

# **Digital Futures in the Making: Imaginaries, Politics, and Materialities**

8<sup>th</sup> International Working Conference of the Digital Anthropology Commission  
German Society for Cultural Anthropology and Folklore Studies (DGEKW)

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**Book of Abstracts**

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## KEYNOTE LECTURES

### **Ethnographic tales on AI, Data and Dark Futures: what should Anthropology do with the digital agenda of the 'others'?**

**Débora Lanzeni (Monash University)**

Thursday, 15<sup>th</sup> September, 09:45-11:00

What is digital future-making? How do we understand theoretically and ethnographically digital processes surrounding our fieldwork and research problems? How should anthropologists deal with digital futures played out in front of us?

These are questions that I will address from my trajectory in technological design, imagination and future of work understandings. I will draw in the ethnographic projects that I am currently involved in on the 'digitalization' of work in service platforms and the health industry.

### **Forgetting and remembering how to make knowledge and culture in AI times**

**Maya Indira Ganesh (Cambridge University)**

Friday, 16<sup>th</sup> September, 09:15-10:15

My talk begins with identifying shifts occurring at the intersection of knowledge-production, the digital, and culture. Applications of machine learning (ML) technologies to research are revealing the depth of the reproducibility crisis in Science. Large natural language and image-generation models reveal, ironically, the limits of language for the cognition and relationality emerging through these technologies; and how we are in thrall to narratives and metaphors of AI as either tool or threat to humans. In parallel, decoloniality as epistemology and as methodology evolves through challenge and discussion. It calls out modern knowledge-making about the human that has relied on a problematic naming of the nonhuman, which 'AI' dutifully replicates. Drawing on my cultural research about AI, autonomous vehicles, and recent writing and teaching about the new industrial product, 'AI ethics', I will talk about the place of the cultural scientist in making Humanities-situated knowledge about the digital, technology, and culture.

## **PRE-CONFERENCE WORKSHOPS**

Wednesday, 14<sup>th</sup> September, 12:00-16:30

## **“Wissenssoziologische/anthropologische Diskursanalyse digital – die D-WISE Toolsuite | AI-in-the-Loop für qualitative Forschungsansätze”**

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Chairs: Gertraud Koch, Chris Biemann (University of Hamburg)

Discussants: Alejandra Tijerina García, Florian Schneider, Isabel Eiser, Teresa Stumpf, Tim Fischer, Fynn Petersen-Frey (University of Hamburg, D-WISE project)

Mit der D-Wise Toolsuite entsteht eine open source verfügbare prototypische Arbeitsumgebung als digitale Unterstützung von wissenssoziologischen Diskursanalysen (WDA), die in einem BMBF-geförderten Verbundprojekt in interdisziplinärer Zusammenarbeit von Empirischer Kulturwissenschaft und Informatik entwickelt wird und Open Source zur Verfügung stehen soll. Ausgehend von den Forschungslogiken empirisch-qualitativer Ansätze werden hier qualitative und KI-gestützte Analyseverfahren in neuer Weise für die Unterstützung diskursanalytischer Verfahren integriert, wobei die Plattform nach dem Prinzip „AI in the Loop“ menschliche Lernprozesse priorisiert, ohne das „Machine Learning“ der KI zu vernachlässigen.

Das Panel stellt vor, wie die D-Wise Arbeitsplattform für qualitative Diskursanalysen eingesetzt werden kann und diskutiert Möglichkeiten, die D-Wise Tool Suite für eigene Projekten zu erproben.

## Experimental Urban Dashboard Designs for Mundane Data

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Johanna Fischer, Inga Reimers, Daniel Schulz (HafenCity University Hamburg),  
Timo Kaerlein (Ruhr-Universität Bochum)

Early morning in the year 2071. The digital city of Hamburg is buzzing with electronic assets loading all kinds of dashboards. Citizens navigate the plethora of urban data while dashboard designs direct their focus: Storing, translating, exchanging, distributing, using, and experiencing data. (Anderson and Pold 2021) Whatever the purpose, they all depend heavily on the aggregated information that is only accessible through dashboard interfaces. Until 2020, the representational apparatus of dashboards generally favored quantitative data, hierarchical structures, and an operational logic of binary choice. The underlying decisions taken as to which types of data were represented at all were often opaque, data lacked context, and qualitative factors were generally excluded. Now in 2022, our experimental workshop, co-conducted by an interdisciplinary team of scholars, proposes an exercise in design fiction: What if we approach the dashboard from a humanities and social science perspective, drawing inspiration from endeavors in data feminism? (D'Ignazio and Klein 2020) Which indicators usually omitted could be made part of a 'critical dashboard interface'? (Verhoeff et al. 2019) How could it reflect qualitative data types like those usually gathered in ethnographic fieldwork (dérives, interviews, on-site participatory observation)? The workshop starts with three brief inputs focusing on the role of critical interface design across the digital humanities (Kaerlein), an extension of what might figure as urban data by taking into account alternative "urban intelligences" (Mattern 2021) (Reimers) followed by an overview of existing design strategies to visualize urban data in the City Science Lab at HCU (Fischer/Schulz). Participants will then work together in small groups. With the aid of online design tools, they sketch speculative dashboard designs to explore the scope of mundane urban data.

## CONFERENCE DAY 1

Thursday, 15<sup>th</sup> September, 8:30-19:00



## Beyond the digital divide? Shaping ethical digital futures

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Chair: Marion Näser-Lather

### **In pursuit of the greater good? Socio-technological imaginaries of developers coding on the 'future factory' GitHub**

Emilian Franco (LMU Munich)

While social- and anthropological studies are increasingly devoted to research the effects of algorithms on the social world (e.g. Neyland 2019) the production of algorithms still appears largely unnoticed and remains "somewhat of a modern myth [and] not a black box that can be simply opened" (Seaver 2017, 2).

When I traced (Geier & Ribes 2011) various source codes (e.g. from Facebook or Signal), they led me to GitHub, the largest platform for Open Source Software (OSS) in existence today. Simultaneously, GitHub is the new "Maschinenraum" (Engine room) of algorithm factories (Daum 2020). Here, new algorithms are developed, tested and distributed – thousands a day, by people from all over the world (Octovers 2021). Whatever algorithmic futures there will be, they probably will be "forked" and produced on GitHub.

Following Appadurai's definition of future „as a cultural fact“ (2013), I take a look on the future narratives and imaginations of the developers and contributors on GitHub. Which futures are desired? And how are they articulated, performed and in-acted during the qualitative interviews I conducted?

A first analysis of the empirical data indicates that besides strong ambivalences, a certain "GitHub identity" or even coding culture guides the future imaginations and links them to a wider narrative, which I provisionally named "the greater good imaginary". By identifying those „socio-technological imaginaries“ (Jasanoff 2016) and guiding moral codes, I believe there is a lot to discuss about emerging digital futures in the making.

## **"This is not what I expected". Sociotechnical imaginaries and disillusionment. An exploration of meaning, purpose and materiality in a military innovation context**

Sofie van der Maarel (Radboud University Nijmegen)

This paper focuses on moral experience and materiality in an innovation context. Whereas most innovation studies focus on optimization and process management, this study investigates the relations between sociotechnical change through innovation, and how people experience meaning and purpose in their work throughout this change. Through an ethnographic fieldwork study with participant observation and in-depth interviews, I analyzed the everyday practices in an 'innovation unit' at the Dutch military organization. In this unit, sociotechnical change is designed and tested with technologies such as artificial intelligence and robotics. I observe that everyday practices in the unit evolve around the co-production of 'sociotechnical imaginaries'. Despite a shared imaginary of an 'innovative military future', there are conflicting perceptions, expectations and experiences on what technological innovation looks like, between military personnel at the policy level, the strategic level and the operational level of the innovation unit. Focusing on moral experience at the operational level of the unit, feelings of disappointment and frustration were leading topics in interviews. I argue that these feelings are exemplary of deeper sentiments of loss of meaning and purpose. As a result of conflicting perceptions, expectations and experiences, the military personnel slowly lose their faith in the imaginary. Therefore, their everyday practices become meaningless and purposeless – they no longer feel as if contributing to an 'innovative military future'. I describe this process as 'disillusionment', which is a moral experience characterized by a value conflict between personal and professional values. It has a temporal and disruptive character, and could further develop into more severe symptoms of moral disorientation or moral injury if not being taken seriously by the organization. This paper integrates a focus on moral experience; materiality; sociotechnical change; imaginaries; (conflicting) perceptions on technological innovation.

## **Crazy, Classified City Life - Hackfeminist Future-Making Practices between Dystopia and Utopia, Predictability and Possibility**

Maja-Lee Voigt (Leuphana University Lüneburg)

Der urbane Raum ist längst ein Inter\_Space: Hier verschränken sich Materialität und Virtualität, Analoges und Digitales in steter Wechselwirkung. Oft unsichtbar und als ‚technisch neutral‘ deklariert bestimmen Tech-Unternehmen zunehmend über urbane Gestaltung, wollen die Komplexität und Zukunft von Städten durch ‚Smartness‘ berechenbar machen. Diverse Lebenswirklichkeiten marginalisierter Perspektiven finden dabei wenig Repräsentation. Im Gegenteil: Von meist weißen, cis-männlich dominierten Entwicklern programmierte Artificial-Intelligence-Systeme scheinen mehr und mehr über gesellschaftliche Teilhabe, Möglichkeiten der Raumeignung on- und offline sowie über die Zugänglichkeit zu (sozialer) Infrastruktur zu entscheiden. Mit dem Voranschreiten der urbanen Automatisierung werden so vor allem patriarchale und heteronormative (Vergangenheits-)Praktiken reproduziert, standardisiert und in der künftigen Stadt materialisiert. Ermöglicht wird dies durch die Undurchdringbarkeit nicht-demokratischer Entscheidungsvorgänge eines technokapitalistischen Urban Designs, die – basierend auf binärcodierten Berechnungen – über die Diversität von Gesellschaften bestimmen (wollen). Wem gehört also diese ‚brave new city‘ die versucht, die Dichte der Unterschiedlichkeiten urbanen Lebens kalkulierbar zu machen?

Aufbauend auf einer fünfmonatigen Feldforschung zu raumschaffenden (Kultur-)Techniken cyberfeministischer Kollektive widmet sich dieser Beitrag dem Aneignen von unterdrückenden, profitablen und patriarchalen (Zukunfts-)Technologien. Analysiert wird, wie Praktiken des Hacking sichtbar und welche Utopien der zukünftigen Gesellschaft dabei formuliert werden. Denn: Was im Kampf um algorithmische Steuerung und Tech-Alphabetisierung wirklich verhandelt wird, ist die Herrschaft über die Zukunft und wer sie nach welchen Vorstellungen gestalten und festschreiben wird. Die digitale Ethnografie zeigt, wie feministische Hackspaces der maschinellen Vorhersehbarkeit (predictability) und zunehmenden Klassifizierung urbanen Lebens zum Trotz versuchen, ihre Visionen einer künftigen, offeneren Gesellschaft bereits in den Zwischenräumen des Jetzt zu leben. Ihre widerständigen Hacks, kollektive Organisation und Aufklärungsarbeit decodieren kritisch, spielerisch und open-source-basiert die hyperdurchplanten und ausschließenden Zukunftsentwürfe ‚smarter‘ Stadtproduktion. Sie fordern ein Recht auf Stadt, auf Repräsentation im urbanen Zusammenleben ein und widersetzen sich damit binären Antwortmöglichkeiten einer automatisierten Entscheidungsarchitektur, die heterogene Bedürfnisse kaum berücksichtigt – weder in der Gestaltung von Algorithmen oder Artificial Intelligence, noch auf dem Asphalt, der die Stadt bedeutet.

## Contested Digital Futures: Disconnection as a Future-Oriented Practice

Hannah Kanz (University of Freiburg)

In the 1980s Hermann Bausinger coined the term “inconspicuous omnipresence of the technical” (Bausinger 1984: 346). This holds true even more with the continuing digitisation. In the last years cultural anthropology and other social sciences tried to account for this change by arguing, that the difference between online and offline is constructed and cannot be uphold (Beck 2015: 3; Miller/Horst 2012: 12ff.). Meanwhile in the public discourse the division of the so-called real life and the less authentic digital space is still strong. In line with this dualistic divide there are calls to spend more time offline, to be present in the moment and to find a balanced way of handling digital media and communication technologies.

This results in different disconnection practices that, by closer examination, hold potential for “reflecting upon what it means to be human” (Miller/Horst 2012: 3). Drawing on ethnographic research in digital detox and offline camps, this paper seeks to map and understand how people negotiate ideas of the good life in relation to digital devices. The ethnographic material – namely fieldnotes and interviews – stems from my ongoing PhD research project.

Disconnection, in this case, describes a voluntary temporal retreat from digital devices as a group and at the same time an individual practice. I argue that digital detox camps function as a sort of laboratory, where people try to form deep connections with themselves, with others and with nature. By drawing on a seemingly lost past and easier way of life they try to envision what it means to be authentically human while confronted with constant connectivity and ambient media. Therefor the future-oriented question of how one should live is negotiated through practices of disconnection.

## Privacy of Adolescence and the Aspect of Digital Divide

Selina Irnleitner (TU Dresden)

Young people grow up in digitized environments and take them for granted. In contrast to earlier generations, there is no “exclusively analogue past” for them - smartphones, social networks and voice assistants have been part of everyday life in most cases since their birth. The presentation will deal with privacy of adolescence in social networks and differences regarding digital inequalities. Analog and digital concepts of privacy from the own research project will be presented and explained. Furthermore, certain practices will be demonstrated that show how young people protect their privacy in social networks. Creative practices as well as the generation-specific demarcation between private and public will be evident. The lecture will thus present everyday practices of adolescents with regard to individual privacy and show, which differences exist between analogue and digital spheres and which criteria the adolescents use for this. In addition, supposedly contradictory behaviour patterns will be elucidated and perspectives for the future regarding digital privacy will be presented. Last but not least, the topic of social inequality in digital spheres will be addressed: The aim is to show which barriers and accesses young people are confronted with, be it in the exercise of digital participation, communication, entertainment or even the protection of privacy, and how these inequalities can affect participation, sustainability, social justice, and even democracy of society.

## Envisioning futures of work: care, solidarity, and the digital

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Chairs: Anna Oechslen (IRS Erkner), Nina Szogs (Museum of Work, Hamburg)

What could digital futures of work look like if care and solidarity are taken into account? With processes of digitalisation transforming work practices and constellations, the boundaries of what is considered work have become increasingly blurry. This creates potential for exploitation, but also opportunities to challenge existing categories of work. In this panel discussion, we explore imaginaries of work as a category and practice open to multiple interpretations.

We take current intersections of work and the digital as a starting point to explore how care work and solidarity are shaped by and interwoven with digital technologies. This includes the tension and ambivalences between connectivity and isolation, as in the case of remote gig workers. What opportunities for solidarity are there for atomized workers? What transnational networks of reproduction and care do they form? Moreover, we ask how the visibility of care work is affected by digital technologies, such as AI applications and online platforms mediating care work. How do individual workers try to deal with tensions between paid work and care responsibilities?

Based on these observations, we discuss the boundaries of what is considered work and how imaginaries of work and digitalized work practices shape each other. How can work be defined in light of these developments? Does solidarity between workers arise with, through or despite digital technologies? How do digital technologies flexibilise, disrupt, and transform the spatial and temporal dimensions of work, and how does this affect solidarity and community at work in digital workplaces? How do ideas about care work affect its outsourcing to technology? What new forms of work emerge in dealing with technology? Finally, we direct our gaze to futures of work to ask: how could digital technologies be leveraged to imagine work differently?

Our panelists contribute the insights that they have gained from their research on work, care, and digital technologies: **Tanja Carstensen** is a sociologist with a focus on digital transformation, work, gender and care. At the University of Hamburg, she is currently working in an interdisciplinary project on care transformations as well as in a project on AI, gender and the work of the future. **Mira Wallis** is an anthropologist with a focus on digital labour, migration and social reproduction. As part of her PhD research at the Humboldt University of Berlin, she currently investigates home-based platform labour in Germany and Romania. **Mariya Ivancheva** is an anthropologist and sociologist of higher education and labour, working as a Senior Lecturer at the School of Education, University of Strathclyde. Her research has focused on different aspects of the casualisation, automation and outsourcing especially of social reproduction and 'essential' labour in academia and other 'high-skilled' sectors.

## Socio-technical imaginaries and the next infrastructures for doing anthropology

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Chair: Samantha Lutz, Quoc-Tan Tran

### Open Access und Retrodigitalisierung - Chancen und Herausforderungen für die Kulturanthropologie

Matthias Harbeck (University Library of HU Berlin)

Die Digitalisierung als gesellschaftliche Veränderungsphase erfasst auch die Wissenschaften mehr und mehr. Um die Forschung besser unterstützen und den Zugriff auf Forschungsergebnisse für die Wissenschaft leichter gewährleisten zu können (und um aus einem ökonomisch katastrophalen Zyklus doppelt und dreifach bezahlter Forschung ausbrechen zu können) unterstützen wissenschaftliche Infrastrukturen (Bibliotheken, Museen, Rechenzentren, Sammlungen, Archive) seit den späten 1990ern die Hinwendung zu Open Access und digitalisieren parallel zunehmend analoges Material, um eine vereinfachte, ortsungebundene Zugänglichkeit zu gewähren bei gleichzeitigem Schutz des Originalmaterials.

Die Entwicklung ist unumkehrbar und dennoch wird diese Entwicklung seit einigen Jahren auch durch eine kritische Betrachtung begleitet, die auf verschiedene Herausforderungen für einzelne Fächer eingeht, welche hier für die ethnologischen Fächer diskutiert werden sollen.

Bei der Retrodigitalisierung können dies z.B. digitalisierte Materialien sein, die vielleicht in Unrechtskontexten oder unter ethisch fragwürdigen Umständen entstanden sind bzw. Dinge und Personen abbilden, die nicht abgebildet werden sollten. Wie sieht der ideale Umgang mit diesem Material aus? Was soll digitalisiert werden – und was sollte eher in den Magazinen verstauben?

Open Access wiederum ist mehr als nur eine Überführung von Publikationen in eine digitale Form. Durch die Digitalität und die freie Zugänglichkeit der Inhalte fallen auch vormals schützende Hürden weg, die ihren Missbrauch zumindest erschwert haben. Sind die Fächer durch Diskussion und Reflektion schon ausreichend gerüstet, mit diesen veränderten Paradigmen im Publikationswesen angemessen umzugehen? Gibt es bereits angepasste Formen der Anonymisierung? Sind die Forschungspartner\*innen in den Feldern einverstanden mit der Wiedergabe von Feldforschungen im Netz? Lernen Studierende und wissenschaftlicher Nachwuchs - aber auch gestandene Professor\*innen bereits, welche rechtlichen und ethischen Hürden bei der Publikation ihrer Forschungen zu beachten und wie damit umzugehen ist? Kennen sich alle bereits bei den unterschiedlichen Angeboten und Formen von Open Access aus? Der Vortrag soll in diese Thematik einführen, auf Probleme hinweisen und über Lösungen diskutieren.

## **Public/private/profit science? Infrastructures of secrecy in transnational bioinformatics**

Rebecca Carlson (Toyo University)

Bioscience often projects ideas of truth and universality in the creation of knowledge about life itself, and ideally scientific practice is a cooperative, transnational effort—a global material and ideological system supported by networked and undulating infrastructures. But although science, as a discipline, is founded on notions of openness and transparency—set off in contrast to the profit-driven tools of market paradigms—these infrastructures are full of secrets. This is especially clear in computational research, which draws increasingly on the circulation of large-scale biological data sets and the international collaborative agreements which are required for sharing this data. Drawing on the suggestion that opacity can become “an object of analysis in its own right” (Seaver 2017) and based on ethnographic research in an international bioscience lab in Japan, this presentation examines the way scientific infrastructures play a role in practices of secrecy: decisions over whether and how to share genetic data and the algorithms and pipelines bioinformaticians create to compute them, and often avoid circulating openly until after publication. In this case, seeing infrastructure as computer code, pipelines, computational environments, supercomputers, and the agreements bioscientists enter into (to access individual, and highly personal genetic data), this presentation argues that infrastructures play a “purposive” and governing role (Hallinan and Gilmore, 2021) in scientific exchanges. Disappearing infrastructures, into the background, in the immediation of their practices, also contributes to the ongoing process of rationalizing bioscience, and human genetics in particular, as universal and knowable (Jasanoff 2019).



## **Infrastructuring desirable futures with humans in the loop. Analyzing human computation as a counter-imaginary to artificial general intelligence**

Libuše Vepřek (LMU Munich)

Contrary to imaginaries of Artificial General Intelligence (AGI) that elevate AI as outperforming humans, today most AI systems, no matter how advanced, fall short of these expectations without humans "in the loop". Building on and at the same time distancing itself from the disappointed hopes for full automation and "humanlike" AGI (Beckert 2018: 284) the AI research field Human Computation (HC) puts central emphasis on human involvement in computational systems. HC aims to combine the skills of humans and algorithms to jointly solve problems that neither can solve alone, striving for hybrid thinking systems (Bowser et al. 2017) where humans remain "in the loop" and in control. Drawing on the concept of sociotechnical imaginaries (Jasanoff/Kim 2009), this work examines the "visions of desirable futures" (Jasanoff 2015a: 4) that are performed through HC, which play out in the imagination and implementation of human-software interplays. In the "future practices" (Reckwitz 2016) of designing HC-systems, questions are being negotiated regarding what human involvement in these systems should look like and how humans and machines should work together to achieve better performance and desirable futures.

Based on ethnographic fieldwork on HC-based citizen science projects I argue that understanding HC as a form of counter-imaginary to AGI allows us to analyze the specificities of its sociotechnical imaginary. I show how this imaginary, to be made convincing, requires advocate boundary work and explicit distancing from AGI endeavors. To be realized, however, HC systems also require constant infrastructuring (Niewöhner 2015) and maintenance on the sidelines to create experiences that are meaningful to all actors involved. Rather than highlighting claimed technical achievement while hiding human involvement, as many narratives of aspirant precursors of AGI do, HC instead tends to hide the system's technical complexity from its users, putting humans in the spotlight.

## Enactment of Futures: Crypto Twitter as Imaginary Practice

Stefan Groth (University of Zurich)

Current debates on financial infrastructures and fiscal policies are increasingly relating the emergence of blockchain technologies to future sociopolitical imaginaries on a global scale. Bitcoin and other cryptocurrencies (\*altcoins\*) are discussed not only in terms of their current influence on financial markets and investment behaviour but also with a view to future political, social, and cultural developments. Particularly in social media, specifically on Twitter and in channels of the messenger Telegram, price developments of Bitcoin and other coins are discussed in relation to political and economic processes (e.g., the introduction of Bitcoin as official means of payment in El Salvador, or the banning of cryptocurrencies in China) and to \*libertarian\*, \*bankless\*, or \*individualistic\* imaginaries of the future. To a large extent, these discourses refer to mediated visions of the future and make use of visual prognoses re-contextualised as sociopolitical aspirations.

This paper analyses the phenomenon of \*Crypto Twitter\*, i.e., discourse networks on the social media platform Twitter that address Bitcoin, altcoins and NFTs, as an example of the coupling of imaginaries of the future and specific investment practices. For Crypto Twitter, visions of the future do not only refer to forecasts of price developments but also concern ideas about the decentralisation of the financial system (\*DeFi\*) as well as (statecritical, individualistic, libertarian) social utopias. Based on a practice-theoretical understanding, the paper views this constellation as a type of \*imaginary practice\* in which aspirational and utopian elements are tied to practice-asemergence. On the basis of a discourse analysis of \*Crypto Twitter\* and interviews with central actors, the contribution asks how contingent imaginaries the future are related to financial infrastructures and investment practices. It shows how sociopolitical imaginaries, investment forecasts, and practices are related and interpreted by actors on \*Crypto Twitter\*.

## **Curating cultural knowledge in digital environments**

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### **The Ethics of Digitizing Death and Engagement with Museum Publics**

Sarah Hiepler (University of Aberdeen), Meryl Shriver-Rice (University of Miami)

This paper will address the ethically-charged aspects of digitizing human death for museum publics and source communities, treating the digital as a novel but problematic space where new forms of exhibition, archiving, ethnographic research, and collaboration are possible. It will survey the landscape of new technological practices from 2019-2022 and review the range of new ethical issues that are bound up in the use of digital platforms for participatory media projects, archiving, exhibition, and immersive storytelling about human remains and death at heritage sites and cultural institutions in the United Kingdom. The ethical quandaries of digital projects at museums are often addressed at the outset, but unexpected ethical issues often arise as the project is being completed and digital and real-life publics engage with the final product. For example, many digital archives replicate existing power dynamics within older archival taxonomies that reflect colonial and other problematic histories rather than using the digitization process as an opportunity for developing new taxonomies. The deployment of new and exciting technologies is argued by most cultural institutions to be necessary to address socio-culturally complex ideas and histories. In some cases, digitizing the dead and victims of trauma (as avatars or other elements of storytelling) can cause further trauma. We will examine case studies from the UK (drawing from Hiepler's current research) employing mixed methods of digital ethnography of museum websites, on-site media, and interviews with museum curators, directors, and other personnel. Many museums are re-evaluating their display of human remains that includes removing or recontextualizing human remains. As the pandemic has forced a greater move to the digital realm, museums and cultural institutions are currently negotiating whether or not to include photos of human remains online, and their curatorial goals and intentions of exhibiting death, and the risks, challenges and opportunities of exhibiting death.

## From Grimm to Grim: Folklore in the Making of Our Digital Futures

James Deutsch (Smithsonian Center for Folklife and Cultural Heritage)

In the popular imagination, folklore may seem completely antithetical to digital futures. Recalling the folktales and legends collected by Jakob and Wilhelm Grimm in the early 19th century, many people mistakenly regard expressions of folklore as antiquated remnants from a preindustrial past that poorly educated folk share in their rural enclaves. However, folklorists know this is false. This paper demonstrates that any type of digital future must consider the ubiquity and danger of folklore in our lives.

Although many instances of folklore in the early 21st century come to mind, this paper focuses on two of the grimmest and most virulent conspiracy theories in the United States today—specifically those that have spread digitally via social media and chat rooms—to promote unfounded beliefs in QAnon and anti-Covid vaxxers. In both cases, folklore has fed and sustained the beliefs that underlie these conspiracy theories. For instance, QAnon’s belief in a “deep state” that abducts, abuses, and murders children is rooted in several common folkloric motifs of child abduction and sacrifice, which appear in folktales, biblical legends, medieval ballads, and more. QAnon’s belief in “The Storm,” in which an alleged elite is captured and summarily executed, likewise derives from folkloric motifs that portray an ongoing, apocalyptic battle between darkness and light. Similarly, the Coronavirus pandemic has unleashed dozens of conspiracy theories, many of which descend from folkloric fears of powerful individuals—such as George Soros, Bill Gates, and their evil cabals—who allegedly control world affairs and contaminate vaccines with chemicals that enslave millions of patriots who might otherwise resist their machinations.

The folklore that underlines these two conspiracy theories is not only patently false but also extremely dangerous. The viability of our digital futures depends in part on a better understanding of the nature and power of these folkloric expressions.

## Contemporary Negotiations of Future Shoah Memory in Digitality

Janina Schwarz (University of Marburg)

In my talk, I will highlight the entanglements of digital memory productions and their specific conceptions of futures.

The ideas and designs of possible futures are crucial in the field of Shoah memory cultures. The global pandemic has acted as a catalyst for digitization processes in many areas of everyday life - including the field of memory cultures. At present, countless digital and transnational memory projects of different origins are emerging, which must be viewed against the background of their historical development and their relational linkage to one another. Therefore, already existing and possible future technologies, their possibilities and limitations play a decisive role. Current projects deal with the preservation, transformation, design and staging of testimonies of various kinds with the help of social media, AR, XR, AI etc. and prepare for the future of memory in digitality (cf. Rothstein 2020: 2 ff.). Digitality describes the "lebensweltliche Bedeutung der Digitalisierung als Realität eigener Art" (Noller 2021: 42). All of these projects make a specific statement about potential and conceivable futures, which is why they are significant from a cultural anthropological perspective: Through them, with them, and at them, current discourses about digital futures can become readable and understandable.

What stories about the Shoah will (not) be told in the futures? Who will (not) be addressed or will (not) have access to it? What technologies will be used for this purpose and how will their repercussions be reflected on what is told? What implicit and explicit assumptions about futures do the makers, developers, and users make, and what measures are taken to achieve specific goals? However, it is also necessary to take the opposite perspective: What influence do specific concepts of the futures have on current productions of memory and what is their relationship to the pasts?

Such and other questions are objects of currently observable negotiation processes that can be investigated by cultural analysis. They also point to the consideration of temporality: Future-making must always be considered against the background of the construction of the past and how it is "experience[d], negotiate[d], reconstruct[ed], and performe[d]" in the present - as Macdonald calls it "past presencing" (Macdonald 2012: 234).

## **Digital research and data ethics**

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Chairs: Marion Näser-Lather (University of Innsbruck), Paula Helm (TU Munich),  
Martina Klausner (Goethe University Frankfurt)

Anthropologists and related fields have long grappled with a necessary adaptation of their methodological practices when engaging with digital fields - be they 'virtual' worlds of online games or social media, expert cultures concerning digital infrastructures and data analytics, or activism around data policy and privacy issues. In the last two years, and with the curtailment of the Covid19 pandemic, the practice of digital ethnography has become even more common as researchers have moved online regardless of their subject, and questions of ethics have become a cross-cutting issue that hardly anyone can avoid addressing anymore. In this panel, we (re)address the deeply intertwined epistemological and ethico-political challenges of engaging with the "digital" in our research. Rather than considering work on digital practices and infrastructures as the object of our research and work with digital data and infrastructures as method separately, we put these debates into dialogue and ask: How can we critically engage with the complex power relations and values inscribed in digital infrastructures? What are the (context-)specific ethical challenges that arise from such engagements? How can feminist approaches help us resist the extractive logic that underlies much of mainstream data-driven research? To what extent can data-informed research be part of critical and engaged research? How can we address the challenges posed by new forms of data colonialism? How do underlying epistemologies differ from the still widely held myth of neutral data? How can we balance the need for open data with the need for privacy? How can we aptly respond to demands such as raw data sharing and reuse when developing university/academic digital infrastructures for storing (sensitive) ethnographic data?

### **Why we need to talk about feminist data protection**

Andreas Baur (University of Tübingen)

### **Fieldnotes as Data: Ethnographies of Ethnography after GDPR**

Rachel Douglas-Jones (IT University of Copenhagen)

### **Collecting data in a digitized negotiation space due to Covid**

Brigitte Zamzow (University of Vienna)

### **Digitale Forschungsdaten im Archiv. Wie ethische Prinzipien in Forschungsinfrastrukturen übersetzt werden**

Sabine Imeri (HU Berlin)

## CONFERENCE DAY 2

Friday, 16th September, 9:15-17:00

## **Digitalisation of cultural heritage and heritagisation of digital culture**

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Chairs: Nicolas Baya-Laffite (University of Geneva), Cassandra Kist (University of Glasgow), Tatiana Smirnova (University of Lausanne)

### **Digitalisation and heritagisation from an STS perspective: reagencying infrastructures**

Nicolas Baya-Laffite (University of Geneva), Dominique Vinck (University of Lausanne)

This introduction to the panel addresses processes of digitalisation of cultural heritage and heritagization of digital culture from an STS perspective, highlighting the relevance of concepts and analytical prisms of infrastructures and re-agencings. Thereby it offers a framework of crosscutting challenges which will be discussed through the papers. In the conclusion, contributions from the papers are discussed so as to move forward toward a sociology of digitalisation and heritagization.



## **Sustaining or disrupting infrastructures of exclusion in the museum**

Cassandra Kist (University of Glasgow)

Prior to and propelled by COVID-19, it has been imperative for cultural heritage institutions to understand how using social media and online communication platforms can benefit vulnerable and marginalised individuals and groups. However, there is currently a lack of literature that considers the connections and disconnections between museum social media practices and social inclusion work in the context of the museum. There are multiple researchers that suggest the potential of social media for socially inclusive practices through studies of social media (Spruce and Leaf, 2017), but also mass critiques of social media practices in the sector due to frequent broadcasting and marketing (Hartley, 2015). Building on these perspectives, my research addresses two main question(s): What are some of the social, organisational, or technical structures creating connections or disconnections between museum social media use and social inclusion work? And how do staff respond to these? To investigate these questions, I pay close attention to staff practices in the context of a case study - Glasgow Museums, using a combination of qualitative methods including participant observation and a frame analysis of social media.

In doing so, I build off Drotner et al.'s (2018) idea that what the sector needs is not just studies of social media for the museum but social media in the museum. Through the analysis, I suggest that staff carry out maintenance practices to contend with organisational conditions and facets that create feelings of 'break-down' or inadequate practices around social media. This includes staff's expressions of micro-frustrations but also, acts of rebellion, tiptoeing, and being resourceful. Together the observed hindering structures and staff's maintenance practices suggests that there is an organisational infrastructure of exclusion operating in Glasgow Museums that prevents staff on the ground from engaging with social media in ways that might align associated practices with the institution's social values and mission. Ironically, staff's maintenance practices may make it seem to upper management that social media is currently 'smooth sailing' and can sustain an institutional infrastructure of exclusion. Staff's implicit participation in sustaining the current infrastructure raises questions regarding how this status quo can be disrupted and simultaneously provides some ideas for envisioning future changes to the institutional structures that surround and intersect with the use of social media.

## Teaching students to design digital heritage projects: another way to understand digitisation?

Mylène Tanferri (University of Lausanne), Noémie Chervet & Chantal Ebongué-Pittet (Musée cantonal de zoologie à Lausanne)

Studying digitization *in action* within a Science&Technologies Studies (STS) perspective provided empirically based studies of heritage digitization (for example, Beltrame, 2012; Camus, 2019a; Tanferri, 2021). These works offered several crucial moves to understand digitization practices, such as the epistemic changes they produce in collections (Beltrame, 2013); the arbitrages they call for to delineate a cultural entity (Camus 2019b); or the local, contingent productions of quality criteria to make copies deemed good enough (Tanferri, s.d.). But studying digitization practices to uncover their mechanisms and consequences is not the same as using these results to design digitization projects. In this presentation, we will provide an account of an experiment in teaching heritage digitization project design to engineering students from different backgrounds. The course relies on the possibility of collaborating with real-life heritage institutions in their school area to design a digital heritage project. The course aims are two-fold. First, to provide a basic understanding of participatory research methodologies, the students will need to carry out their project. Second, to offer workshop-like content to create awareness of specific dimensions of heritage digitization proposed in several lines of research (Cameron and Kenderdine, 2007; Latour and Lowe, 2011; Vinck et al., 2018; Lewi et al., 2019; Navarro and Renaud, 2019; Appiotti and Sandri, 2020).

These elements are to be addressed by students in their project conception and are organized around these different topics: objects potential transformations (gain and loss of specific dimensions, e.g., touch); work and skills repartitions amongst institutional teams and/or third parties; questions of rights attribution/ownership and legal matters; users, experiences and potential engagements designed by the projects and general issues of heritage access; attention to the problems of conservation (what, by whom, for how long) and their political implications. Describing the student's results, we will discuss the course's intention to create awareness around issues in heritage digitization projects. We will also consider what it means to design participatory projects where participation implies both an effort of co-construction with heritage institutions and a reflection regarding the participation of the institution's publics in digital heritage artifacts and their constitutions.

## Peripheral actors in institutional knowledge production: Revisiting behind the scenes work in collections management

Quoc-Tan Tran (University of Hamburg)

Contemporary cultural heritage knowledge production is a dynamic arena of agential interactions. It is influenced by the diverse processes by which actors from various communities of practice determine in which ways digitised items or digital reproductions of cultural artefacts can be used and reused. This contribution attempts to revisit the processes behind the scenes of knowledge production. It reveals the noises, ambiguities, and uncertainties in the collections management and documentation work of two institutions: Swedish Historical Museums, and National Museums in Berlin. Based on ethnographic data, the paper conducts an in-depth analysis of day-to-day, behind the scenes work in museum knowledge production. It places an analytical focus on the peripheral actors – both human (staff members) and non-human (cataloguing tools). Firstly, staff members tasked with caring for collection objects are peripheral actors in the sense that, despite their work realities having a significant impact on the institution's daily operations, they do not participate significantly in the discursive construction of their immediate working environment. The work of collections management should integrate diverse data structures, content, and exchange standards into employees' daily routines. Existing infrastructure necessitates ongoing reflection, tinkering, and maintenance due to the 'imperfect tools' that have been incorporated. Second, tools for cataloging objects are also peripheral actors; despite their inherent imperfection, they are necessary for improving object representation in knowledge management systems.

This contribution demonstrates why infrastructure matters for the museum's knowledge production in the background. By examining the voices and perspectives of the peripheral actors, the contribution illustrates how an infrastructure-based approach (Star, 1999; Star & Griesemer, 1989) – built upon actor-network theory (Law, 1992) and interactionist social worlds theory (Clarke & Star, 2008) – can provide an appropriate epistemological stance for proposing an ecological thinking that can aid in refocusing attention on previously neglected entities, both human and non-human, in museum environments.

## **Collective memory in the digital media ecosystem: the case of the Fête des Vignerons**

Tatiana Smirnova (University of Lausanne)

How does social media participate in the production of the collective memory of a unique intergenerational cultural event, the Fête des Vignerons? Included in UNESCO's list of intangible cultural heritage, Fête des vigneronns takes place every 20-25 years. For these reasons, the question of how different generations of participants relate to the event and how each event reflects a different generational socio-cultural background are central to its continuity. Drawing on an onsite and online observation, I study the role of digital technologies in the shaping of collective memory in this event at the occasion of the 2019 edition. In 2019, the festival has the particularity it was celebrated for the first time in two different but closely related spaces: the circumscribed territory of the town of Vevey and reticular territory of the Internet with dominated social media platforms (Smirnova, Baya-Laffite et Vinck, 2021). Before, during and after the Fête digital memories are stored on individual online spaces, both closed and open. The material – including photos, videos, audio, texts, comics, links, comments, hashtags, and reactions – has been produced by heterogeneous actors (e.g., organizers, actors, spectators, tourists and visitors) and covers sometimes completely different aspects of the event (e.g., construction of the arena, impressions about the spectacle, high ticket prices or the installation of ashtrays with eco-calls). Observing emergence, transmission, fading and disappearance of digital memories in different spaces, I enquiry how they participate in shaping the collective memory of intangible cultural heritage through rather concrete representations.

## Data politics within and beyond the pandemic

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Chair: Katrin Amelang

### **A Dreamy Disruption: Fieldnotes on “Post-COVID” Techno-Entrepreneurial Future Making in the middle of the Pandemic in India**

Sandeep Mertia (NYU)

In the global South, the rapidly expanding cultural economy of computing is generating new narratives of “high-tech” lives and futures. Drawing on nearly two years of in-person and virtual ethnographic fieldwork and archival research, my dissertation explores techno-entrepreneurship and the governance of aspiration in India. The federal government’s flagship ‘Startup India’ program, launched in 2016, now has 57,000+ registered start-ups, many also supported by allied initiatives of state governments across small-cities. Rajasthan—widely-considered to be an ‘economically backward’ (Bimaru) state—set-up India’s largest “Techno-Hub” in Jaipur in 2018 to incubate 700 start-ups. In addition to mentorship and monthly-stipends, the state offers start-ups a dedicated platform called RajStack—India’s only “one-stop digital infrastructure” to access government Application Programming Interfaces. By ethnographically studying Startup India—and its acceleration in the pandemic—this dissertation critically investigates how futuristic narratives of digital capitalism are re-assembled at a human scale in postcolonial and global South contexts.

In this paper, I map the narrativization of “post-COVID” futures—on social media, government and industry webinars, and beyond—to examine how entrepreneurs have “pivoted” the ongoing crisis into a mega-opportunity. Indian start-ups have raised more capital in 2020 and 2021 than ever before. I describe how my interlocutors, in three cities, who claim that “covid has been a big boom,” make meaning of the diverse ongoing impacts of the pandemic. I also describe how the state instituted new hackathons and grants for entrepreneurs to solve pandemic related problems in healthcare, logistics, “EdTech,” and so on; and how the state publicized start-ups that won these competitions. In parsing these, I analyze how the disruption-philic ethos of techno-entrepreneurship, both at the level of the state and start-ups, steers the modulation of aspiration and speculative value with/in digital media as millions languish in the same present.

## Digital-Autoritäre Geflechte und Politiken der/mit Daten während der Pandemie

Nurhak Polat (University of Bremen)

Im Zuge von zeitgenössischen Diskussionen und Diagnosen zur digitalisierten Gesellschaft wird zunehmend auf eine Daten-Wende des Politischen hingewiesen. Die Frage, wie und inwiefern digitalkapitalistische und -autoritäre Praktiken und Politiken mit Daten aufeinandertreffen, gewinnt an Relevanz. Die Covid-19-Krise leitet einen Drehpunkt für die politischen Regimes der Gegenwart ein – sowohl für liberale, ohnehin fragile Demokratien als auch für Autoritarismen. Die digitalisierte Spurenfolge der Viralität und ‚virale‘ Daten prägen gelebte Realitäten, die momentan gewaltig unter das pandemische Brennglas geraten sind. Ihre Existenz – genauso wie ihr Fehlen – ist politisch. Und dies trifft ganz besonders den autoritär regierten Ländern zu. Anhand meiner fern-ethnografischen Beobachtungen und Forschungsmaterialien zu Kontakttracking- und Proximity-APP Hayat Eve Siğar (HES) in der Türkei nimmt dieser Beitrag die Wechselwirkungen zwischen Datenpolitiken, digital-authoritären Praktiken und Alltag unter die Lupe. Unter Rückgriff auf die kritischen Datenstudien und die politische Anthropologie der Digitalisierung erkundet er digitale Regierungsmacht, die zunehmend durch neue datenintensive Infrastrukturen vermittelt wird und sich in digitalen Räumen und mit digitalen Mitteln unterschiedlich entfaltet. In Frage stehen dabei: Wie und in welcher Weise treffen autoritäre Unberechenbarkeiten, Überwachungs- und Datentechnologien, Covid-19-Krise und virale Datenpolitiken aufeinander? Inwieweit dient dieses Aufeinandertreffen der Konsolidierung des autoritären Regimes unter der präsidentialen AKP-Regierung (Partei für Gerechtigkeit und Aufschwung) und fördert neuartige digital-authoritäre Praktiken zutage? Inwiefern stellen pandemische Krisenzeiten einen Nährboden zur Verfügung, der den Autoritarismus mit neuen digitalen und viralen Datenpolitiken zu versehen erlaubt? Dieser Beitrag befasst sich mit einer Art ‚Covidisierung‘ autoritärer Regierungsmacht, die in den letzten Jahren zunehmend taktisch auf autokratische Unberechenbarkeiten setzt und die weithin und oft kontextunabhängig bemängelte Undurchschaubarkeit digitalisierter Prozesse zu ihrem Vorteil nutzt? Das Ziel ist es, ethnografische und analytische Perspektiven auf ‚autoritäre Geflechte‘ zu erfassen und in den Blick zu nehmen, wie diese sich an der Schnittstelle von pandemischen und autoritären (Un-)Kalkulierbarkeiten, datenbezogenen Machtkämpfen und digitalen Transformationen entfalten.

## **Another brick in the firewall? How digital technology in day to day schooling formats visions of the future**

Nadine Wagener-Böck, Kerstin Rabenstein, Felicitas Macgilchrist, Annekatriin Bock (Leibniz Institute for Digital Media (GEI))

Schools are instrumental in passing on knowledge to future generations deemed relevant by society. Norms of social life must be negotiated, implemented, and consolidated – let it be in a rather normative or in a speculative manner. In this regard, in classrooms visions of the future are constantly at stake. Paradoxically, when it comes to digital transformations the foresight of teachers or students (Wellgraf 2019) hardly attracts attention. The education and school itself rather become a controversial issue (Williamson 2013; Macgilchrist et al. 2020). Ignited by the coronavirus pandemic the public discourse about digital media in the educational sector seems to happen between two main positions: a techno-solutionist position on the one hand, labelling an accessible-for-all educational media infrastructure as ‘good deed’ to build a better future – and in doing so depreciating the already tried and tested – and on the other hand an inherently more critical position that reflects on the same technologies in terms of surveillance or exclusion (Selwyn et al. 2019; Teräs et al. 2020).

However, digital technologies such as Smartphones, Tablets, or Active Boards are part of everyday school life shaping how other actors at school envision, open up or fixate the future (Sims 2017). Based on a yearlong ethnographic study at a German comprehensive school we will give insights into a so-called ‘tablet class’. We will show how ideas of the future are proposed, mediated, contested, or rejected as being something designable. In doing so we will argue that the digital technologies calibrate, format and update visions of the future as they play a bifunctional role: First, the technical devices, apps, digital tools do act in classrooms in a rather ‘wild way’, as part of a broader infrastructure (Star 1999); second, they become part of didactics and are therefore tamed for the development of already reflected ideas, utopian or dystopian ones. Hence the digital causes friction in classrooms (Tsing 2005) in which visions of the future are formed. In this paper we will examine practices and topics in which (the effects of) frictions become evident.

## Negotiating Human-Computer Interaction in AI and beyond

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Chair: Nicolas Baya-Laffite (University of Geneva)

### **A hand is a hand is a hand is a table? On the (re)configuration of future choreographies**

Sarah Thanner (University of Regensburg)

Context-aware digital-material environments, where almost everything or everyone can be connected to a computer and screens are not necessarily needed anymore, today play an increasing role in how digital futures are envisioned and designed – from the smart home, to augmented and virtual realities or autonomous driving. Thus, more than 30 years after Mark Weiser's influential vision of "ubiquitous computing", several technological developments have paved the way for what is also referred to as an "internet of things" to become real (Shah 2017).

Shifting away from the desktop computer, new modalities of human-computer interaction emerge, such as tangible or gesture interaction, and the question of who or what can serve as an interface or input device has become an open space of possibility. For this reason, technologies allowing to recognize entities, whether bodies, body parts or inanimate objects, locating them in time and space and implementing possible patterns of interaction have gained increasing importance in designing digital futures. Given these developments, the question arises how these processes and the modes of scientific knowledge production they are embedded in shape future choreographies of (the doings of) humans, bodies and things in human-computer interaction and (re)negotiate the performative enactment of subjectivities and objectivities.

In my contribution, I want to address this question by taking a closer look at the future making practices involved in processes of digital-material innovation in computer science research. To this end, I draw from ethnographic material of my ongoing PhD project, in which I investigate the design and development of augmented reality prototypes for interactive tabletops. In doing so, I collaboratively engage with the computer scientists, who aim to develop hardware and software in order to support and augment interactions around tables in everyday life contexts.



## **“Intelligent Healthcare”: Challenges Entailed in Future Scenarios of AI-Based Predictive Diagnostics of Alzheimer’s Disease**

Paula Muhr (Karlsruhe Institute of Technology)

Deep learning is a form of artificial intelligence (AI) that uses artificial neural networks. Instead of being programmed, such networks learn in a data-driven way to extract some underlying patterns of interest from complex data. In recent years, deeplearning methods are being deployed in medical neuroimaging to produce new insights into currently incurable neurodegenerative diseases of the ageing brain, such as Alzheimer’s disease.

Most innovatively, new diagnostic deep-learning models are being developed for future uses in the clinical context to enable predictive diagnosis of Alzheimer’s disease in its early stages before the onset of dementia. According to future-oriented scenarios, deep-learning methods will be used to analyse neuroimaging scans of individuals who either have no detectable or only very mild clinical signs of cognitive dysfunction in order to identify a subset of individuals at a higher risk of developing dementia in the future. The idea behind such prognostic analysis is that AI algorithms could pinpoint pathological changes in neuroimaging data that are not observable by visual assessments of human experts. The rationale is that a predictive diagnosis of Alzheimer’s disease before the onset of actual symptoms would help clinicians determine which patients would benefit from early therapeutic interventions to slow down future cognitive decline.

The current discussion in the medical community focuses on assessing the potential clinical validity, reliability and reproducibility of various deep-learning models being developed for these purposes. In my opinion, however, there are also broader socio-ethical aspects of such future applications that need to be considered. For example, the high costs of such state-of-the-art technologies would necessarily go hand in hand with limited access to their future application, thus fueling socioeconomic inequalities. Moreover, future AI-based prognostic scenarios entail a fundamental renegotiation of the boundary between health and disease. In such scenarios, cognitively functional individuals with a purported brain pathology—which will only be identifiable using black-boxed AI algorithms—would be designated as requiring a preventive medical intervention. Even if potentially therapeutically effective, such designation could nevertheless be stigmatising.

## **Futures of search: exploring virtual assistants (AI) through a critical ethnography of the self**

Renée Ridgway (Copenhagen Business School)

Instead of 'ubiquitous googling' (Ridgway 2021) and receiving 10 blue hyperlinks, virtual assistants (chatbots and voice computing devices) attempt to answer queries with one single response, without a choice for the user to click on links that best suits her search. This shift marks the transition to the 'conversational web', with virtual assistants employing artificial intelligence (AI) enabled software and integrated into the invisible data infrastructures of IoT (Internet of Things). Modelled on the figure of a domestic servant (Schiller and McMahon 2019) and reproducing master/slave relationships from former centuries and computer programming vocabularies, their nomenclature (Siri, Cortana, Alexa) often refers to 'feminine' names (Hansen 2018, Phan 2019), yet they belie technological neutrality. With increased usage during the pandemic, chatbots in cognitive digital therapy such as Woebot and Replika, 'the AI companion who cares', engender what some deem the 'ELIZA effect' (Weizenbaum 1966), where users often attribute human (female) characteristics to an AI along with its operations as being equal to that of humans (Dillon 2020). Users are increasingly sharing intimate aspects (data) of their daily lives when searching as 'digital truth serum' (Stephens-Davidowitz 2017), which they wouldn't necessary divulge to humans.

Yet how do virtual assistants determine answers to users' queries and how can they be designed differently? In order to understand their social effects in regard to question/response 'intraactions' (Barad 2007), a critical ethnography of the self investigates the human inputs and AI outputs by applying a feminist 'situated knowledge' (Haraway 1988) to elucidate posthumanist agencies (Hayles 1999) within these experimental technics of mediation (Stiegler 1994). Perhaps virtual assistants could be designed otherwise so that are ethical, caring and assistive, augmenting human decision-making and preferences instead of only providing one answer to queries and making decisions for them.

## Governing risky AI

Matthias Kloft (University of Frankfurt)

The proposed paper investigates the formation of social, legal and ethical norms in the development and use of artificial intelligence within financial markets and the banking sectors. The research is part of the ongoing, interdisciplinary project called "Regulatory theories of Artificial Intelligence", funded by the Centre Responsible Digitality of the state of Hesse, and is situated at the intersection of law, technology, and the financial market. A.I. has become an established component of financial markets and the banking sector more broadly. However, regulatory, and legal frameworks lag far behind technological developments in the field. For example, the introduction of so-called robo-advisors, partly autonomous systems that take on the role of human portfolio managers and pursue passive long-term investment strategies. While some decisions and market interactions have been automated, the human remains firmly "in-the-loop". Through these assemblages, of human and non-human actors, new forms of expertise emerge alongside more traditional economic knowledge producing and engaging with new kinds of data to make and un-make markets. Concepts such as *risk*, *responsibility*, and *accountability* are re-negotiated and situated within new kinds of digital practices and infrastructures. With this paper I also aim to make visible how new processes and technologies of governance are employed to define and manage potential risk of automation and A.I. To examine these more-than-human interactions and entanglements, this anthropological study engages in a cross-scale analytical framework that draws on ethnography as well as a range of transdisciplinary methods. The proposed paper draws on work in progress and as such invites further discussion and comments on preliminary findings.

## **Crafting the Digital Transformation: Skills, creative use and play**

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Chair: Anne Dippel

### **Translating Tacit Knowledge in Digitality**

Sarah May (University of Freiburg)

Only recently, success in the woodworking crafts was based on a specialized expertise that results from the experience of working with hands. Craftspeople are said to hold an incorporated, tacit knowledge which is the result of experience and corresponds to specific material knowledge learned by hand (Marchand 2021; Sennett 2008; Polanyi 1985; Korff 2002). Ongoing innovation processes in technology, however, have not stopped at the woodworking crafts but have instead lead to a rapidly increasing digitalization of work practices in this sector. Beside the challenges of establishing paperless offices the most significant transformation concerns the woodworking process itself: In order to establish computerized production lines, the tacit knowledge of craftspeople must be made explicit and transferred into digital processes which, in turn, must be applied by using new crafts-related IT-knowledge. In my ethnographic work it becomes clear that the craftspeople are not passive in these digitalization processes but rather involved in the development of concrete new workflows and also in the avoidance of digitalization in sense of resistance (Eckhardt et al. 2020).

The relevance of implicit knowledge distinguishes the woodworking crafts from other fields of everyday life, and yet this might be a certain potential: By describing and deconstructing practices, interpretations, innovations, cooperation, constraints, barriers and hopes that reveal in the field of the digitalizing crafts with wood I may enrich the discussions about digital futures. Hence, the paper's central questions are: How do craftspeople and cooperating actors translate tacit knowledge in digital products and practices? And what can the discussion on digital futures learn from a cultural analysis of the skilled crafts? I answer these questions on base of my ethnographic-comparative analysis in which I focus everyday activities in carpentries, joineries and musical instrument workshops in order to reveal transformations of working practices, knowledge and self-images of actors involved in the creation, application and prevention of digitalizing processes.

## Digital Fashion and "experience" in the digital realm

Stefanie Mallon (University of Göttingen)

Digital Fashion has been available to dress gaming characters and used for design and marketing of clothes for a while. But in 2019 the first item of purely digital clothes was sold by The Fabricant: the dress called 'Iridescence' was the first digital couture garment on blockchain (Lyst 2021). The field is growing and the range of digital clothes, which are superimposed onto a photograph of a person as a still or moving image, expanding. While the first dress cost \$9,500, prices have sunk, making now even designer items are also a lot more affordable than their physical equivalent. Now, they are marketed as a democratized and a sustainable option for digital natives who forgo acquiring material clothes for their social media appearances and interactions. Michaela Larosse from The Fabricant explains that the addressees of these products are digital natives, for who analog and digital experiences blend into each other. "Dressing up their digital self to hang out on digital platforms is real life for them" (Larosse quoted in Lyst and The Fabricant 2021). This increasing movement of everyday interactions into the digital realm (Hassan 2020) with the creation of online personae for social media and the digital clothing as the future way to dress will be the focus of this paper. The question for this paper is how digital fashion users experience consumption of digital clothes (Negrin 2016) and how they understand this practice as part of participation in the creation of positive futures.

## **Cyborg Cook: Domestic Cooking in the Digital Age**

Katharina Graf (Goethe University Frankfurt)

Contemporary kitchens are increasingly smart. Wired food processors offer a choice of recipes and prepare food for busy cooks, while smartphones or intelligent fridges promise to shop online autonomously. Whatever the futuristic image, so-called smart technology is depicted as rescuing domestic cooks too busy or inexperienced to cook. Ethnographers are suspicious of such one-directional and hegemonic visions of technological impact on everyday life and ideally positioned to explore the entanglements of social, cultural, economic and political dimensions in increasingly digitally mediated human-machine interactions in the home. Yet, an empirical understanding of how humans and kitchen technologies interact in this rapidly changing context is surprisingly scarce, especially in Germany. Compared to burgeoning scholarship in other countries, empirical and especially ethnographic research on food and technology in Germany is still scarce. This is surprising, since Germany has been at the forefront of scientific and technological development in food for more than a century and is reputed globally for producing popular innovative household appliances, increasingly including digital ones. Based on ongoing research in Frankfurt and the Rhein-Main region around procuring, preparing and eating food, this paper proposes to address these gaps through ethnographic attention to everyday food practices and the analytic notion of the more-than-human or cyborg cook.

## Digital Worlds "In-Between": Practicing Hybrid Futures at Computer Game Events

Ruth Dorothea Eggel (University of Bonn)

Thousands of people gather regularly, to celebrate digital games at computer game conventions. The events enable digital communities to meet face-to-face, while simultaneously inviting and affording the intensive and excessive use of digital media on site. As media practices are inseparably linked in and with other experiences (Pink 2015), gaming events are contemporary "digital media vernaculars" (Coleman 2010) where online and offline activities cannot be understood in binary terms (Taylor 2009). This contribution seeks to show how "virtual" and "actual" (Boellstorff 2008) are merged into hybrid environments: "It's part of reality and part of virtual reality. It's kind of in-between, where the worlds just connect. [...] To think about it (..) this might be the future." (Interview with Yulianis 2019). How are these simultaneous experiences of various "digital" and "non-digital" layers of interactions paradigmatic for digital futures? How are they practiced and trained in these present-day settings?

Such hybrid spaces also challenge our ethnographic research and ways of "being-there" (Mollerup 2017). My multi-sited and multi-methods approach at 16 events throughout Europe, followed the field not only in physical co-location but also in co-presence in digital worlds. Tracing these contemporary developments, my research exemplifies how digitalities are embedded in various practices and how they shape understandings and meanings of technosocial phenomena in presence and future(s): Digital imaginaries are "embodied", oscillating between digital fantasies and creative performativity (e.g. through cosplay or body-modification). Engaged participation online and offline becomes a normative principle of action, prompting individuals to co-produce and actualize desired experiences. Extensive knowledge about computers, digital gameplay and technological processes and machines become contested elements in practices of inclusion and exclusion.

Thus, facilitating an assemblage of various digital and non-digital practices entangled, the events create and celebrate "in-between" spaces, paradigmatic for practices, imaginations and materialization of digital futures in everyday life.

## **Affective futures – “It’s about making sure that the technology doesn’t take over my life”**

Filiz Laura Aksoy (Carl von Ossietzky University Oldenburg)

Digitalisierungsprozesse werden in öffentlichen Diskursen oftmals unter Rückgriff auf unterschiedliche dystopische und utopische Zukunfts- und Entwicklungsvorstellungen verhandelt, gleichzeitig hat die Nutzung digitaler Technologien im Alltag eine Selbstverständlichkeit, die auffallend losgelöst von diesen Szenarien erscheint. Vor dem Hintergrund dieser Annahmen widmet sich der Beitrag der Frage, wie (Zukunfts-)Szenarien der Digitalisierung mit Medienhandeln im Alltag korrespondieren, d.h. welche handlungspraktische Relevanz die Szenarien entfalten. Die alltagspraktische Bedeutung von Zukunftsszenarien wird dabei nicht als Folge einer rein reflexiven Auseinandersetzung verstanden, sondern der Einsicht Raum gelassen, dass das „[e]ngagement with the future rests on tacit knowledge“ (Adam/Groves 2007: xiii). Das, was alltäglich mit digitalen Medien und Technologien getan wird, wird gleichzeitig nicht auf reine Regelmäßigkeiten, implizite Gewohnheiten und vorbestimmte Routinen reduziert, sondern subjektivierungstheoretisch die „ambivalente Gleichzeitigkeit von [...] Einpassung und »eigensinnigem« Heraustreten“ (Alkemeyer/Buschmann, 2016: 128) aus (zukunftsweisenden) Digitalisierungsszenarien betrachtet.

Im zugrundeliegenden Promotionsprojekt wird im aktuell laufenden Erhebungszeitraum in leitfadengestützten Interviews untersucht, welches kommunikative Wissen und welche expliziten Vorstellungen von Digitalisierung bei den Interviewten präsent sind. Ergänzend dazu werden Erzählungen zur eigenen Mediennutzung im Alltag generiert. In der Auswertung des Materials werden zwei Interpretationsstränge verfolgt: Erstens liegt der Fokus der Analyse auf der Art und Weise, wie in Äußerungen zu Digitalisierung sprachlich Zukunft entworfen wird und welche affektiven Besetzungen die Szenarien enthalten. Zweitens werden implizite und konjunktive Handlungsorientierungen der alltäglichen Mediennutzung rekonstruiert. In der interpretativen Arbeit werden diese beiden Stränge zusammengebracht, wobei im Weiteren nach Brüchen und Kontinuitäten zwischen reflexiven Szenarien, affektiven Besetzungen und impliziten Handlungsorientierungen gefragt wird. Aufbauend auf den im Sommer 2022 vorliegenden Ergebnissen einer rekonstruktiv-hermeneutischen Interviewanalyse (Kruse 2014) wird im Beitrag der Fokus auf zentrale Motive und Thematisierungsregeln aus den Interviews gelegt. Der Blick richtet sich dabei insbesondere auf affektive Besetzungen der Digitalisierungsszenarien – die als Imaginationen künftiger Zustände verstanden werden – und die Frage inwieweit sich diese als teleoaffektive Strukturen (Schatzki 2002: 80) in der alltäglichen Nutzung digitaler Technologien wiederfinden.



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