**Documentation of the 24th International Summer School 2022: Digitization, Artificial Intelligence, and Responsibility of Sciences.**

By Maria Jastrzebska & Viktoriia Simankova

**Saturday: Day 1, 25. June 2022**

Everybody who wanted to learn or exchange about digitalization and its social impact in an open, friendly, and interdisciplinary atmosphere, was at the right place at the right time here. The summer school started with a cozy **party at the old airport Tempelhof** in Berlin, which is nowadays a huge summer meeting place for the residents of the city and its visitors. Everybody was welcome: students, their hosts, and organizers as well. We could get to know each other and take the time, to find out what our interests and motivation in summer school were. But most of all: we had fun, danced, broke the ice, and built up bonds which let us start the adventure in Berlin in a good mood.

**Sunday: Day 2, 26. June 2022**

Berlin is a huge city of many cultures and a rich history, mirroring the social changes in the whole Europe. In the summer, it is also full of open-air parties and concerts. We were offered on the second day of our school to visit some interesting places, guided by students from the Alice Salomon University of Applied Sciences (ASH). They took us on **a journey to "the heart of Berlin" on foot and by boat**. We could choose the different sightseeing tours and continue our exchange as we talked about our own, diverse countries of origin or other cultural experiences we had. Of course, it is impossible to explore Berlin fully in only one day. The students from the ASH prepared a little sightseeing guideline for us, though, so we could explore the city on our own in our leisure time during the week. Shortly said, we had an excellent opportunity, to connect learning and entertainment during the summer school and were supported with all information we needed.

**Monday: Day 3, 27. June 2022**

On Monday, we already knew each other, so it was easy to get into the interdisciplinary, scientific discussion. But first, as we came together at the ASH, we sat in a circle and were greeted by Prof. Dr. Heinz Stapf-Finé and Prof. Dr. Bettina Völter (the director of the ASH) very warmly. The first input, that led us to the topic of our gathering, was the words of Frank Schmiedchen from the Association of German Scientists (VDW). As he underlined, what the dangers of unreflected digitalization for democratic countries and human beings as such are, an intense discussion arose. We came to the advantages and disadvantages of digitalization and

were already strongly up to find solutions. Extremely helpful at this point was the fact, that we had various backgrounds. Some of us studied social work, some engineering, computer science or international management, but also economists, sociologists, and philosophers were present. Hence, we came up with many approaches, which appeared to be great topics for the student presentations the next day. Some of us decided to take the chance and prepare them, but it was not necessary. Before we got to it, we spoke with Dr. Erika Mezger about the **impact of digitalization on social services**. She showed us, for example, how complex it is, to establish an international guideline or institutional frame, for supporting employees in the digitalized labor market. She mentioned, though, how important it is, that we take part in the process, take responsibility for it, and engage ourselves. So, we went home to prepare for the next day with the reflection, that the problem is complex, and we should be aware of it while looking for remedies. But also, that we can join our interdisciplinary knowledge and are not alone in our "professional bubbles".

**Tuesday: Day 4, 28. June 2022**

On Tuesday the weather was, fortunately, a little cooler so that we could focus better on our presentations. We could hear the report of the situation in the **educational environment in Turkey during the covid-pandemic**, and how the digital devices and system could support keeping the educational system going on. Considering the problematic issues of the situation brought us to some critical conclusions, like, that we cannot replace personal social networking with digital one. On the other hand, it is helpful and useful to supplement "analog" learning and networking with digital possibilities: it can help to include people who cannot take part in it physically. Afterwards, we took a little **insight into the bioethics and digitalization of medicine in Mexico**. The questions we asked, were, how could equal access to the new treatments be possible, what if we were stuck in an optimization struggle, and how could it change our concept of humans as such? Then we looked at the advantages and disadvantages of **digitalization of the traffic**. We asked: could artificial intelligence solve our traffic and supplies problems? How could it help decrease the pollution and waste of time? To what degree would it be reasonable to shift decisions to the AI, not losing control and regulating the responsibilities at the same time? In the third presentation, there were representatives of social work to hear. They showed that the concept of human, based on the instrumental reason and prioritizing of economic growth could lead to the reproduction of poverty and inequality in the neoliberal "activating welfare state". **Digitalization pressure could affect vulnerable social groups**, making them more dependent, or excluding them. A vision of a world that they want to live in, was from the perspective of the social workers a social reality, which allows people

to criticize digitalization processes. The goal is not to reject the technological progress as such, but to steer it through community-based networking and letting the digital devices and systems remain only tools. These tools should be used wisely and be ethically constrained based on the "capability approach", to protect the democratic welfare state and individuals. The last student presentation gave us an insight into the so-called **nudging**, which is **a strategy of influencing people's behavior** according to their well-known psychological biases, like being idle. It caused a very intense discussion on the question if nudging as a manipulative strategy is ethically acceptable, even or most of all if we mean, that we want to make individuals act differently for their own good. The main problem is here the issue, that we would have to assume, that we know what is good in general. So, the exchange that we had on Tuesday was broad, rich, and intense. We saw that digitalization is a complex topic and that an interdisciplinary approach is very much needed. The first step was to find the common language between the disciplines and, most of all, to answer some principle philosophical questions on humankind and concept.

In the afternoon, two lecturers told us more about the construction and fallibility of artificial intelligence and the philosophical approaches of **transhumanism and posthumanism**, which sometimes tend to be religious ways of thinking, putting the technology in the place of God. We were warned of the present possibilities of trading with data, collecting power in hands of a few people, and transitioning the western democratic countries into authoritarian systems. Digitalization could be an instrument of it. So, we concluded, that we should use the technology to serve us, but we desperately require international law regulations and ethics, to steer the process and not allow the inequality and authoritarian forms of governing to overtake. It was a hot discussion, and we still had numerous questions, which could not be answered, without gathering more knowledge about the global economic and political issues. These topics came to word in the next days of our summer school.

**Wednesday: Day 5, 29. June 2022**

Wednesday was all about the topic "**The Future of Labor and Social Systems**". Therefore, we started the day with a lecture about "The crisis of neoliberal globalization" by Prof. Dr. Hansjörg Herr from Berlin School of Economics and Law. We learned about the development of multiple crises in the past, which can help us to understand and shape the future. In following presentation about "Digitalization and New Social Questions" by Dr. Christian Kellermann, German Research Center for Artificial Intelligence and former Director of the Institute for the

History and Future of Work, we looked at the impact on labor and jobs, as well as on social systems.

In the afternoon, we could choose a field of social work and visit an organization to see and hear how it deals with digitalization.

The **field visit**: **German Association for Social Work** (DGSA)

One of the visits was a meeting with the German Association for Social Work. They let us ask what we are particularly interested in, and we discussed it. The issues were the rather slow process of digitalization in social work and difficulties in implementing the digital skills in Curricula at Universities, but also according to the direct work with users. A frame of competencies and some guidelines exist though, whereas they are very abstract, and we concluded, that eventually, social workers should understand the principles upon which digitalization takes place and with what consequences. Further, the usage skills should be practically implemented in modules. One of the main goals of the social work facing digitalization in the academic and users-work dimensions seemed to be an aware and responsible approach. So that the social workers adapt themselves and their clients to the technological progress in a critical and responsible way.

The **field visit**: **Caritas Digital**

Another field visit aimed to get to know Caritas which is one of the largest welfare organizations in Germany. The Caritas Digital department first spoke about the organization in general, about the social work Caritas offers, and in particular about the digitalization in social work. We learned about the project "Learning Systems in Counseling", which deals with AI and data in social associations.

After such a demanding day, we also had some spare time. Some of us could spend time in the city, visit an exhibition "The future of mobility" at Futurium and various other events, walk on the streets of Berlin, enjoy delicious food, meet new people, get to know diverse cultures and finally fall asleep with a lot of knowledge and different impressions we gained throughout the day.

**Thursday: Day 6, 30. June 2022**

We started Thursday with a lecture "An Old or New Hegemony? **The International Perspective of Digitalization of economics**" by Dr. Rainer Engels (GIZ), followed by a discussion about the presented 10 theses of digitalization.

In the afternoon, we walked to Einstein Hall in Berlin-Brandenburg Academy of Sciences and Humanities. There we joined the event "**Summer School goes public**" - a Public Discussion organized by "International Summer School" and "Young VDW" on Responsibility of Science in the Field of Digitalization and Artificial Intelligence. "Young VDW" is an association of national and international students, graduates, doctoral candidates, and postgraduates from various scientific disciplines which aim to bring young researchers from different scientific disciplines into an active and constructive discourse with each other, to strengthen them in their competencies, and thus to improve their prospects. In this spirit, everybody was warmly welcome to participate at the Public Discussion! All summer school participants, students from Alice Salomon University of Applied Sciences Berlin as well as international professors and students could discuss the topic of digitalization and artificial intelligence.

The afternoon was divided in 3 parts: First, we got insights into AI from a perspective of a neuroscientist Dr. Niall Duncan from Taipei Medical University as well as keynotes about AI in combination with ethical and legal reasoning by Prof. Christoph Benzmüller from University of Bamberg. Second, Prof. Ute Schmid from University of Bamberg presented and Alexander von Gernler, former Vice President of the German Informatics Society, spoke about society needs and the human factor in the responsibility of science in the field of digitalization and artificial intelligence. Between each part, everybody could ask questions on the individual presented topics. Next and last, all speakers were invited to a public discussion. This was the almost most interesting part of the day as we could ask questions about the future and the development of artificial intelligence that concern us and then observe answers and expert opinions from different fields. We learned about explainable AI, the importance of transparency and human-AI-partnership, why we should replace detailed understanding with trust and even how Google trains its autonomous vehicles with our help without us realizing it.

In the evening, all summer school participants and speakers were invited to a **farewell party at YAAM Berlin. Young African Art Market** is a multicultural place in Berlin with an enormous history. At the inner-city beach of the YAAM which is located directly on the Spree we could get away from the hustle and bustle of the city, speak to each other in an informal atmosphere, get to know each other even more and form friendships. We relaxed and enjoyed African food and cool drinks, played table tennis and discovered wall art. All of this was accompanied by good music, ranging old-school classics and roots reggae to the latest tunes and friendly Caribbean vibes.

**Friday: Day 7, 1. July 2022**

Friday was our last day of the summer school. Dr. Jasmin Link from University of Hamburg prepared a workshop "**Towards the future**" about an interdisciplinary approach on various perspectives on digitalization, digital networks and artificial intelligence. We had some very interesting discussions about path dependence and the importance of connecting perspectives. The day officially ended with a Certificates Ceremony and final evaluation.

**Conclusion**

Every summer school is a unique experience in itself. Summer school staff is a talented and enthusiastic group of people united by the desire to offer interesting and professional experience. Scientists, lecturers from universities and experts from economic fields are well versed in their academic disciplines. Lectures, oral debates and presentations are all actively used to push students to deepen their knowledge, familiarize themselves with critical thinking and the future development around digitalization and artificial intelligence. The courses and speeches excite, inspire and develop. This is what makes the experience of being in a summer school program so rewarding. In addition to that, who wouldn't also like to explore the capital of Germany, meet new like-minded people and have an international experience?