In contrast, she believes that we have to find new convivial ways of human and non-human relationships based on commoning. The editors of this issue's Special topic, Daniela Gottschlich, Julia-Lena Reinermann, and Sarah Hackfort have conducted this conversation.

Andrea, thank you very much for joining us today to talk about how the integration of care could change technology assessment and possibly drive sustainable transformation in society. So, let's start with the question: What is your understanding of care?

Based on my research on convivial technology, I understand care as a broad activity that also includes maintenance work of technical things. Relationships are at the core of care. But these are not only relationships to human beings but also to non-humans, including artifacts such as technical devices. Every device, every electricity or telecommunications network requires material inputs like raw materials, underground cables, and buildings. All these things are subject to entropy; once built, they will eventually fall apart, as Rosi Braidotti (2006) suggested. Often, out of 'patriarchal carelessness', the focus is solely on the act of *producing* things. But the much more important question is how we *maintain* technical infrastructures, devices and our environment, including the houses we live in. This requires a lot of care work. Just as the spaces we live in need to be cleaned, technical devices need to be maintained and repaired.

To my mind, care is not limited to the caring activities that, in patriarchal settings, are typically ascribed to women. Instead, I have a broader understanding. I think it's crucial to include the type of household and repair work that within rigid binary gender images is often attributed to men, such as changing light bulbs, changing car tires, or painting wooden windows. This is all care work that is often overlooked. With this understanding, taking care of things that would otherwise fall apart, for example by repairing them, comes more to the forefront.

What does care have to do with different approaches to sustainability?

Quite a lot. Let's look at the issue of contaminated sites: The industrial age and its associated technological innovations produced mountains of hazardous waste, which were dumped and disposed of well into the 1970s without any consideration for the soil and water. This is a classic sustainability problem that could be tackled in different ways. At present, I can identify, roughly speaking, two positions for sustainability transformation: an ecomodernist position of green growth and a degrowth position. From a strictly ecomodernist perspective, one could argue that our technical infrastructures and all the composite materials that go into them, are toxic. For example, the cradle-to-cradle advocates who make this argument say that we must change completely and only produce things that are green, healthy and new. This requires a lot of capital and resources, that is, a lot of green growth. This position considers ecological problems, but it leaves exploitative capitalist structures of production intact.

From a post-capitalist, feminist degrowth perspective, I think this position is nonsense. We need to get away from apocalyptic notions of progress where 'we're going to build a new world once the old one has completely vanished and we're going to do it in a good, green, new way.' That's not possible. We are living in this world with all its testimonies to toxic industrial production. And this applies both to the material and the immaterial world. We live in a world shaped by 5,000 years of patriarchy, war, genocide, trauma and guilt. All this is felt in our very bones, and we can't get rid of it by saying we're just going to make it all new. Instead, we must compost and deal with all these burdens. The same

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goes for material things. With a care perspective on sustainability, we can say that recycling is more efficient and much more sustainable. In other words, use your old refrigerators longer, even if they use more electricity. Because when you take into account the energy embodied in their production, it simply becomes more sustainable. It's about asking ourselves how we can learn to love our inherited burdens (Fersterer and Vetter 2020). In other words: How can we reuse all these old appliances, with all the problems they present, in a mindful, slow and careful way, while dealing with our toxic immaterial inheritances?

Another important question to ask wherever we need new infrastructure is: Who owns it? For example, I'm currently working on a research project about local energy transition and big renewable energy plants (Big Trans n. d.). The crucial question here is: Are they built by profit-driven outside investors, or are they owned by local municipalities or citizens' energy cooperatives? But that still doesn't tell us where the metals and rare earths used in the PV modules came from. This is something we should also care about. As the field of development cooperation has known for decades: A newly installed technical system will be rather short-lived if the local people don't have some sort of connection, some sort of relationship to it – either by having the know-how to maintain and operate the equipment, or by receiving some material or immaterial benefit from it, rather than just having their scenery ruined.

You say that a care perspective on sustainability transformation in terms of technology and technical things requires learning to love the burdens of our legacy and thus focusing on the existing rather than the new. Secondly, the question of ownership is central to new technical infrastructures – in other words, who owns these infrastructures? The third aspect is how they are embedded, how people can connect to them. And the fourth would be questions of global justice: Where do the materials throughout the whole supply chain come from, what are the consequences of their extraction and use for others? Looking at these different strands, what would a precautionary technology assessment mean to you?
From a global perspective, analogous to Ulrich Brand and Markus Wissen's concept of an 'imperial mode of living' (Brand and Wissen 2021), we can also speak of an 'imperial technology' that we need to overcome. An imperial mode of living is expressed, for example, in the imperial access to food, which also includes its technical components, devices and, above all, the raw materials needed to produce them. So, a precautionary technology assessment would involve the conscious consideration: Be mindful and think about who is going to take care of these things for the next 50 years? What will it take? Does the technology make sense given the climate catastrophe and the predictions of what is going to happen climatically in that region?

Dr. Andrea Vetter

born 1981, is a transformation researcher and is co-founder and co-designer of the socio-cultural center ‚Haus des Wandels' in East Brandenburg. She is editor of the magazine ‚Oya' and associated member of ‚Konzeptwerk Neue Ökonomie' in Leipzig. She works as a researcher at the Chair for Sociology of Technology and the Environment at BTU Cottbus-Senftenberg.

And with regard to the inherited burdens we should learn to love, it may often involve having to tear them down in places because it would take too much energy to keep them going. The question of whether we want to put ourselves through this, given the times we are rushing into, becomes also relevant. We are living in deeply crisis-ridden times, which will likely be accompanied by a whole series of eco-imperial conflicts – driven by environmental exploitation and inequality – including wars and unforeseen weather events. For example, building a nuclear power plant has become even more risky. Nuclear power plants were built in the 1950s, after World War II, in places with very stable social and climatic conditions. Such a high-risk, large-scale technological undertaking requires very stable social, political, and climatic conditions to be operated relatively safely. That safety no longer exists. We have to be aware of these changed circumstances and of the fact that we are moving into times of great uncertainty and risk. That is why it is now even better to use convivial technologies: manageable, smaller, more regional, more relational, less failure-prone, less risky technologies (Vetter 2018, 2023).

How can care approaches help to develop and implement technologies in a more sustainable way? Do you have any concrete ideas how we can raise awareness and get people on board?
I think for most people it may be helpful to think about the direct environment they live in. This can prevent us from plunging into apocalyptic feelings and enable us to recognize what we can do for and by ourselves. There are different levels and strategies of transformation where we can start, but they all start from our personal situation and aim at different societal structures (Vetter 2023). So, if things suddenly break down or don't work in the same way anymore, and we do know how they actually work, then we can either fix them or say, no, it's too expensive to fix them, let's do something else instead. Let's take the example of composting toilets, which I've done a lot of research on.

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The people I've talked to say they use composting toilets because they are motivated to maintain them, to take care of them on their own. This relatively time-consuming work makes them feel embedded in ecological circles and gives them a sense of manageability, control, and security. If there was a major power outage, people would still have functioning toilets that are simple and don't require electricity. Our wastewater treatment plants, on the other hand, don't work without electricity. What is required now is a huge increase in the technological literacy of broad sections of the population. According to Ivan Illich, this is a question of self-sufficiency, of empowering people rather than just relying on experts.

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What political changes are necessary to achieve this, and what institutions support people in care work and technology assessment?

First, we could reduce the amount of time people spend on wage work, so they have more time to care for themselves and for others. Part-time work as the new normal!

Second technical policies need a much stronger focus on sufficiency, reuse and recycle instead of innovation. We can find new uses for old buildings and adapt existing technologies. In France, there's a government incentive for people who convert their gasoline cars to electric vehicles. People often think that if you want an electric car, you have to buy a new one; but that's not true. You can simply replace the engine and a few other components. I thought that was totally awesome. Why isn't this more widely known and supported? Why aren't there repair and conversion centers attached to recycling centers in every municipality? This should be a mandatory municipal task. There have been similar programs in the past. In the former GDR, there were SERO points (run by the VE Kombinat Sekundär-Rohstofferfassung), that is, collection points for secondary raw materials. These points were located in every municipality, and people could bring items to be recycled, reused, and even recycled again. However, the SERO combine was dismantled after reunification. It would be interesting to reinstall something similar today.

Thirdly, school education is another starting point. For example, only few German secondary schools teach crafts. Why is it not a normal part of the curriculum from year 1 to 10 for everyone to learn in workshops how to handle materials like wood, textile, metal, plastics or ceramics, to repair things and learn how to use a 3D-printeror program a Raspberry Pi? Or take the so-called digitalization programs in schools: they cost insane amounts of money, and many contracts are signed with large corporations like Microsoft. Open-source school clouds have been and are being developed with public research funding. This would be a huge opportunity for schools to buy old discarded computers across the board, run them with Free and Open Source Software, and allow students to learn how to use them in IT class. This would create stable networks, make real learning possible and be far less costly. However, today's market logic tends to hinder rather than support what is technically possible.

Last but not least, there's the issue of research funding: Organizations like the Free Software Foundation, for example, have long been calling for 'public money, public code', which means that all research projects involving collaboration with industry and funded by taxpayer money must be made available to the public open access. This could be expanded to open-source hardware (OSHW) as well. Why not set up in every university an open workshop and maker space for local small-scale industrial production, coupled with economic models of community-supported everything? In these regional public workshops washing machines, dishwashers, hoovers, fridges, mixer and all kinds of household devices could be built and repaired, and their blueprints made publicly available with an OSHW licence. Engineering and economics students could develop individual projects, and local community members, such as younger students, housewives or senior citizens, could get involved. We need to think of basic technical devices as a commons. But to make all these ideas possible, we need to come back to my first point, reducing the standard number of working hours: People do need time and space to develop ideas like this and to establish relationships with everything that is around them.

Thank you very much for the interview.

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