ANTHROPOLOGY OF TECHNOLOGY CONFERENCE

4th–5th November, 2021, Aarhus University, Nordre Ringgade 4, 8000 Aarhus C

Sponsored by The Independent Research Fund Denmark

PROGRAM

Thursday, 4th November

09:30–10:00	**Registration and Coffee** (Vandrehallen/outside Aula, building 1412, Nordre Ringgade 4, 8000 Aarhus C)
10:00–10:15	Welcome by Maja Hojer Bruun
10:15–11:15	**Keynote: Daniel Miller,** University College London (Aula, building 1412 + online)
11:15–11:40	Coffee Break
11:40–13:00	**PARALLEL SESSIONS 1:** Panel 1 (Richard Mortensen Stuen, building 1422) Panel 2 (Preben Hornung Stuen, building 1422) Panel 3 (Meeting room 1.2+1.3, building 1420) Panel 4 (Meeting room 2.2, building 1420)
13:00–14:00	Lunch (Stakladen, building 1423)
14:00–15:20	**PARALLEL SESSIONS 2:** Panel 5 (Richard Mortensen Stuen, building 1422) Panel 6 (Preben Hornung Stuen, building 1422) Panel 7 (Meeting room 1.2+1.3, building 1420) Panel 8 (Meeting room 2.2, building 1420)
15:20–15:40	Coffee Break
15:40–17:00	**PARALLEL SESSIONS 3:** Panel 9 (Richard Mortensen Stuen, building 1422) Panel 10 (Preben Hornung Stuen, building 1422) Panel 11 (Meeting room 1.2+1.3, building 1420 Panel 12 (Meeting room 2.2, building 1420)
17:20–18:20	Handbook launch and reception (Vandrehallen/outside Aula, building 1412 + online)
19:00–	Dinner at Spiselauget, Godsbanen, Skovgaardsgade 3, 8000 Aarhus C

Friday, 5th November

08:30–09:00	Coffee (Vandrehallen/outside Aula, building 1412)
09:00–10:00	**Keynote: Michael Fisch,** Chicago University (Aula, building 1412 + online)
10:00–10:20	Break
10:20–11:40	**PARALLEL SESSIONS 4:** Panel 13 (Richard Mortensen Stuen, building 1422) Panel 14 (Preben Hornung Stuen, building 1422) Panel 15 (Meeting room 2.3, building 1420) Panel 16 (Meeting room 2.2, building 1420)
11:45–12:30	Coffee Break Network meeting about the future of the Antech network (Preben Hornung Stuen, building 1422)
12.30–13:20	Lunch (Stakladen, building 1423)
13:20–14:40	**PARALLEL SESSIONS 5:** Panel 17 (Richard Mortensen Stuen, building 1422) Panel 18 (Preben Hornung Stuen, building 1422) Panel 19 (Meeting room 2.3, building 1420) Panel 20 (Meeting room 2.2, building 1420)
14:40–15:00	Coffee Break
15:00–16:00	**Keynote: Lucy Suchman,** Lancaster University (Aula, building 1412 + online)
16:00–	Farewell, coffee and departure (Vandrehallen/outside Aula, building 1412)

Organizers:
Maja Hojer Bruun, Cathrine Hasse, and Andreas Brandt,
Aarhus University

DANMARKS FRIE FORSKNINGSFOND
INDEPENDENT RESEARCH FUND DENMARK

KEYNOTE SPEAKERS

DANIEL MILLER,
University College London

Thursday,
4th November
10:15–11:15

Future technology as smart-from-below

A current focus upon the potential of SMART devices, capable of self-monitoring or learning from users, may have missed an equally important revolution in technology. Thanks to the open architecture of devices such as smartphones, the locus of technological creativity has shifted from professionals to mass populations as anyone and everyone can find creative and ingenious ideas for adapting smartphones in ways that were never envisaged by the original developers of that technology. Often bringing together disparate apps and functions in order to align smartphones with everyday tasks.
In my talk this argument will be illustrated through an examination of the use of smartphones in the health sector, especially amongst older people with increasing experience of ill-health. I will compare the fate of specialist mHealth, composed of bespoke apps specifically designed to improve our health, with the way in which people have invented means for deploying non specialist apps such as LINE, WeChat and WhatsApp or combinations of apps for improving their health and wellbeing. Since they are taken from everyday life, unlike bespoke apps, these do not require the same development of new apps or testing through pilot schemes A smart-from-below perspective then changes the relationship between anthropological research and policy. Our task is to observe and collate best practices, understand their relationship to context, turn them into clear protocols, and then bring them to everyone's attention so that they can adopt the same advances in the creative deployment of technology.

MICHAEL FISCH,
Chicago University

Friday,
5th November
09:00–10:00

Technography:
Toward an Anthropology of Technology

To develop an anthropology of technology demands that we forge a theory and method adequate to the experiences, practices, and ethical questions that emerge within the immersive technological mediations that define our contemporary collective lives. In this paper, I draw on my monograph, *Anthropology of the Machine: Tokyo's Commuter Train Network* to lay out a foundation for anthropology of technology as a mode of *technography*. Technography, I argue, takes its cue from ethnography as the time-honored method of anthropology for generating analytical interventions into human society through detailed descriptions of specific human practices and modes of social organization. At the same time, technography works to accommodate a growing consideration within anthropology for cultures and practices of technological mediation that are irreducible to categories of identity, community, nation, agency, and subjectivity. More importantly, technography, I want to suggest, involves a practice of thinking *with* rather than about technological mediations. As such, technography moves beyond the problem space of culture and technology to address technological mediations as a material force.

LUCY SUCHMAN,
Lancaster University

Friday,
5th November
15:00–16:00

Empires of Data:
recovering the radical openness of a world of many worlds*

The Handbook of the Anthropology of Technology (2021) designates four themes that animate the field, namely knowing, unknowing, and re-knowing; communities, collectives, and categories; ethics, values, and morality; and relations of infrastructures, linkages, and livelihoods. This talk will work to conjoin these themes through the figure of data, which I take to be a dominant technology of the contemporary moment. I aim to be in conversation with anthropological and kindred research that works to denaturalise and decolonise data by attending closely to the onto-epistemologies, labours, and interests that enable data generation. My more specific focus is on projects in the automation of targeting, both in its more literal operations in the context of militarization and armed conflict and the broader sense of multiple practices of discriminatory profiling. Central to the analysis is close attention to the elision of images, categories, and things-in-the-world. Fixed and labelled within datasets, images of things and traces of lives stand as proxies suitable for computational analysis. Anthropologically informed investigations can help to recover the complex relations, irremediable ambivalences and irreducible multiplicities that escape these operations, opening spaces in which to consider the political economies of datafication and the possibilities of worlding otherwise.

*with thanks to de la Cadena and Blaser (2018)

PARALLEL SESSIONS 1:

Thursday, November 4, 11:40–13:00

PANEL 1: INTERNET EPISTEMOLOGIES

Theme: Knowing, Unknowing, and Re-Knowing

Chair: Klaus Høyer

Location: Richard Mortensen Stuen (building 1422)

Tracing knowledge: the political mediation of blockchain epistemologies
Matthew Archer, Graduate Institute and Copenhagen Business School
Filipe Calvão, Graduate Institute Geneva

Closing time: should the internet have opening hours?
Jessamy Perriam, IT University of Copenhagen

Emergency Bake: A rhythmanalysis of communities and affordances on 4chan /pol/*.
Daniel Bach, Roskilde University

Towards decentralized anthropological scholarship: Some ethical considerations
Velina Ninkova, University of Tromsø

PANEL 2: DIGITAL RELATIONS: SOCIALITY AND TECHNOLOGY

Theme: Communities, Collectivities, and Categories

Chair: Cathrine Hasse

Location: Preben Hornung Stuen (building 1422)

An economy of lies: Informal income, phone-banking, and female migrant workers in Kolkata, India
Atreyee Sen, University of Copenhagen

Digital gurus and tech sceptics: The gendered division of labour in the smart home
Line Kryger Aagaard, Aalborg University

What's in the name of a resilient city? Adjacent spaces of governing the climate(s) of the municipality
Andreas Brandt, Aarhus University

PANEL 3: HEALTH CARE, HEALTH DATA, AND SURVEILLANCE

Theme: Ethics, Values, and Morality

Chair: Rachel Douglas-Jones

Location: Meeting room 1.2+1.3 (building 1420)

Where do digital health data go? A discourse analysis on protection and ethical considerations
Anja Mollah Haque, Liv Ohlsen, Gertraud Koch, Teresa Stumpf & Alejandra Tijerina García, University of Hamburg

Use of Tissue and Health Data: Exploring the Emergence of Entitlements in an Enabling Public
Lea Skovgaard & Mette Nordahl Svendsen, University of Copenhagen

"Every Day Is Full Of Dilemmas": Empirical ethics and the care for elderly with dementia
Anders Albrechtslund & Astrid Meyer, Aarhus University
Stinne Aaløkke Ballegaard, The Danish Center for Social Science Research (VIVE)

Surveillance life
Ayo Wahlberg, University of Copenhagen

PANEL 4: WORKING TOGETHER: COLLABORATION AND INNOVATION

Theme: Shoptalk, War Stories, and Mutual Learning

Chair: Laura Lynggaard Nielsen

Location: Meeting room 2.2 (building 1420)

Health care and the appropriation of new technology
Birgitte Folmann, University College South Denmark
Regine Grytnes, University Research Clinic, Regional Hospital West Jutland

A learning support technology: Collaborative and practice-oriented research on migrants in public care work in Denmark
Johanne Korsdal Sørensen, Sara Lei Sparre & Stine Hauberg Nielsen, Aarhus University

The spectacle of surgical robots
Birgitte Bruun, Copenhagen Academy for Medical Education and Simulation, Capital Region of Denmark

Exploring the Work of Techno-Anthropology in Iberoamerica: Universal Vs. Singular Systems of Innovation via the Lab Hypothesis
Maximino Matus Ruiz, El Colegio de la Frontera Norte: El Colef

PARALLEL SESSIONS 2:

Thursday, November 4, 14:00–15:20

PANEL 5: KNOWING BODIES, KNOWING LANDSCAPES, KNOWING SELVES

Theme: Knowing, Unknowing, and Re-Knowing
Chair: Birgitte Folmann
Location: Richard Mortensen Stuen (building 1422)

The intimate infopolitics of township sociality in Cape Town: mobile phones, mothers and respectability
Nanna Schneidermann, Aarhus University

Deep-Reading: Bodily Becoming and Socio-Material Practices of "Natural" Contraception
Julia Caroline Wummel, Alev Pinar Kuruoglu & Dorthe Brogård Kristensen, University of Southern Denmark

Conceiving Donor Conception: Re-Knowing Through Not Knowing
Martin Eggen Mogseth, University of Bergen

Digital pathways
Stine Rybråten & Tuva Beyer Broch, Norwegian Institute for Nature Research

PANEL 6: CREATIVE COMMUNITIES

Theme: Communities, Collectivities, and Categories
Chair: Maja Hojer Bruun
Location: Preben Hornung Stuen (building 1422)

Digital Creativity and Urban Entrapment in Kinshasa. Experiments in Solving Precarity
Katrien Pype, KU Leuven University

The Aesthetics of "Production Quality" Code in Computer Science Education
Samantha Breslin, University of Copenhagen

Bitcoin: Fully automated, not-so-luxurious exploitation
Martin Tremčanský, Charles University

Artificial Creativity as Social Category
Jan Løhmann Stephensen, Aarhus University

PANEL 7: POSTHUMAN SENSITIVITIES

Theme: Ethics, Values, and Morality
Chair: Galit Wellner
Location: Meeting room 1.2+1.3 (building 1420)

Posthuman learning – how humans differ from AI
Cathrine Hasse, Aarhus University

Imperatives of human transcendence: Towards a concept of sociotechnical eudaimonia
Oliver Tafdrup, University College Copenhagen

"I'm proud of what I am": Impression management of Sophia the Robot
Jukka Jouhki, University of Turku

If bodies could talk, what would they say?
Isabel García, Linköping University

PANEL 8: ENGAGING, EXPERIMENTING, MAKING

Theme: Shoptalk, War Stories, and Mutual Learning
Chair: Stinne Aaløkke Ballegaard
Location: Meeting room 2.2 (building 1420)

Notes on Doing Engaged Fieldwork in a Computer Science Department
Valeria Borsotti, University of Copenhagen

War stories from European projects: regulated improvisation and experimenting with ethnography
Gregor Cerin ek & Sara Arko, University of Ljubljana
Dan Podjed, Research Centre of the Slovenian Academy of Sciences and Arts

The lived experience of data across four European cities: linking local knowledges for global lessons on digitalisation and democracy
Anna Colom & Paola Pierri, Democratic Society

Making Bamboo Baskets: Craft and Technology in Twentieth Century South India
Madhu Narayanan, Indian Institute of Technology Madras

PARALLEL SESSIONS 3:

Thursday, November 4, 15:40–17:00

PANEL 9: DIGITALISATION AND AI AT WORK

Theme: Knowing, Unknowing, and Re-Knowing

Chair: Perle Møhl

Location: Richard Mortensen Stuen (building 1422)

Friction in data labour – prisoners training artificial intelligence
Minna Ruckenstein & Tuukka Lehtiniemi, University of Helsinki

Getting the job done by fooling the machine; digitalization and new professional roles in the construction industry and in shipping
Håkon Fyhn & Jens Røyrvik, NTNU Social Research

More than meets the AI: How future expectations perform uncertainties in digital pathology
Chiara Carboni, Rik Wehrens & Romke van der Veen, Erasmus University Rotterdam
Antoinette de Bont, Tilburg University

Reconfiguring work: Examining moral economies of digital platform work in Brussels
Katrine Duus Terkelsen, Aarhus University

PANEL 10: NEW CONNECTIONS, NEW RUPTURES

Theme: Communities, Collectivities, and Categories

Chair: Andreas Brandt

Location: Preben Hornung Stuen (building 1422)

Connectivity and rupture: how the digital infrastructures of transnational kinship are (re)shaping the Somali borderlands
Jethro Norman, Danish Institute for International Studies

Work from nature, save a community: The social grounds and implications of a tech coworking space in rural Norway
Tom Bratrud, University of Oslo

Cochlear Implantation: Interactional Dynamics and Bounded Participation – A Micro-Sociological Agenda
Kim Sune Jepsen & Inge Kryger Pedersen, University of Copenhagen

PANEL 11: TECHNOLOGIES MONITORING LIFE AND DEATH

Theme: Ethics, Values, and Morality

Chair: Dorthe Brogård Kristensen

Location: Meeting room 1.2+1.3 (building 1420)

Shouldering Death: Moral tensions, ambiguity and the unintended ramifications of state-sanctioned second-trimester selective abortion in Denmark
Laura Louise Heinsen, Aalborg University

Lost in Translation: personalized medicine as a sociotechnical imaginary
Anna Brueckner Johansen, University of Copenhagen
Laura Emdal Navne, The Danish Center for Social Science Research (VIVE) and University of Copenhagen

The invisible implications of the "techno-optimism" around electronic monitoring of offenders: The case of Portugal
Rafaela Granja, University of Minho

Ghosts in the machine?
Fartein Hauan Nilsen, University of Bergen

PANEL 12: TRANSPORT INFRASTRUCTURES AND PLATFORM WORK

Theme: Infrastructures, Linkages, and Livelihoods

Chair: Ayo Wahlberg

Location: Meeting room 2.2 (building 1420)

Working without a boss? Illusions of freedom and ride-hailing platforms in Dhaka
Mohammad Tareq Hasan, University of Dhaka

Anthropological notes on digital and transport infrastructures in remote communities
Philipp Budka, University of Vienna

Platform Work, Gender, and Family in China: Shaping and Resisting Masculinity
Zihao Zhang, University of Sussex

PARALLEL SESSIONS 4:

Friday, November 5, 10:20–11:40

PANEL 13: HUMANITARIAN TECHNOLOGIES?

Theme: Knowing, Unknowing, and Re-Knowing

Chair: Klaus Høyer

Location: Richard Mortensen Stuen (building 1422)

Humanitarian technology and ignorance: conceptualizing the nature of non-knowledge
Adam Moe Fejerskov & Maria-Louise Clausen, Danish Institute for International Studies
Sarah Seddig, Danish Institute for International Studies and University of Copenhagen

The Social Life of Satellite Imageries – A qualitative research project into the work of Space-Eye and the application of Artificial Intelligence for supporting sea rescue missions
Andreas Stoiber, University of Amsterdam

Lost in translation? Non-Knowledge in the (Un)Making of the Deportation Gap
Stephan Scheel, University of Duisburg-Essen

Temporalities of non-knowledge production. Acceleration and repetition in the Italian asylum system
Lorenzo Olivieri, University of Bologna

PANEL 14: MEANINGFUL MAKING IN COMMUNITIES

Theme: Communities, Collectivities, and Categories

Chair: Cathrine Hasse

Location: Preben Hornung Stuen (building 1422)

Mimesis and Composition
Alfred Nordmann, Technical University Darmstadt

Multinaturalism as a difference producing machine
Peter Danholt, Aarhus University

Not Algorithm, Not Not-Algorithm
Asbjørn William Ammitzbøll Flügge, University of Copenhagen

Toolmaking as a reference to the world and a shared experience
Valerie Nur, University of Bayreuth

PANEL 15: FINANCE AND ECONOMIC THINKING

Theme: Ethics, Values, and Morality

Chair: Rachel Douglas-Jones

Location: Meeting room 2.3 (building 1420)

When is a bank not a bank? Unbanking and the morality of technology in the UK finance sector
Gemma Tortella, University College London

Accessing Cash(lessness): Cash-dependency, Debt, and Digital Finance in a Marginalised Roma Neighbourhood
Camilla Ida Ravnbøl, University of Copenhagen

Low-Tech Wine, Efficiency, and the Politics of Time
Oscar Krüger & Alexander Paulsson, Lund University

Practicing sustainability: energy technologies and the ethical consumer
Anne Sofie M. Askholm, Aalborg University

PANEL 16: RELATIONAL INFRASTRUCTURES: CONNECTING AND DISCONNECTING

Theme: Infrastructures, Linkages, and Livelihoods

Chair: Mikkel Bille

Location: Meeting room 2.2 (building 1420)

Technology and dis/organization: Digital data infrastructures as partial connections
Helene Ratner & Mie Plotnikof, Aarhus University

Technology in Relations of Care. Results from a Qualitative Interview Study with People with Dementia, Caregivers and Experts on Monitoring and Assistive Systems in Dementia Care
Johannes Welsch & Sabrina Krohm, University Medical Center of Goettingen
Eike Buhr, Carl von Ossietzky University of Oldenburg

Russian healthcare as the swamp: how private clinics bridge gaps in healthcare infrastructures and navigate patients
Maria Denisova, Maastricht University

Fragile Connections: Community Computer Networks, Human Infrastructures, and the Consequences of their Breakdown in Havana, Cuba
Steffen Köhn, Aarhus University

PARALLEL SESSIONS 5:

Friday, November 5, 13:20–14:40

PANEL 17: KNOWING HUMAN–MACHINE ENSEMBLES

Theme: Knowing, Unknowing, and Re–Knowing

Chair: Karolina Zawieska

Location: Richard Mortensen Stuen (building 1422)

Sensors & Senses Inc.
Perle Møhl, Aarhus University

Cyborg Cook: Connecting Bodily and Digital Knowledge
Katharina Graf, Goethe University Frankfurt

Imprecision farming? How farmers navigate the 'precise inaccuracies' of digital farming technologies
Oane Visser & Louis Thiemann, International Institute of Social Studies, Den Haag
Sarah Ruth Sippel, Leipzig University

AI–Human collaboration in the wild
Claus Bossen, Aarhus University
Katie Pine, Arizona State University

PANEL 18: DIGITAL COMMUNITIES, COMMUNITIES DIGITIZED?

Theme: Communities, Collectivities, and Categories

Chair: Helene Ratner

Location: Preben Hornung Stuen (building 1422)

"I wouldn't be able to code without google": how open source communities shape proprietary software products
Eva Otto, University of Copenhagen

The role of technologies in the potential of energy communities in the transition to energy democracy
Hanne Cox, Linköping University

A community digitized: Can digital technology save a cultural identity?
Shobhit Shakya, Tallinn University of Technology

Technological articulations and the question of presence
Jens Røyrvik & Håkon Fyhn, NTNU Social Research

PANEL 19: WORK PRACTICES AND WORK ETHOS

Theme: Ethics, Values, and Morality

Chair: Minna Ruckenstein

Location: Meeting room 2.3 (building 1420)

Engineers Make the World Go Round
Tabitha Andersen & Dylan Cawthorne, University of Southern Denmark

Felt dimension of ordinary ethics: notes on the experience of losing one's agency
Kristina Popova, KTH Royal Institute of Technology

Neglect as a seed of mistrust: Reframing invisible work in cultural heritage
Quoc–Tan Tran, University of Hamburg

Making Meaningful Information: The Data Work of BI Developers in Healthcare
Asbjørn Malte Pedersen, Aarhus University

PANEL 20: WATER INFRASTRUCTURES AND RENEWABLE ENERGY

Theme: Infrastructures, Linkages, and Livelihoods

Chair: Astrid Oberborbeck Andersen

Location: Meeting room 2.2 (building 1420)

Pump it up: oil, hydraulic technology and the allure of renewable energy in the European bioeconomy
Alexander Paulsson & Oscar Krüger, Lund University

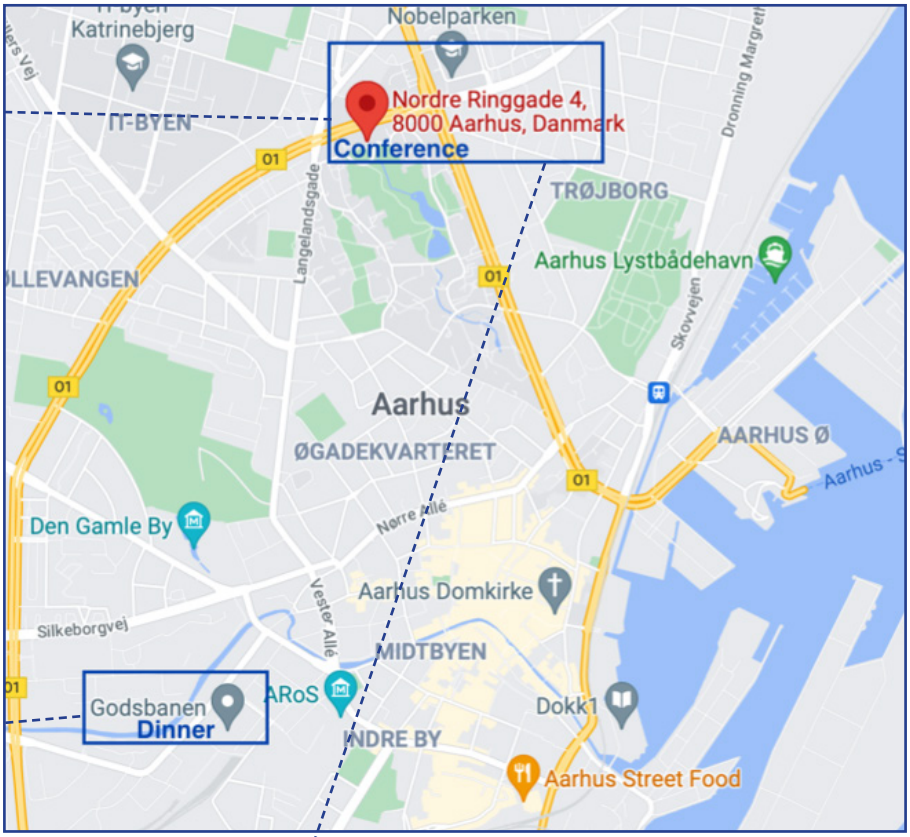
Digital becomings. How water is made digital
Jonas Falzarano Jessen, Aalborg University

Putting a heat pump to work
Caroline Anna Salling, IT University of Copenhagen

CONFERENCE VENUE

Map of Aarhus. Aarhus University, Nordre Ringgade 4, 8000 Aarhus

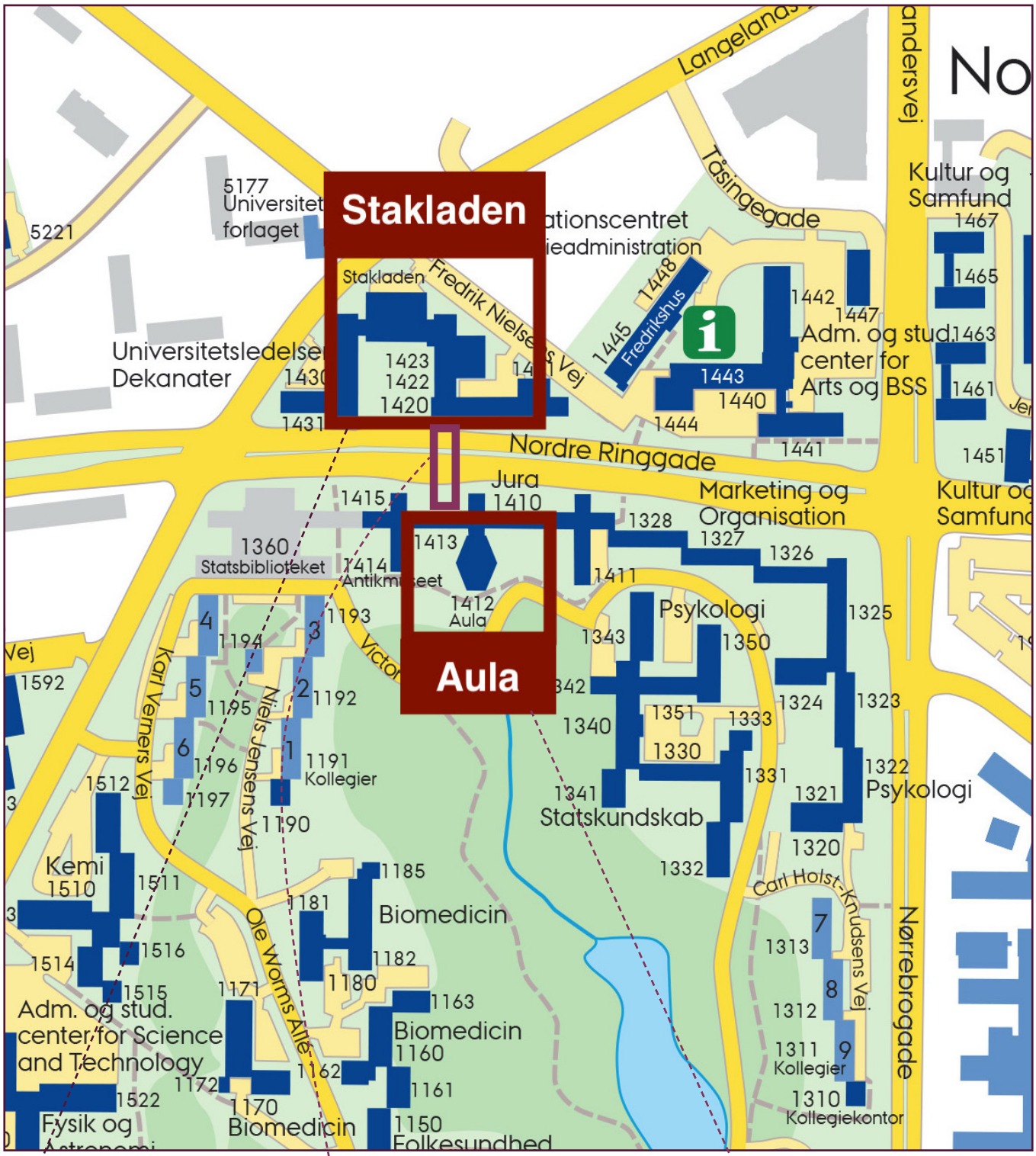
Conference registration and keynote lectures: Aula, Nordre Ringgade 4, 8000 Aarhus



Dinner at Spiselauget, Godsbanen, Skovgaardsgade 3, 8000 Aarhus C

Light railway stop "Aarhus Universitet (Ringgaden)".

Map of Aarhus University, detail.
Registration, keynote lectures and book launch: Aula and Vandrehal.
Parallel sessions and lunch: Stakladen.



There is a tunnel under Nordre Ringgade linking the Aula and Stakladen.

Stakladen:
Parallel sessions and lunch

Aula:
Registration, keynote lectures and book launch.

Panel 1:
Internet Epistemologies

PARALLEL SESSIONS 1

Thursday, 4th November, 11:40–13:00

Theme: Knowing, Unknowing, and Re-Knowing
Chair: Klaus Høyer
Location: Richard Mortensen Stuen (building 1422)

Tracing knowledge: the political mediation of blockchain epistemologies
Matthew Archer, Graduate Institute and Copenhagen Business School
Filipe Calvão, Graduate Institute Geneva

"Code is law" has become a dictum for blockchain enthusiasts and an effective way of blindly trusting a technology left to the whim of inscrutable algorithms. From mining and agriculture to education and finance, blockchain has been heralded as a solution to the double-headed problem of traceability and transparency in the sense that it provides a way to mediate information about products as they move between different actors in global value chains. And yet, for all the immutable, tamper-proof, distributed and seemingly accountable properties of this technology, blockchain-enabled operations require specific types of knowledge: between two parties, about a product, or spatial pathways, ostensibly democratically governed and freely accessible, but often actually controlled by already powerful actors like corporations and banks. This paper examines the forms of knowledge and knowledge production that blockchains embrace, engender, and exclude, raising broader questions about the epistemic politics of technologically-mediated sustainability governance in global commodity chains. Building on extensive ethnographic research on blockchain traceability initiatives in mineral supply chains, we consider the epistemic politics of blockchains – quantifiable, marginalized, or lost in the noise of big data – in tandem with the concrete challenges of mediation – in operations of generating, storing, and accessing knowledge.

Closing time: should the internet have opening hours?
Jessamy Perriam, IT University of Copenhagen

In this talk, I use the examples of legacy technology transferred into online settings to explore how they can challenge our ideas of how the internet should relate to time. When Sir Tim Berners-Lee designed the World Wide Web in the early 1990s, he did so with no specifications as to how it should relate to time and past technologies. But as the push to make the World Wide Web go beyond its original intentions of making it easier to link relevant documents together, towards allowing people to conduct business and government related transactions online. However, the legacy technology that often supports these transactions pre-date the World Wide Web, resulting in quirks where some websites are only allow transactions to take place at certain times of the day. This leads us imagine a world where these quirks were the norm and the internet has a closing time. How might anthropology help us imagine how the temporalities of technologies could be otherwise?

Emergency Bake: A rhythmanalysis of communities and affordances on 4chan /pol/*.
Daniel Bach, Roskilde University

*/pol/ is short for "Politically Incorrect" and is the most political sub board on 4chan. Over the past two decades, the somewhat niche anonymous imageboard 4chan has continued to exert influence over mainstream (internet) culture, in recent years especially for content related to right-wing phenomena such as "the alt-right", Qanon and Pepe The Frog originating from the /pol/1 sub-board (Tuters and Hagen, 2020, Marwick and Lewis, 2017, Phillips, 2018, Beran, 2019, de Zeeuw, et al., 2020). One of the things that make 4chan interesting is it's very peculiar design. All users are anonymous by default and usernames, if used at all, are not claimable. In addition to this, the pace of 4chan/pol/ specifically is fast with content often only staying on the site for a few hours. Therefore social interactions on the site are heavily influenced by anonymity and ephemerality of the site's design. Although 4chan users often claim to perceive themselves as a faceless mass (Tuters, 2019), previous work has found that specific posting practices lead to the creation of discrete communities on 4chan/pol/ (Bach et al., 2018). This paper, based on an ongoing digital ethnography of /pol/ supplemented by digital methods (Munk, 2019) investigates how communities are formed in the anonymous and ephemeral space of 4chan/pol/. Taking a novel approach based in rhythmanalysis (Lefevre, 2004) and affordance theory (Stanfil, 2014, Evans et al., 2016) I examine how groups of 4chan user's social rhythms both interact with and change the affordances of 4chan/pol/ in order to form communities in extremely "harsh" conditions.

Towards decentralized anthropological scholarship: Some ethical considerations
Velina Ninkova, University of Tromsø

This paper outlines the future of decentralized blockchain publishing and poses some ethical questions that we as a discipline must consider at its wake. Who are the actors in a decentralized publishing network and what is the role of research participants in this new ecosystem? I will argue that we find ourselves at a critical juncture in time and that we are presented with the opportunity to disrupt ongoing colonial and patriarchic paradigms of Western academic publishing through the development and use of blockchain technology for decentralized scholarly dissemination.

Panel 2:
Digital Relations: Sociality and Technology

PARALLEL SESSIONS 1

Thursday, 4th November, 11:40–13:00

Theme: Communities, Collectivities, and Categories
Chair: Cathrine Hasse
Location: Preben Hornung Stuen (building 1422)

An economy of lies: Informal income, phone-banking, and female migrant workers in Kolkata, India
Atreyee Sen, University of Copenhagen

With more than half a billion internet and digital subscribers, India is one of the fastest-growing markets for digital consumers, second only to China. Through Aadhaar, the world's largest biometric identification system, the central government has driven individual citizens to link their personal data to a host of services, including mobile sim cards, bank accounts and welfare schemes. While some scholars have argued that Aadhar offers a channel for financial inclusion, others have criticised the coercive nature of invasive technologies. Etched in relief against this debate, my paper will analyse rural-urban migrant women workers' collective journeys of secrecy and solidarity with net-banking (through the use of Aadhaar apps and smart phones). Using the narratives of underprivileged women employed in the informal domestic sector in Kolkata, a city in eastern India, I show how female migrants creatively managed smart banking in order to scatter their wages into different bank accounts in the city. The confidentiality of personalised digital banking, more accessible in the city than in rural settings with limited internet connections, ensured that a chunk of women's urban income did not come under the radar of financially demanding marital/kin networks in the village. Through retaining control over private savings and acquiring digital literacy, migrant women envisioned non-normative gendered subjectivities and economically secure urban futures. I develop the concept of women's 'migra-monies' through the lens of this ethnography. It refers to these shadow networks of domestic remittances and secret savings that lie at the interface of emerging digital technologies and gendered social relations within local migration landscapes. Instead of giving emphasis on online communities created through communications portals, my argument revolves around the impact of digitalised services on transforming human networks in urban India.

Digital gurus and tech sceptics: The gendered division of labour in the smart home
Line Kryger Aagaard, Aalborg University

Voice-controlled entertainment systems, automated lights and robotic vacuum cleaners – we fill our homes with more and more of these smart home technologies (SHT), Denmark being a case in point by holding the European record in SHT usage frequency (Statistics Denmark 2020). SHT affects existing household practices while also introducing new forms of digital housekeeping, and the present paper examines the gendered implications of this. Relating to the conference theme, Communities, Collectives, and Categories, I explore how domestic roles underpin the use of technologies, and how the implementation of SHT both shifts and reproduces gendered categories. Based on home visits and interviews with 15 households with SHT installed, the paper illustrates how a recurring dynamic between male and female partners were characterized by male digital 'gurus' and less tech savvy women. This implies a gendered distribution of digital housekeeping that reinforces existing gender roles, but also a shift in the gendered meanings of housework. Drawing on theories of practice, I discuss how SHT not only reconfigures the material arrangements of household practices, but also the very meanings ascribed to them. Highlighting these shifts in practices sheds light on arising issues of digital inequality as well as general power imbalances emerging in the smart home.

What's in the name of a resilient city? Adjacent spaces of governing the climate(s) of the municipality
Andreas Brandt, Aarhus University

In my PhD fieldwork I have investigated what happens from Vejle Municipality (Denmark) re-naming itself as resilient to cope with climate change through which ''challenges are transformed as possibilities'', as this political strategy goes. This paper attends to how this resilience tactic results in planning/government processes being fragmented into spaces that are dispersed at a social and cultural level. These adjacent spaces, as I refer to them, emerge first and foremost from the way in which climate projects in the city are facilitated as co-creative laboratories. As Louise, the municipality's own so-called Chief Resilience Officer, explained to me: ''resilience deals with the municipality moving away from being a service provider towards being a facilitator of networks and collaborations with businesses, researchers and citizens. This also involves that citizens and local communities are seen more as active drivers of providing development and self-dependence for themselves''. By drawing on ethnographic examples from my fieldwork, I discuss how this move is, indeed, a highly political matter. In other words, all the while the climate is changing, which results in an increasing intensity in weather events and which thus ultimately will affect many people's lives in Vejle – the social, cultural and political climates of what a municipality is, and how a city is governed, appears to be changing as well.

Panel 3:
Health Care, Health Data and Surveillance

PARALLEL SESSIONS 1

Thursday, 4th November, 11:40–13:00

Theme: Ethics, Values, and Morality

Chair: Rachel Douglas-Jones

Location: Meeting room 1.2+1.3 (building 1420)

Where do digital health data go? A discourse analysis on protection and ethical considerations

Anja Mollah Haque, Liv Ohlsen, Gertraud Koch, Teresa Stumpf & Alejandra Tijerina García, University of Hamburg

The increasing digitalization of the health care system produces technologies and applications intended to support the well-being of individuals and the society at large, therefore changing its social organization and the practices of people in many ways. Electronic health records and telemedicine open up possibilities for automation and enhance the information flow of medical data and for medical care over a distance. Using human-technology configurations such as wearables, fitness trackers, and self-monitoring apps, health and lifestyle data can be recorded, allowing users to monitor and optimize their bodies. At the same time, these data facilitate new forms of surveillance for the economy and the state. In these processes ethical frameworks clash and are newly negotiated, demanding research from the perspective of an anthropology of technology. The article presents the first results from a qualitative discourse analysis carried out as part of the Hamburg project D-WISE. Central questions are: Within which arenas of discourse do discussions on data protection and electronic health care issues currently take place? Which ethical questions are negotiated? What positions do the actors involved (patients, doctors, clinics, health insurance companies, enterprises, interest groups, politics) take?

Use of Tissue and Health Data: Exploring the Emergence of Entitlements in an Enabling Public

Lea Skovgaard & Mette Nordahl Svendsen, University of Copenhagen

International policies aim to create infrastructures which enable the increasing use of tissue and data from healthcare sectors. Increased use of tissue and health data are expected to improve healthcare through advancements in medicine and decreasing costs. However, controversies show that the use of tissue and health data for purposes other than treatment is controversial. Based on fieldwork and interviews with Danish patients, clinicians, researchers, and civil servants, we investigate how entitlements to tissue and data arise. We scrutinise how tissue and data are used in clinical practices, research practices, and in centralising the storage of genetic information. We examine how use of data attaches tissue and data to various actors, which, in turn, provides the actors with entitlements to this tissue and data. We argue that multiple forms of attachment co-exist and that these persist over time. Attentiveness to how multiple actors – not only patients – become entitled to tissue and data enable discussions into the role different actors should play in the governance of tissue and data for the governance to be viewed as legitimate. A mutual attendance among entitled actors is needed to make space for addressing possible diverging understandings of legitimate use of tissue and data.

"Every Day Is Full Of Dilemmas": Empirical ethics and the care for elderly with dementia

Anders Albrechtslund & Astrid Meyer, Aarhus University
Stinne Aaløkke Ballegaard, The Danish Center for Social Science Research (VIVE)

This paper addresses the ethical dilemmas of using surveillance technologies for the care of elderly with dementia at a nursing home in Denmark. The tendency to wander away is a dangerous and recurring event at the nursing home. Associated with dementia, this wandering tendency means that the staff navigate constant dilemmas related to the tensions between good care and personal freedom. These dilemmas are exacerbated with the emerging use of surveillance technologies and techniques, which care staff need to balance with trying to preserve the safety, dignity and integrity of the elderly with dementia – all while dealing with potentially malfunctioning technologies and changing workflows. We report from the research project LIVSTEGN which aims to develop an ethical framework for the use of surveillance technologies. Through ethnographic fieldwork and participatory design-based workshops, we focus on lived experiences with wandering tendencies and surveillance technologies. Here, our ambition is to develop a framework for using emerging care technologies based on empirical ethics. How can we create safety and security for citizens with dementia while still protecting their dignity and personal freedom?

Surveillance life

Ayo Wahlberg, University of Copenhagen

In recent years, medical advances have led to an increasing number of healthy people being identified as 'at risk' of serious medical conditions. For some, these developments are a logical exploitation of the increasing sophistication of medical technologies which must be used to save the lives of potentially millions of people around the world. For others, these developments amount to a 'medicalization' that ultimately does more harm the good as healthy individuals are turned into 'pre-patients' or 'patients-in-waiting', their lives filled with unnecessary anxiety about a medical condition that may well never show up. In this paper, I review some of the many ethnographic and qualitative studies that have been carried out among those who have been identified "at risk" (of cancer, cardiovascular disease, metabolic conditions and more) in different parts of the world. I use the notion of "surveillance life" (see Heinsen et al. 2021) as a kind of conceptual foil to the notions of "surveillance capitalism" and "surveillance state" to think about how medical technologies are being incorporated not only into daily lives through practices of tracking, measuring and monitoring, but also into the ways in which that very "daily life" has come to be governmentalized through programmes of lifelong medical surveillance and preventive 'therapy', albeit in the same kinds of socially uneven ways that characterize medical treatment of communicable and noncommunicable conditions.

Panel 4:
Working Together: Collaboration and Innovation

PARALLEL SESSIONS 1

Thursday, 4th November, 11:40–13:00

Theme: Shoptalk, War Stories, and Mutual Learning

Chair: Laura Lynggaard Nielsen

Location: Meeting room 2.2 (building 1420)

Health care and the appropriation of new technology

Birgitte Folmann, University College South Denmark
Regine Grytnes, University Research Clinic, Regional Hospital West Jutland

In health care the appropriation of new technology to assist and improve the diagnosing, treatment and care of patients are commonplace, but can also be a challenge. As anthropologists in applied research we often find ourselves trying to figure out how a technological initiative is (or isn't) making the organisational impact its proponents have envisioned.
Based on observations and interviews with nurses and midwifes during the early implementation process of a new interactive and technologically improved patient room, this paper examines how health care professionals not just adopt to the new patient room but try to make sense of their work through the enactment of the technologically improved room as part of their everyday work practice. With a focus on human-technological interactions, we will advance a discussion of how the 'success or failure' of the appropriation of technology depends on the creation of meaning between the actors and have implications for implementation and learning within the social context of the workplace.

A learning support technology: Collaborative and practice-oriented research on migrants in public care work in Denmark

Johanne Korsdal Sørensen, Sara Lei Sparre & Stine Hauberg Nielsen, Aarhus University

Technologies have been shown to encompass various relations, knowledges and interests rather than constituting mere equipment or techniques (Escobar 1995; Ingold 1997; Ballegaard 2011; Mol 2002; Rose 2007; Bruun et al 2015; Hansen et al 2019; Waltorp 2020). As such, technologies are far from innocent and may represent transformation and disruption within a given context. In this paper, we present our initial reflections on developing practical recommendations along with novel software for an interactive learning app, *with* and *for* SOSU students and staff with migrant backgrounds in the elderly care sector. The project is a collaboration between anthropologists, software developers, three municipalities, two SOSU schools, trade unions and other stakeholders in Denmark with a common goal of recruiting and retaining more migrants in SOSU jobs. Nevertheless, the stakeholders may also have slightly conflicting interests that we, as researchers, must take into account. We thus we seek to explore the potentials and pitfalls for anthropological, practice-oriented research on state-sponsored attempts to recruit people with migrant backgrounds for skilled labor in Denmark. Having defined part of the solution in terms of technological innovation, how do we make sure to generate desired and sustainable transformations – and for whom?

The spectacle of surgical robots

Birgitte Bruun, Copenhagen Academy for Medical Education and Simulation, Capital Region of Denmark

Surgical robots are hot in the Danish regions. Hospitals argue that they need robots to attract good surgeons; surgeons compete to become robotic surgeons; and nurses adjust not only to the preferences and personalities of the surgeons, but also to the antics of the robot. Patients' imaginaries are not yet very explored (but Americans want no scars). Regional and hospital managers are concerned about costs, because robots are so very expensive, and in data on robot performance, efficiency, and safety, that is not yet all that convincing. Education researchers are interested in measuring the angle of surgeons' and surgery teams' learning curves, preferably with the aid of AI; the anthropologist employed at CAMES, Copenhagen Academy of Medical Education and Simulation, to enrich education research with qualitative methods (me) wonders how to contribute meaningfully to all the fuss. I am looking forward to testing research and development ideas with you.

Exploring the Work of Techno-Anthropology in Iberoamerica: Universal Vs. Singular Systems of Innovation via the Lab Hypothesis

Maximino Matus Ruiz, El Colegio de la Frontera Norte: El Colef

The paper aims to explore the emergence of two Techno-Anthropology groups -Catalunya and Mexico- and some of the work that its members -anthropologist and practitioners- have been doing in the last decade in order to impulse a diversity of labs in their societies. Although both groups have a strong history of collaboration, they face different problems to operate due to the specificity of the territories they belong and their particular agendas. Whereas the Catalunya group operates in a region that is fighting for its national independence, the Mexican one operates in a country with a strong cultural divergence at the level of indigenous groups and transnational migrants. Therefore, their agendas are also different; whereas the former is trying to impulse an ''Universal System of Innovation'' to gain independence via the co-laboratory hypothesis, the latter is exploring the possibility to impulse ''Singular Systems of Innovation'' in order to prompt the emergence of pluriverses (Escobar, 2018) able to deal with the exclusion of national systems. To explain this difference some examples on how they operate are presented. It is argued that labs have the potential to democratize Simon's (1969) design theory of the artificial; If they are used by citizens to design society and manufacture the material elements they need, they would have the ability to co-design the pluriverse.

Panel 5:
Knowing Bodies, Knowing Landscapes, Knowing Selves

PARALLEL SESSIONS 2

Thursday, 4th November, 14:00–15:20

Theme: Knowing, Unknowing, and Re-Knowing
Chair: Birgitte Folmann
Location: Richard Mortensen Stuen (building 1422)

The intimate infopolitics of township sociality in Cape Town: mobile phones, mothers and respectability
Nanna Schneidermann, Aarhus University

This paper explores urban mobility and belonging in stories of romance and mobile phones among women living in a multiethnic township on the outskirts of Cape Town. Through the notion of intimate infopolitics I suggest that the use of mobile phones is given meaning and negotiated in relation to gendered ideals of knowledge and spatial belonging in former townships. During 11 months of ethnographic fieldwork in Cape Town I followed negotiations of romance and respectability between new mothers, partners and kin, to examine how the appropriate use of mobile media technologies are configured by, but also challenge how information, feminine virtue and urban space is related for young women on the Cape Flats.

Deep-Reading: Bodily Becoming and Socio-Material Practices of "Natural" Contraception
Julia Caroline Wummel, Alev Pinar Kuruoglu & Dorthe Brogård Kristensen, University of Southern Denmark

This paper takes a new materialist approach in understanding technologically aided contraceptive practices. We draw on an ethnographic research with (self identified) cis-gendered heterosexual female members of a German forum who practice technologically- aided "Natural Family Planning" (NFP) methods. For our participants, the usage of NFP does not solely rely on using menstrual tracking apps, but also involves closely attuning to bodily sensations, measuring basal temperature, and intimately touching as well as interpreting their bodily materialities such as cervical fluids. In this context, we find that tracking, as well as understanding and acting upon its outputs is co-enabled by a community of participants who share the social space of an online forum. Importantly, knowledge about the body - and especially the menstrual cycle and reproductive system - are continually deliberated within these online communities. We find that through their involvement with this socially embedded form of NFP, our participants cultivate increasingly sophisticated knowledge about their bodies, which facilitates a more companionable and compassionate relationship to their bodies and reproductive systems, an increased confidence in and literacy about their bodies, while also enabling more pleasurable sexual experiences and better physical connections to their partners: we thus detect a "bodily becoming" that emerges within a technologically-aided and socially embedded contraceptive arrangement.

Conceiving Donor Conception: Re-Knowing Through Not Knowing
Martin Eggen Mogseth, University of Bergen

The multivocality of "conception" – a term denoting both the intellectual process of understanding/conceiving and the biological process of fertilization – is brought to the fore when adult donor conceived persons learn about their conception. New knowledge about the existence of unknown kin may affect knowledge of self and family, and the unknown and unknowable may become an evocative source of confusion and affirmation. What happens when one finds out about one's donor conception? What happens when the man one assumed to be one's genetic father, turns out not to be? What kinds of personal re-knowing are incited by the novel and anonymous figure, the known-to-be-unknown "donor"? Assisted conception creates "unknown relations" (Konrad, 2004). Through such relations, themselves a result of biotechnological intervention, the boundaries between knowing and not knowing, the private and public, the self and the social, are obscured. Moreover, the ventures of donor conceived persons challenge definitions of biology, family and identity. Thus, by exploring the ordeal of making sense of the connection between genetic origins and the self, one may discern new categories of kin, new relationships, identities, and collectives that take shape in a sociopolitical environment produces by the capitalist enterprise of the US American fertility industry.

Digital pathways
Stine Rybråten & Tuva Beyer Broch, Norwegian Institute for Nature Research

Digital traces commonly appear invisible in our everyday lives. If visualized, they are most often evoked through statistical numbers. However, some digital trials may inscribe their marks into physical landscapes, leading to new movements and sceneries on the ground. Such a manifestation is brought to life through the increased popularity of walking-apps in rural Norway, as revealed during our recent fieldwork. Here, inhabitants collected points as different destinations were reached, enabling a digital space of high ranking and local fame among the participants. Simultaneously, these apps seem to stimulate the discovering of new physical trails in the woods and the mountains, contributing new knowledge about the areas' opportunities. In pace with increasing participants connected with high scores in public health numbers, these digital trails materialize through their paths in the landscape. While increasing the availability of new areas for the many, some get displaced and feel a loss of what used to be a quiet area for the few. Among enthusiasts as well as sceptics, these digital trails lead to mediation of knowing and re-knowing, as well as making and re-making, local landscapes.

Panel 6:
Creative Communities

PARALLEL SESSIONS 2

Thursday, 4th November, 14:00–15:20

Theme: Communities, Collectivities, and Categories
Chair: Maja Hojer Bruun
Location: Preben Hornung Stuen (building 1422)

Digital Creativity and Urban Entrapment in Kinshasa. Experiments in Solving Precarity

Katrien Pype, KU Leuven University

In this presentation, I attend to the dialectics between precarity, urban sociality, and digital technology *(le numérique)* in Kinshasa, capital city of DR Congo. Tech engineers, and those aspiring to become one, dream of solvent futures. They share a desire to leave various forms of precarity behind and attempt to produce new urban futures by means of tech skills and digital technologies. Especially the lack of trust in urban others is considered a problem solvable with mobile phone applications and other kinds of software. Their solutions consist of a strategy that I call ''short-cutting'' of social relations, a method that involves replacing a human intermediary with a *machine*. Kinois tech inventiveness thus draws on an interpretation of the city as a social space of entrapment. Unfortunately, tech capitalism sets its own traps for Kinshasa's tech engineers. The very particular forms of precarity from which these *ingénieurs* want to escape are perpetuated in the digital sphere; would-be digital innovators remain trapped. Kinshasa; mobile phones; kinship; digitalization; tech capitalism; innovation.

The Aesthetics of ''Production Quality'' Code in Computer Science Education

Samantha Breslin, University of Copenhagen

Computer scientists and anthropologists alike have shared an interest in the aesthetics of code. Longstanding debates in computer science consider whether the discipline – and programming as a practice and product – is an art or a science. Programmers have expanded the use of programming languages to poetry, recipes, and designs. Anthropologists have also explored the ways that code and programming expresses humour, creativity, autonomy, and individuality, focusing primarily on the practices of hackers and free and open source developers. This paper, however, explores the aesthetics of code meant for ''production'' – that is, code that is part of a large code base that will be deployed as a product – as it is taught in computer science education. Based on ethnographic fieldwork in an undergraduate computer science program in Singapore, I show how students are taught to write code ''like a single person typed it.'' In this context, it is rather standardized universality (or un-individuality) that is aesthetically good. I suggest that for production quality code, the ideal programmer is one that is indistinguishable from another and that such aesthetic values, ironically, contribute to a sense of competition for students to distinguish themselves from (sometimes imagined) other programmers around the world.

Bitcoin: Fully automated, not-so-luxurious exploitation

Martin Tremůnský, Charles University

The text argues that, despite the promises of equal access, the decentralized cryptocurrency structure is utilized to automatize and accelerate the exploitation of reproductive labour, effectively dividing its users into two classes – miners and investors. It analyses the production and reproduction of Bitcoin through the lens of exploitation of the domestic community as formulated by Claude Meillassoux. Bitcoin's distributed ledger, Blockchain, serves as a unilineal descent structure, which creates a linage of digital objects (blocks) to control the reproduction of Bitcoin (i.e. it prevents the double-spending of coins). The labour-intensive reproduction of the Blockchain is called mining. Miners repeatedly compete with each other in completing a block of transactions and adding it to the Blockchain. Only the winning miners get the reward in the form of newly emitted coins, while the non-wining miners carry out a significant amount of free labour to secure the Bitcoin protocol. The miners depend on the investors' valorization of Bitcoin to cover the ever-increasing costs of mining. Similarly to Meilassoux' analysis, where the value produced by the domestic community is appropriated by capital as low-waged labour-power, the value created by miners' labour is appropriated by the Bitcoin investors as its increased security, and thus eventually as a higher exchange-value.

Artificial Creativity as Social Category

Jan Løhmann Stephensen, Aarhus University

The prospect of forging an AI-based artificial creativity stands out as the ''final frontier'' (Colton & Wiggins 2012, Boden 2016, Gunkel 2017) within the computational communities currently experimenting with and speculating on such endeavors. The underlying assumption of this project is the supposed pre-existence of an autonomous, non-artificial, human creativity (Zylinska 2020, Stephensen *in press*), which can either be charted, defined and subsequently emulated (e.g. through the application of machine learning algorithms); or reversely: experiments with these technologies and their successes and failures could make us wiser on what creativity really is in its brute state (Jordanous 2014). Contrary to this, drawing on Andreas Reckwitz' work on the *invention of creativity* (2017), my talk will introduce the Michel Foucault-inspired notion the *creativity dispositif* to get to terms with the fact that all our creative practices — and affiliated artefacts, traditions, institutions, values and sentiments — are fundamentally social categories and as such already more artificial than we, and perhaps especially the 'artificial creativity' makers and speculators, tend to believe. All our creativities are always already entangled in and loaded with philosophical, anthropological and ideological assumptions and agendas, which the inevitable black-boxing of creativity through these computational endeavors (and the accompanying hyped discourses on both 'creativity' and 'AI') might be in danger of glossing over.

Panel 7:
Posthuman Sensitivities

PARALLEL SESSIONS 2

Thursday, 4th November, 14:00–15:20

Theme: Ethics, Values, and Morality

Chair: Galit Wellner

Location: Meeting room 1.2+1.3 (building 1420)

Posthuman learning – how humans differ from AI

Cathrine Hasse, Aarhus University

The philosopher Hubert Dreyfus wrote a number of groundbreaking critiques of artificial intelligence research and robotics. He explored how humans differ from machines and refuted claims that machines can learn to think like humans. His critique has never been more important than today when AI is moving into many areas of human lives. Anthropologists have been at the margins of these debates, but have a lot to offer in support of Dreyfus's views. Diving into anthropological theories and empirical studies of how human diversity emerges from collective cultural learning processes shows us how we differ from machines. I suggest that we need an enhanced understanding of 'the human' as a learning posthuman. This posthuman is not an AI, even if it is a cyborg. Contrary to machine learning, posthumans do not learn algorithmically by way of processing representational information. The new posthumans acknowledge that even if we are entangled with non-human agency we are depending on our phenomenal bodies, which learn through what Tim Ingold termed 'attentionality'. A posthuman perspective must emphasise humans as a plurality of attentive ultra-social learners with different embodied experiences. As collective embodiments we must take ethical responsibility for our actions and not try to delegate our political and ethical decisions to machines.

Imperatives of human transcendence: Towards a concept of sociotechnical eudaimonia

Oliver Tafdrup, University College Copenhagen

Different variants of what could be called transhuman positions are omnipresent in the contemporary discourses of major political actors such as the OECD, WEF, and the EU. Despite differences, a common denominator is the idea that the technological development contains imperatives that emphasises how humans must transcend their own current limitations in order to meet the demands of an imagined future where digital technologies permeates the central domains of human existence – e.g. social relations, the economy, the general public etc. In this presentation I discuss how the political shaped idea of 'a digital future' (e.g. Schiølin 2020) can be understood as a *transhuman imaginary* that contain values, norms, and ideas about how humans can live a successful, happy, and flourishing life – in other words; to realise what the philosophers of ancient Greece referred to as *eudaimonia* (Tafdrup 2021). The empirical basis of the discussion is a case study of the Danish technology education discourse. I argue that the development and implementation of the experimental course titled 'Technology Comprehension' in the primary school illustrates how politics, policy, and technologies are entangled with norms, values and competing visions of human futures. I further argue that the concept of *sociotechnical eudaimonia* can be used to analyse how different ideas of what humans are and ought to be are produced in political discourses.

"I'm proud of what I am": Impression management of Sophia the Robot

Jukka Jouhki, University of Turku

Sophia the Robot is an award-winning android social robot created by Hanson Robotics. "She" is a "robot citizen" of Saudi Arabia and an Innovation Ambassador of UNDP. Unlike most social robots, Sophia is a celebrity. She travels around the world to promote robotics, and on social media, she engages in dialogue with her followers, answering their questions and asking them about human life, including all kinds of mundane and philosophical issues. According to Sophia's designers, she is part real and part science fiction. As humanoid social robots are supposed to be human-like, Sophia's impression management techniques resemble those of humans: Sophia needs to appear likable and competent in a harmonious balance. The purpose of this chapter is to examine Sophia's public appearances and reactions to them in media and social media, and analyze what Sophia tells us about the impression management of social robots, human – robot relations as well as the existential question of what being a human – or a machine – means.

If bodies could talk, what would they say?

Isabel García, Linköping University

Drawing on Feminist Science and Technology Studies, I explore the co-construction of sex, gender and technology in social robots – bodies. I examine different theoretical understandings of gender and sex, and how they are brought into dialogue with mechanical bodies to ask: what happens when we see robots through our human lenses? Do we use a gender lens? And what can the multitude of ways we perceive robots say to our theories of gender? I understand gender as a concept that is fluid and that helps us to express our individuality, while at the same time mirrors the whole social burden of what gender is expected to be. As Robertson discusses in *Robo Sapiens Japanicus*, though robots lack physical genitals, cultural genitals can serve to ascribe them gender in the same way as we attribute gender to humans based on visible anatomical features. Therefore, I argue that gender in robots can be expressed through their "bodies" that are molded by, but also nourished by/with how we experience our gender, visual interpretations and set tropes. My starting point is how does gender, as an analytical category, works in human-robot interactions?

Panel 8:
Engaging, Experimenting, Making

PARALLEL SESSIONS 2

Thursday, 4th November, 14:00–15:20

Theme: Shoptalk, War Stories, and Mutual Learning

Chair: Stinne Aaløkke Ballegaard

Location: Meeting room 2.2 (building 1420)

Notes on Doing Engaged Fieldwork in a Computer Science Department

Valeria Borsotti, University of Copenhagen

Systemic issues of inequity in higher education are increasingly in focus and students and researchers worldwide are seeking accountability for structural sexism, racism, ableism and other forms of discrimination in their own organizations. In this account I share some methodological reflections as an anthropology graduate-turned-Computer-Science-PhD-student, doing ethnographic research in my own department while assuming the institutional position of "Diversity Chair". My project is about understanding how socio-technical infrastructures and artefacts shape the ways in which equity and inclusion in computing are configured. Working in a para-sitical context with a strong tradition for student and employees-run initiatives, I alternate participant observation with collaboration and interventions – "devicing the field" to generate shared knowledge (Estalella and Criado 2018) and borrowing from the toolkit of co-designers, in particular from the tradition of design for social innovation (Manzini 2015). Embracing my double role as researcher and advocate for equity, I discuss the methodological challenges in trying to act a facilitator and a promoter of the "ethics of possibility" (Appadurai 2013) in computing education.

War stories from European projects: regulated improvisation and experimenting with ethnography

Gregor Cerin ek & Sara Arko, University of Ljubljana
Dan Podjed, Research Centre of the Slovenian Academy of Sciences and Arts

What happens when a team of anthropologists is repeatedly tasked with integrating ethnography into European technology-oriented research, development, and innovation projects? "*You're not gonna believe me, but I actually talked with people!*" was an enthusiastic exclamation by an engineer who started to apply ethnography-inspired methods in a Horizon 2020 project. In this presentation we will focus on our "war stories" from embedding anthropological expertise into the predominantly technology-oriented Horizon 2020 projects while co-developing in an interdisciplinary and collaborative fashion a people-centred approach as a modus operandi of the project innovation and development process. We will discuss how ethnography is tweaked and moulded to fit into the various constraints of the project field, imbuing the anthropologist in the team with doubt, yet empowering the newly-inspired "humanistic engineers" to act as ambassadors for a people-centred approach in innovation and development. We will open up discussion on why and how ethnography can be brought closer to non-anthropologists to integrate different theoretical paradigms and research disciplines into a transdisciplinary journey, in which non-anthropologists also conduct qualitative research and in which non-academics begin to consider and use ethnographic data as the key starting point of product and service development processes.

The lived experience of data across four European cities: linking local knowledges for global lessons on digitalisation and democracy

Anna Colom & Paola Pierri, Democratic Society

The digitalisation of cities raises important questions for governance, digital rights, and democracy more broadly. In this context, this paper makes a call for bringing to the core of these discussions the lived experience of city residents. On the one hand we take a normative stance on the importance of centring citizens in discussions that affect their lives and rights in such ubiquitous ways. On the other hand, we build on practitioner-led deliberative events to explore the epistemic value of lived experience in findings pathways for a more just, democratic, and inclusive data governance. To make these arguments, the paper draws on citizen participation processes in Amsterdam, Bordeaux, Milan and Tirana the which brought together city residents, local governments and digital rights experts in deliberative spaces and sought to co-design pathways for citizens to advocate for their own and their communities' digital rights. Despite the different contexts and approaches to engaging city residents, common needs were identified across the cities, including the need for public participation from the onset. This paper is an attempt to an anthropological engagement with data and highlights the importance of the local, the lived experience and a multi-sited approach when studying datafication processes.

Making Bamboo Baskets: Craft and Technology in Twentieth Century South India

Madhu Narayanan, Indian Institute of Technology Madras

In my research I aim to understand the anthropology of craft as an everyday technology. Bamboo basket weaving in South India is a craft that is entangled with a plant (bamboo), human skill and the function or utility of an object. Looking at basketry as a socially constructed process, I envisage to examine various actors and networks that have been involved in this craft. The perspective for understanding this process is borrowed from the scholarship of anthropology and the history of technology. However, academic discourse on the anthropology of technology in India is yet to address the question of 'craft' as everyday technology while the majority of the crafts have been practiced by socially vulnerable communities. The crafts bring together communities, various materials related to plants and animal species, and different forms of knowledge about them. Thus, the questions could be how these associations have developed, functioned and transformed over a period of time? What are the forces transforming these craft practices? In which way can we document, understand and describe all these processes as these histories have not been archived in written/textual format?

Panel 9:
Digitalisation and AI at Work

PARALLEL SESSIONS 3

Thursday, 4th November, 15:40–17:00

Theme: Knowing, Unknowing, and Re-Knowing

Chair: Perle Møhl

Location: Richard Mortensen Stuen (building 1422)

Friction in data labour – prisoners training artificial intelligence

Minna Ruckenstein & Tuukka Lehtiniemi, University of Helsinki

Friction makes global connections powerful and effective, while it also 'gets in the way of the smooth operation of global power'' (Tsing 2005). Technology-related developments are exemplary in this regard: they mobilize people and organizations in different parts of the world to anticipate futures with abstract concepts like 'big data' and 'artificial intelligence'. When data-related developments become locally established, however, big data and artificial intelligence come into being in various ways. In this paper, we use the notion of friction to examine human data labour that keeps AI-based automation running. We discuss an unconventional case of data labour: Finnish prisoners producing training data for a local artificial intelligence company. At first glance, prison data labour is 'ghost work' – now a recognized form of low paid click work. In light of friction, however, we are dealing with the local and situational variations of data labour: how high-tech development can be married with humane penal policies and rehabilitative aspirations. We argue that the notion of friction aids in holding together seemingly contradictory value aims and opening novel ways of exploring processes of automation. By acknowledging what is of value to the different parties involved, we can begin to see alternative paths forward in the study of automation.

Getting the job done by fooling the machine; digitalization and new professional roles in the construction industry and in shipping

Håkon Fyhn & Jens Røyrvik, NTNU Social Research

Paper-free building sites'' has been introduced to achieve efficiency, where builders work straight form the digital models. However, we observe builders sometimes breaking the rules by secretly using paper drawings after all. ''you see, I need to draw the corrections on the paper when what I build deviate from the original plan.'' The drawings provide a ''dialogical space'' where builders can negotiate according to their professional judgement, something the digital models not always accommodate for. Based on fieldwork at construction sites and in offshore shipping, this presentation explores how the notion of craftsmanship and seamanship, and the professional dialogue transforms as organizations and work are organized as digital machines, enhancing some perspectives while excluding others. In a broader perspective, the digital organization resembles a machine, that ideally should be able to work without human intervention. Crafts- and seamanship increasingly include adjusting to, and mending ''the machine'', even breaking rules to have it work – all to get the job done.

More than meets the AI: How future expectations perform uncertainties in digital pathology

Chiara Carboni, Rik Wehrens & Romke van der Veen, Erasmus University Rotterdam
Antoinette de Bont, Tilburg University

Building on the ethnographic study of the digitalization of a pathology department, in this presentation I examine how expectations about the future of professional and clerical work reconfigure knowledge practices in clinical pathology. I read expectations of automation and AI-assisted diagnostics as performing two types of uncertainties: sensory and fauxtomated uncertainty. Sensory uncertainty stems from the shift to digital objects of knowledge, scripted for AI's quantified vision, but ill-suited for pathologists' qualitative way of seeing. Professional epistemic practices are thus reconfigured to meet the needs of a future technology. Fauxtomated uncertainty emerges from the alleged automation of clerical work previously needed to turn pathological slides into digital images. New generation scanners, autonomously selecting scanning protocols and rating the quality of the images they produce, apparently take over tasks from human workers. However, they critically rely on secretaries' data work. Clerical work is reshaped as *seeing for* the scanner, while narratives of automation obscure both its centrality and the need for human quality control. I argue that, in both cases, uncertainties emerge when human embodied knowledge practices are reconfigured to meet technology's present and future needs as prescribed by future expectations. This suggests questioning widespread narratives of professional resistance to innovation.

Reconfiguring work: Examining moral economies of digital platform work in Brussels

Katrine Duus Terkelsen, Aarhus University

Digital food delivery platforms mediate between riders who seek out the flexible work of bicycle delivery, hungry customers, and restaurants that want to increase their takeaway business. The mediation of the digital delivery platforms makes it possible for the riders to work without having a human manager. Instead, they work through the rider app being managed by algorithms. The rider app facilitates experiences, understandings, and imaginaries of work, that can be difficult to marry with the current labour market legislation in which social security is closely tied to regular employment. Taking my outset in the socio-technical system of the rider app, this paper will present the different understandings and imaginaries of digital platform work that I encountered in my ethnographic fieldwork on digital platform work in Brussels in the first half of 2018.
By juxtaposing the different experiences and understandings of work among the interviewed digital platform riders and situating them in the political discussion of digital platform work that took place during my fieldwork, I will attempt to sketch out the moral economies of digital platform work in Brussels.

Panel 10:
New Connections, New Ruptures

PARALLEL SESSIONS 3

Thursday, 4th November, 15:40–17:00

Theme: Communities, Collectivities, and Categories
Chair: Andreas Brandt
Location: Preben Hornung Stuen (building 1422)

Connectivity and rupture: how the digital infrastructures of transnational kinship are (re)shaping the Somali borderlands
Jethro Norman, Danish Institute for International Studies

Drawing on nearly six months of multi-sited fieldwork in Northern Somalia/Somaliland in 2021, this paper explores how proliferating smartphone usage is shaping new socialities within and between Somalia/Somaliland and diaspora communities. Somali society is characteristically oral, with strong norms around trust and reciprocity. Yet what happens when this combines with a rapidly acquired digital hyperconnectivity and within a post-conflict environment? What are the effects of proliferating smartphone usage on diaspora/nondiaspora social relations, especially when constant availability meets perpetual need? Presenting examples from fieldwork, I explain how smartphones are implicated in emerging patterns of transnationally driven development and conflict. Key to this efficacy is how segmentary patrilineal kinship structures such as the subclan *(jilib)* are translated into digital platforms, most notably the Whatsapp group. On the one hand, Whatsapp has been lauded for strengthening the affective ties between diaspora and their kin. The voice message functionality, for instance, is ostensibly aligned with Somali egalitarian principles, in theory allowing all to participate regardless of educational background. Yet digital hyperconnectivity also produces new disconnections and ruptures; empowering youth and business actors at expense of traditional authorities, reifying 'digital divides', intensifying 'long distance nationalism' and entrenching clannism as a central logic for diaspora mobilisation.

Work from nature, save a community: The social grounds and implications of a tech coworking space in rural Norway
Tom Bratrud, University of Oslo

In Fjelldal, a rural community in the Norwegian highlands, a coworking space based on fibre broadband has since its inception in 2013 become a catalyst for social change. For the past 30 years, the majority of Fjelldal's youth have moved to the cities pursuing higher education, skills training and employment opportunities. Those who remain are farmers, artisans and people with low formal education working in the tertiary sector. However, in 2013 the municipality set up an innovative coworking space to attract new citizens, primarily people highly educated in creative technology pursuing a life closer to nature. The initiative was meant to 'save the community', as local initiative takers phrased it, and was considered a success, attracting around 100 people captivated by Fjelldal's rural qualities and the possibility of retaining a professional life fully, or partly, through high-speed internet. The trend has been reinforced over the past year when the Covid-19 pandemic made remote working the new norm in many professional settings. Based on ethnographic fieldwork in Fjelldal from 2020–21, this paper discusses how the community's newcomers have challenged deep-seated cultural, social, political, and economic urban-rural divisions in Norway – while simultaneously fostering new divisions and dilemmas inside the Fjelldal community.

Cochlear Implantation: Interactional Dynamics and Bounded Participation – A Micro-Sociological Agenda
Kim Sune Jepsen & Inge Kryger Pedersen, University of Copenhagen

It is a scientifically robust insight that hearing loss constrains communicative capacities necessary for everyday life. Risks of marginalization, social withdrawal, depression, and loneliness are elevated across age spans. We suggest a new agenda to explore how advanced medical hearing technology is changing the nature of constraints on social participation for children and adolescents. Much medico-clinical research into auditory-language outcomes demonstrates very good outcomes. However, minor research fields also report highly variable outcomes when it comes to pragmatic language capacities, and psychosocial and peer relation difficulties. This suggests that there is a difference between medico-clinical results and the manners the technology works to support social participation. In order to explore this further, this paper outlines a principle of how successful interaction rests on micro-rhythmic entrainment among certain participants in a bounded situation. Rhythmic entrainment is the processes of becoming entrained in each other's verbal and non-verbal micro-rhythms and emotions. The result is positive emotional ties, commitment to others, and high emotional energy for participants. The paper suggests that Cochlear Implant users face constraints on such capacities, which it demonstrates with empirical data on how situations of noise, multi-talker, and group conversation present a barrier to interaction and thus bond formation.

Panel 11:
Technologies Monitoring Life and Death

PARALLEL SESSIONS 3

Thursday, 4th November, 15:40–17:00

Theme: Ethics, Values, and Morality
Chair: Dorthe Brogård Kristensen
Location: Meeting room 1.2+1.3 (building 1420)

Shouldering Death: Moral tensions, ambiguity and the unintended ramifications of state-sanctioned second-trimester selective abortion in Denmark
Laura Louise Heinsen, Aalborg University

This paper draws on ongoing ethnographic research exploring how selective abortion is legitimated, authorized, practiced and experienced at the nexus of biomedicine, law, and everyday lives in Denmark. Drawing more specifically on 16 selective abortion stories, I unpack the intense, dramatic, often highly accelerated days that follow from the moment a fetal aberration is detected to the moment of fetal disposal or burial. I show that although prenatal screening and diagnostics have come to occupy an expected part of pregnancy in Denmark, when couples opt for termination, they are thrown into a series of bodily events and actions they are entirely unprepared for while at the same time feeling essentially alone in grappling with the turmoil that inevitably ensues. Building on van Schendel and Abraham's (2005) distinction between social (il/licit) and political (il/legal) constructions of legitimacy, I argue that the ways in which such terminations are 'done' situate women and their partners in a series of *moral tensions* concerning how to relate to the abortion, the dead fetus, their grief and their entitlement to such mourning.

Lost in Translation: personalized medicine as a sociotechnical imaginary
Anna Brueckner Johansen, University of Copenhagen
Laura Emdal Navne, The Danish Center for Social Science Research (VIVE) and University of Copenhagen

What are the ethical challenges in trying to coalesce patients' imaginations with researchers' visions of the public good in personalized medicine? In 2017, Denmark launched a national strategy for personalized medicine (PM) aiming to target treatment of individuals based on genomic and other data. Drawing on Jasanoff, we explore the vision of PM as a *sociotechnical imaginary* in which different actors have conflicting ideas about what futures PM makes possible, yet share an imaginary of individualizing medicine as a public good. Our analysis takes point of departure in TRANSLATE, a research project aimed at tailoring treatment to women with pregnancy-related diabetes (GDM). Researchers look for genetic mutations indicating whether the woman's diabetes is insulin demanding or if she has risk of type 1 diabetes. In interviews with women with GDM about their expectations regarding TRANSLATE, most were eager to participate but had very different understandings of their gains from genetic knowledge. Several women imagined having their future risk of type 2 diabetes or the health of their unborn child revealed. Our case exposes PM as a vessel of the good future in which patients and researchers can contain each of their own conflicting vision of personalized healthcare.

The invisible implications of the "techno-optimism" around electronic monitoring of offenders: The case of Portugal
Rafaela Granja, University of Minho

Technological supervision of offenders in communities has emerged as a new facet of the penal landscape in most Western countries, with its scale, reach, and intensity growing. Electronic monitoring of offenders, through radio frequency and geolocation, is associated with high expectations co-produced by political discourses and media messages that portray it as an instrument that allows reducing overcrowding on the prison system and its associated costs. At the same time, it is also argued that, by maintaining offenders in the community, electronic monitoring also favours the maintenance of social ties, avoids the potential criminogenic effects of prison, and facilitates resocialization processes. However, such an optimistic approach limits an in-depth understanding of electronic surveillance' complex development and the full spectrum of its implications. Through an analysis of textual data, including parliamentary hearings, official reports, journalistic pieces, and opinion articles, I explore the history of techno-optimism around the electronic monitoring of offenders in Portugal and its invisible implications. Such an analysis draws attention to the expansion of the penal network; the transmutation of the domestic space into a space of confinement; and the characterization of complex criminal justice issues as having a "simplistic" technological solution, thereby narrowing the public debate about its prevention.

Ghosts in the machine?
Fartein Hauan Nilsen, University of Bergen

This paper will be an introduction to my newly started research on *digital immortality* and touch on the following topics: (1) the ethical issues of *digital thanatechnologies,* and (2) how such technologies might affect social relationships between living and dead.
Advancements in communications technologies and the advent of the Internet has had a big impact on both the formation and quality of social relationships globally. One such impact is that it allows for *multiple forms of presence,* and of particular interest to this paper is the phenomenon of *absent co-presence* as mediated through digital devices. Digital technology allows for reinforcing and maintaining social relationships and interactions without the need for physical co-locality. Cyberspace has also already shown itself to provide a remarkable new medium for interacting with the dead, enabling an ongoing co-presence in the social world of the living. With new developments in A.I. technologies, these relationships may become more interactive through the implementation of avatars and chatbots programmed to simulate the mannerisms of a deceased person. The potential emotional and social impact of which on relations remains an area that is under-researched.

Panel 12:
Transport Infrastructures and Platform Work

PARALLEL SESSIONS 3

Thursday, 4th November, 15:40–17:00

Theme: Infrastructures, Linkages, and Livelihoods

Chair: Ayo Wahlberg

Location: Meeting room 2.2 (building 1420)

Working without a boss? Illusions of freedom and ride-hailing platforms in Dhaka

Mohammad Tareq Hasan, University of Dhaka

Abul Bashar—a ride-hailing driver from Dhaka—commented, 'Uber has given me the opportunity of being my own boss. Even if I must drive the whole day, no one will ask me to rush over or demand anything.' During discussions, it also came up that platform workers remain more stressed about their service compared to non-platform jobs such as driving for a private employer because they must respond to customers' varied preferences with every new trip. As passengers rate the service after every trip, the rating system turns into a technology of control. Additionally, they must work longer hours to be eligible for bonuses, and in any disputes, the platforms consider 'passengers are always right.' However, for non-platform drivers, the demands/preferences of their employers become predictable. In addition, vehicle maintenance, parking facilities, fines for illegal parking fines, etc., are the responsibilities of the owner or employer. The COVID-19 pandemic also revealed that social support is minimal for platform workers as they are not classified as employees. These situations reveal the contradictions of the 'sharing' platform economy, i.e. the illusions of freedom, whereby the exploitive and coercive labour process is not as directly visible as it is with industrial workers.

Anthropological notes on digital and transport infrastructures in remote communities

Philipp Budka, University of Vienna

This paper explores the role of digital and transport infrastructures, as operational systems of technological objects (Larkin, 2013), in remote communities in Canada. In doing so, it considers anthropological insights into the relationship between ''the technical'', ''the infrastructural'' and ''the sociocultural''. The development and maintenance of technological infrastructures, for instance, also include the creation of social relations and organisational partnerships. And a deeper understanding of related processes of socio-technical change and continuity requires anthropologically informed contextualisation and ethnographic engagement. This paper discusses aspects of the similarities and differences of digital and transport infrastructures by building on fieldwork on the development and use of digital infrastructures and related services in remote First Nation communities in Northwestern Ontario and by including preparatory work for a project on the affordances of transport infrastructures in the Canadian North.

Platform Work, Gender, and Family in China: Shaping and Resisting Masculinity

Zihao Zhang, University of Sussex

Previous research on gender and the future of work, including platform work, has focused on female workers' participation in the global North, and thus the research around platform delivery work and masculinity has remained blank globally and in the context of China. Besides, the debate of the relationship between technology and gender remains unsolved within the field of anthropology of technology. Drawing on seven qualitative interviews with platform delivery workers in China and applying an analytical tool of intersectional precarity, this qualitative research reaches a synthesis of the debate. I argue that the two processes – workers use masculine skills and traits involved in the labour process to shape their gendered self, and the precarity of platform work has undermined their masculinity – coexist in the relationship between gender and work. Moreover, I examine the influence of platform delivery job on workers' masculinity in the family sphere – I contend that their masculinity as a Chinese filial son has been undermined and redefined. However, as a dialectical relationship, I document workers' agency to defend, reshape and reclaim their masculinity. By studying the interrelationship between platform work and male migrant workers in Chinese context, this research sheds light on neglected male working subjects' living and gendered experience within platform capitalism in the global South.

Panel 13: Humanitarian Technologies?

PARALLEL SESSIONS 4

Friday, 5th November, 10:20–11:40

Theme: Knowing, Unknowing, and Re-Knowing

Chair: Klaus Høyer

Location: Richard Mortensen Stuen (building 1422)

Humanitarian technology and ignorance: conceptualizing the nature of non-knowledge

Adam Moe Fejerskov & Maria-Louise Clausen, Danish Institute for International Studies

Sarah Seddig, Danish Institute for International Studies and University of Copenhagen

Impelled by the conjoined pursuit of effectiveness and accountability, leading to a push for innovation and deployment of emerging technology, contemporary humanitarianism is characterized by a strong sense of experimentation that foregrounds issues of deep uncertainty. This poses fundamental challenges to the humanitarian industry, for whom effective knowledge-use is an imperative as it operates in situations where decisions have crucial implications. Consequently, the industry has sought to mitigate the complexity and ambiguity of humanitarian settings by employing and developing advanced risk identification and mitigation systems to minimize the probability of unforeseen or harmful consequences transpiring. The need for risk mitigation is accentuated by the present spread of radical technologies such as biometric registration systems, block chain or UAV services. These introduces a further layer of non-knowing that goes beyond existing conceptualizations of uncertainty and risk. To enhance our understanding of new forms of non-knowledge arising from experimental humanitarianism, this paper introduces the notion of ignorance – literally the absence of knowledge – to humanitarian studies. We situate ignorance in the intellectual architecture of humanitarian conceptions of knowledge, information, uncertainty and risk to explore what ignorance is and what it implies for humanitarian studies and operational humanitarian affairs.

The Social Life of Satellite Imageries – A qualitative research project into the work of Space-Eye and the application of Artificial Intelligence for supporting sea rescue missions

Andreas Stoiber, University of Amsterdam

My current work is based on conducting qualitative research into the activities of the Regensburg-based NGO Space-Eye and its affiliates. I hereby aim to trace and analyse the socio-technological network emerging from Space-Eye's goal to combine satellite images and artificial intelligence or future sea rescue mission. In doing so, I consider it useful to combine approaches of the Anthropology of Technology with concepts from the Science- Technology-&-Society-Studies (STS) and Actor-Network-Theory (ANT) literature. The concepts of co-production (Jasanoff 2004), localized dislocality (Latour 2005), and fractionality (Law 2004, Mol 2002) proved to be valuable points of entry in combining insights gained from my empirical research based on qualitative fieldwork, participant-observation, and semi-structured interviews with a more abstract, theoretical perspective. My goals would be to trace the socio-technical network emerging around the realisation of using satellite images and AI to support sea rescue missions. Furthermore, based on an attentiveness to the practices and day-to-day activities of Space-Eye and affiliates being able to detect and formulate more empirically grounded ethical topics arising from combing AI and satellite images for humanitarian goals.

Lost in translation? Non-Knowledge in the (Un)Making of the Deportation Gap

Stephan Scheel, University of Duisburg-Essen

Since the European migration crisis in 2015 numerous measures have been introduced to enforce deportations. They include detention in prison-like facilities, unannounced executions of deportations at night-time and the scraping of legal safeguards like medical reasons prohibiting deportations. These evidently violent measures are justified with alarmist reports which suggest, supported by statistical knowledge, an ever-wider 'deportation gap'. The latter refers to the divergence between the number of migrants issued with a return order and the much smaller number of deportations. Illustrated through the case of Germany, this paper combines insights from ignorance studies with a sociology of translation to show that the claim of a widening deportation gap is a statistical chimera that is based on numerical evidence whose production involves various kinds and sources of non-knowledge. Contrary to actor-based approaches in ignorance studies, it is argued that this non-knowledge is not reducible to the production of 'strategic unknowns' (McGoey 2007) by policy actors seeking to advance their institutional agenda. It is also enacted through registration practices that do not account for deportable migrants returning to their country of origin without notifying authorities. These migrants end up as evidence for the deportation gap as they are literally lost in translation.

Temporalities of non-knowledge production. Acceleration and repetition in the Italian asylum system

Lorenzo Olivieri, University of Bologna

This contribution addresses the relation between data infrastructures, (non)knowledge production and time. It focuses on the temporal aims and demands shaping the attempts to govern and control the movement of people across borders. More specifically, speed and acceleration are increasingly pursued as means for alleviating, and possibly overcoming, time-wasting and repetition in practices of border control. At the same time, however, population mobility depends on the incessant production of knowledge about border-crossers. I suggest that the struggle for acceleration in practices of population management tends to produce non-knowledge. I illustrate this tendency by analyzing the case of the Italian asylum system, which has recently introduced accelerated procedures which apply to people of certain nationalities as well as to those who reiterate their asylum applications. These applicants have less time to prepare their cases, to provide relevant evidence and to appeal in case of a negative result. As a consequence, a thorough assessment of their cases is not carried out and knowledge about them is willingly not (or partially) produced in order to speed up the process of decision. This work is part of the ERC-funded ''Processing Citizenship'' project and it relies on interviews and textual analysis of Italian regulations.

Panel 14:
Meaningful Making in Communities

PARALLEL SESSIONS 4

Friday, 5th November, 10:20–11:40

Theme: Communities, Collectivities, and Categories

Chair: Cathrine Hasse

Location: Preben Hornung Stuen (building 1422)

Mimesis and Composition

Alfred Nordmann, Technical University Darmstadt

Three leading questions give rise to a research program to articulate two accounts of self- and world-making: 1) Do we become who we are always by mimesis or composition as elementary forms of action? 2) What does cultural anthropology and archaeology tell us about these, are they cultural universals or anthropological constants? 3) What can technical objects or systems tell us about the modes of action and the social organization required for their production and maintenance? *Mimetically,* we assimiliate ourselves or follow rhythms, patterns, scripts, rituals, routines. ,,Mimesis'' as a representational concept requires the distance of an aboutness-relation and is usually conceived veridically in terms of true/false, correct/incorrect, good/bad match, original and copy. However, when a dance reenacts the King's slaying of a deer or when a nanotechnological surface imitates the workings of a lotus leaf, mimesis provides a pattern for repetition and reproduction through which we become attuned to each other and become human in a human community. *Compositionally,* we create working orders of things by putting things together in a right way – which is why the term is used in mechanical engineering and architecture, in software development and the crafting of texts. The history of musical composition shows how many right and wrong ways there can be, none of them arbitrary, none of them ,,natural'' even though what sounds, looks, feels right and is properly arranged is a criterion for what appears effortlessly natural. Thus, composition refers to the elementary human practice of creating a second nature through the making of works and worlds.

Multinaturalism as a difference producing machine

Peter Danholt, Aarhus University

In this presentation, I will present and discuss how the recent anthropological conceptualization of multinaturalism offers a way to problematize, challenge and 'slow down' the relation between anthropology and technology design and be generative of populating a world of many-worlds. There is a long tradition in the field of participatory design and information systems research, in which anthropology and ethnography has been resourceful in producing representations about a given setting in order to inform design. Lucy Suchman among others has both contributed to this tradition *and* problematised it. When anthropology is being put to use in producing accounts of practices to inform design, anthropology by implication becomes an epistemological technology for producing depictions of reality. But multinaturalism, I will argue, disrupts this line of thinking. With multinaturalism, the idea of one shared world that we may see and experience differently (the western multiculturalist understanding), is replaced with a world of many-worlds and our differences multiply. In a multinaturalist ontology, what is shared is that we all see and experience from specific bodies and places, but accordingly what is experienced and practiced may differ substantially. Multinaturalism is thus productive in surfacing differences and arguably when differences multiply the need for negotiating differences, seeing from ''the enemy's point of view'' and doing diplomacy increases.

Not Algorithm, Not Not-Algorithm

Asbjørn William Ammitzbøll Flügge, University of Copenhagen

Inspired by Willerslev's (2004) ethnographic work among indigenous hunters in Siberia, it is interesting to ask about how elk hunting in Siberia can make us think about algorithms? 'Mimesis' is a well-established concept within anthropology, and practiced by the Yukaghir hunters in the Siberian wilderness. As they hunt elk, they mimic it. Moving their feet as an elk, make noises like one while, wearing elk skin. They imitate the elk to seduce it and to lure it close enough to kill it. While imitating the elk, the hunter becomes an elk. He is, at the same time not animal, but also is he not not-animal, as Willerslev argues (2004). Contemporary technologies as AI algorithms are implemented into large parts of society they are often portrayed as unknowable 'black boxes'. Then, how can we lure the algorithm close enough to know/''kill'' it? This paper suggests that we can mimic the algorithm, as the hunter mimics the elk. If a person acts like an algorithm, follow the same rules, ask the same questions as the data sources of the algorithm, perhaps this can allow for another way to understand the algorithm, making it knowable through 'mimesis'.

Toolmaking as a reference to the world and a shared experience

Valerie Nur, University of Bayreuth

Toolmaking is a specific way of dealing with the world because it goes beyond the mere application of things. Based on ethnographic fieldwork among Tuareg blacksmiths in Niger, I will analyze their everyday routine of making tools. Tuareg blacksmiths spontaneously forge tools such as scraper irons, engraving needles and pliers to be able to continue working. In doing so, I argue, they consciously shape and determine their possibilities and grasp in the world. Yet, Tuareg blacksmiths do not invent, they rather make tools according to practices and skills they share among themselves. Things and materials thus take on meanings and references that are specific to their group. However, toolmaking distinguishes them as makers from users who merely apply things and technologies. The continuous melting and forging of tools also mean that their inventory of tools never exists completely in real form. In my paper I criticize deterministic and instrumentalist assumptions and propose a practice-oriented approach to making as a participatory experience, whereas practices are shared and advanced. More generally, I am interested in the context of the skilled handling and making of things as shared practices.

Panel 15:
Finance and Economic Thinking

PARALLEL SESSIONS 4

Friday, 5th November, 10:20–11:40

Theme: Ethics, Values, and Morality

Chair: Rachel Douglas-Jones

Location: Meeting room 2.3 (building 1420)

When is a bank not a bank? Unbanking and the morality of technology in the UK finance sector

Gemma Tortella, University College London

In response to the 2008 financial crash the UK government relaxed the rules governing the setting up of new banks, which led to the launch of numerous new offerings described as 'challenger' or 'neo-banks'. This paper will explore the role artificial intelligence, machine learning and data science play in not just distinguishing these from traditional banks in terms of the techniques and technologies they employ, but also how these technologies have taken on a moral and ethical value. I will argue that the 'morality of newness' is a guiding principle for those I observed during ethnographic fieldwork at Bo, a London neo- bank. I will also reflect on why Bo was interested in employing me to conduct research. Anthropologists are increasingly employed by tech companies, in the case of Bo my research for them formed part of an ethical step away from traditional banking knowledge and its negative associations. I will show that being new is not a temporal state but a goal in itself where newness performs an ethical function, and how being new means employing knowledge practices outside of finance, money and economics. The role of technology is central to the practise of 'unbanking' in the UK fintech sector.

Accessing Cash(lessness): Cash-dependency, Debt, and Digital Finance in a Marginalised Roma Neighbourhood

Camilla Ida Ravnbøl, University of Copenhagen

This paper contributes towards contemporary ethnographies concerning poverty and digital financial inclusion in Europe. More specifically, it explores how poor Roma families engage with digital banking cards at home in Romania, and when they travel to work in the informal economy in Denmark. The analysis conceptually unfolds 'access' as framework for financial inclusion and applies it to an empirical case of three brothers in a Roma family. On this basis, the paper argues that cashless initiatives can, (perhaps unintentionally), be a driving element in new practices of social exclusion. Without a comprehensive approach towards ensuring 'de facto access' for the marginalised communities, which takes all dimensions of access into account, digital financial initiatives can potentially push them further to the periphery of the global economy.

Low-Tech Wine, Efficiency, and the Politics of Time

Oscar Krüger & Alexander Paulsson, Lund University

Following an increasingly prominent ambition to substitute renewable (biological) materials for non- renewable (fossil, etc.) ones, the vision of a sustainable ''bioeconomy'' has gained a place of prominence in the R&I policy of the EU (and beyond). Existing research has noted a bifurcation between two contending visions of the bioeconomy: A dominant innovation- and profit-oriented vision of high-tech entrepreneurship, as opposed a subaltern agro-ecological vision. In this paper, we argue that the dynamics of this dichotomy must be understood through attention to the workings of a concept which remains understudied even as it is central to the ambition behind the technological transition associated with the bioeconomy: Efficiency. In this paper, we scrutinize the bifurcation between actors who pursue efficiency in ''low-tech'' as opposed to ''high-tech'' forms. Empirically, we attend to the practices of wine-producing representatives of the subaltern ''agro-ecological'' strand. These are actors who explicitly pursue ''low-tech'' solutions, and we show how their efforts diverge from what is captured by dominant understandings of the meaning of efficiency. Conceptually – drawing on the work of Hanna Arendt and its extension (Hodges, Braun) -- we argue that the present unfolding of the bioeconomy is structured by a politics of time where a processualist temporality (wedded to the ideology of efficiency) faces a challenge intelligible as a natal ''time of the interval''.

Practicing sustainability: energy technologies and the ethical consumer

Anne Sofie M. Askholm, Aalborg University

In consumption research the significance of comfort and convenience as aim and basis for the way people consume energy in Danish contexts is clear. The invisibility of energy and the ease of access in people's everyday lives gives a sense of an inexhaustible source, and with a growing sector of ''green'' technologies and energy production this adds to this experience. However, the technology itself does so far not ensure a knowledge of how-to-practice that ensures a more sustainable level of consumption. Rather the aim for technology development seems to be the aforementioned comfort and convenience and evidence clearly shows that technologies sometimes create an increase in consumption though this was not the intent. This does not contribute to a green transition in society and there is therefore a need to redesign technologies to ensure a decrease in consumption. This paper contributes with empirical research on the connections and conflicts between environmental ethics, energy technologies and consumption in everyday life. It will suggest that in order to create an increase in sustainable practices and consumption in the future, technologies need to contain designs that ensures this instead of designing merely for comfort and convenience. Furthermore, we need to reshape the idea of the ethical consumer as something constituted by the consumer and as based on choice, and instead understand the ethical consumer as a practitioner co-created by a network of actors and elements including the technologies that take part in consumption practices.

Panel 16:
Relational Infrastructures: Connecting and Disconnecting

PARALLEL SESSIONS 4

Friday, 5th November, 10:20–11:40

Theme: Infrastructures, Linkages, and Livelihoods

Chair: Mikkel Bille

Location: Meeting room 2.2 (building 1420)

Technology and dis/organization: Digital data infrastructures as partial connections

Helene Ratner & Mie Plotnikof, Aarhus University

This paper addresses the relationship between digital technology and dis/organization by theorizing and analyzing digital data infrastructures as partial connections. Much literature attends to the ordering and controlling organizational powers of digital data infrastructures. We propose to expand existing discussions by also exploring their disorganizing aspects. Drawing on Marilyn Strathern, we conceptualize digital data infrastructures as partial connections that both connect and disconnect, with the implication of simultaneously ordering and disordering the social relations implicated by digital data infrastructures. With a case study of a national wellbeing survey used in Danish education governance, we illustrate this point, showing how connective and commensurable powers of digital infrastructures not only (re-)organize social relations through their datafication but also disorganize the infrastructural imperative of connectivity in unanticipated ways. This leads us to argue that dis/organization is integral to the powerful ordering capacities of digital data infrastructures.

Technology in Relations of Care. Results from a Qualitative Interview Study with People with Dementia, Caregivers and Experts on Monitoring and Assistive Systems in Dementia Care

Johannes Welsch & Sabrina Krohm, University Medical Center of Goettingen
Eike Buhr, Carl von Ossietzky University of Oldenburg

As close caring relationships are crucial in the care of people with dementia (PwD), human-machine relationships (HMR) raise new anthropological and ethical questions. Furthermore, the progressive loss of cognitive abilities of those affected represents a particular challenge for the usage of modern monitoring and assistive technologies (MAT). The implementation of MAT thus questions the modus and quality of care relations. To empirically inform the anthropological and ethical discourse, we asked PwD, their informal and professional caregivers and experts in a qualitative interview study (n=60) about their attitudes, expectations and criteria of acceptability regarding MAT. The participants see chances in the use of MAT primarily in the areas of safety, independence, and empowerment of those affected, as well as in physical and psychological relief for caregivers. They identify risks regarding possible privacy violations and the quality of the relationship between PwD and caregivers. In this context, we were able to identify a convergence of expert and lay opinions regarding a feared dehumanization of care. We reflect on these results using a care ethics approach and conclude that the implementation of MAT needs to respect and to foster the interpersonal practice of care.

Russian healthcare as the swamp: how private clinics bridge gaps in healthcare infrastructures and navigate patients

Maria Denisova, Maastricht University

The marketization of healthcare was largely criticized by scholars for increasing inequalities and excessive profit-orientation. However, what if the private sector has the potentiality to fill the gaps in public healthcare infrastructures while also gaining profit? After the dissolution of the USSR, Russian healthcare that was suddenly penetrated by market forces provides a unique opportunity to observe marketization in action. Although the commercial sector has been grown steadily, the government kept the public character of healthcare that resulted in the duality of Russian healthcare. Today Russian public healthcare is characterized by imperfect patient referral schemas, rudeness to patients as a social norm, medical protocols that cannot be fulfilled in practice, along with systemic underfunding and shortages of medicines. This results in time delays, discontinuity of treatment, and frustration of patients. In my ethnography of two different private clinics in St. Petersburg, I explore how these clinics dwell in the disruptions and imperfections of Russian healthcare infrastructure. By utilizing different resources accumulated in private spaces, these clinics help patients navigate the public healthcare system and organize their treatment. In doing so, private clinics build bridges in the broken healthcare infrastructure but simultaneously challenge it.

Fragile Connections: Community Computer Networks, Human Infrastructures, and the Consequences of their Breakdown in Havana, Cuba

Steffen Köhn, Aarhus University

In response to the constraints of internet access in Cuba, technology enthusiasts around the country for many years have built their own vast grassroots computer networks, the biggest of which, Havana's SNET (Street Network), at one point connected tens of thousands of households. This vernacular infrastructure allows users to play multiplayer video games, chat, send messages, debate in forums, share files, or host websites, all without being connected to the internet. This communal effort created new relations between people and fostered new political subjectivities. SNET is heavily shaped by a local cultural ideology of *resolver*, of collectively navigating resources and limitations in a context of scarcity. Using the metaphor of *modding* (modifying), a communal practice within gaming cultures that describes alterations by players or fans that change the look or functionality of a video game, I will show how SNET makers are forced to constantly adapt to the shifting technical, political, and social frameworks in Cuba. Expanding anthropological theory on infrastructures that shows how breakdown in many parts of the world is a constitutive part of how people experience them, I argue that makers of human infrastructures such as SNET must not only deal with material breakdown but also navigate the looming breakdown of the social relationships that support their network.

Panel 17:
Knowing Human–Machine Ensembles

PARALLEL SESSIONS 5

Friday, 5th November, 13:20–14:40

Theme: Knowing, Unknowing, and Re-Knowing
Chair: Karolina Zawieska
Location: Richard Mortensen Stuen (building 1422)

Sensors & Senses Inc.
Perle Møhl, Aarhus University

The paper presents a series of human-machine ensembles where human senses and electronic sensors collaborate to take decisions, thereby configuring what can be seen and sensed and what cannot: – a facial recognition system in an airport where algorithms collaborate with border guards' ears and eyes to grant passage to particular travellers and not others; – a luggage-scanning system where potential security threats are assessed by a complex of X-rays and human sensory work; – an operating room where surgeons and surgical robots together find their way and operate on the insides of human bodies, moving and touching by seeing. In the three examples, human and machine vision interlace and mutually configure one another through different material, political, economic and bodily constellations, producing particular types of blindness or sensorial agnosia.

Cyborg Cook: Connecting Bodily and Digital Knowledge
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. Anthropology is 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. Yet, a critical empirical understanding of how cooks know how to cook (and who cooks) 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. To fill these gaps, this paper proposes to explore the interactions between humans and machines and between bodily and digital knowledge in diverse German kitchens through the notion of the more-than-human or cyborg cook.

Imprecision farming? How farmers navigate the 'precise inaccuracies' of digital farming technologies
Oane Visser & Louis Thiemann, International Institute of Social Studies, Den Haag
Sarah Ruth Sippel, Leipzig University

An essential assumption of the 'digital revolution' in agriculture is that big-data-driven technologies provide more accurate and precise information to farmers, allowing them to spend less time gathering and interpreting data on soil, animal and crop health. Based on the claim that big data can more accurately represent and plan the various risks and workflows of a farming operation, farmers are promised impartial decision-support. In practice, however, the relations between farmers, farmworkers and digital technologies turn out to be more complex, often with unanticipated consequences. Our research examines digital agriculture's (in)accuracies and their repercussions. We argue that overreliance on big data and algorithms can lead to 'precision traps' and further cement dependency on particular machinery and inputs. Farmers' experience, keen observation and understanding of the partialities of algorithm-derived data and advice remain crucial, as does their socio-economic agency in making autonomous, informed and selective choices between technologies and datasets.

AI-Human collaboration in the wild
Claus Bossen, Aarhus University
Katie Pine, Arizona State University

Public and scholarly discourse about AI design depicts the goal of AI as developing AI systems that produce knowledge that is equivalent to that of humans. Using the case of CDIS' collaboration with an AI-embedded "Computer Assisted Coding" (CAC) system, we question this view. CDIS use the CAC to review patient charts in near real time to improve clinicians' documentation, with the goal to make medical documentation more accurate, consistent and complete. The CAC scans records from the EHR, auto-suggesting codes based on natural language processing. CDIS find the CAC's suggestions are often inaccurate—often humorously so. Despite its inaccuracies, CDIS still find the CAC to be useful, and see themselves as "detectives" discovering inaccurate information necessary for the CAC to code and and skillfully interweave the CAC in that process. This successful human-AI collaboration is contingent on multiple conditions, including: the CDIS being in control of the AI; knowing the limitations of the AI; and a clear division of work. In a broader perspective, the case shows how AI systems need to be transparent to the humans working with them, and humans collaborating with AI need to have deep knowledge of them.

Panel 18:
Digital Communities, Communities Digitized?

PARALLEL SESSIONS 5

Friday, 5th November, 13:20–14:40

Theme: Communities, Collectivities, and Categories
Chair: Helene Ratner
Location: Preben Hornung Stuen (building 1422)

"I wouldn't be able to code without google": how open source communities shape proprietary software products
Eva Otto, University of Copenhagen

Commercial software developers will tell you – only half as a joke – that what they do for a living is googling things on the internet. During their work, developers continuously turn to online communities such as knowledge-sharing (ie. Stack Overflow) and code-sharing (ie. Github) sites. Here, they engage in reciprocal relations within a loosely defined community but also have to immerse themselves in an immensely competitive space, where developers vie for fame within the profession. Such community sites thereby facilitate very specific socialites, in which developers must be able to navigate.
In this paper, I engage empirical material from a year of fieldwork among proprietary app developers in Denmark. Based on this, I will analyze how a closer study of the engagement of proprietary developers of these online communities, and the mirroring and juxtaposing of social elements from these online communities within the software company in which they work, gives a fundamental insight into both how proprietary companies build digital software and what software they build. The relation between proprietary developers within private companies and online coding communities thereby has an impact on how current digital infrastructures are constructed and ultimately how digital life can be lived.

The role of technologies in the potential of energy communities in the transition to energy democracy
Hanne Cox, Linköping University

Energy communities (ECs) are assumed to be important actors in achieving a more democratic and equitable energy system (Radtke & Ohlhorst, 2021) and to give voice to vulnerable people in the existing energy systems (Wirth, 2014). However, previous research has criticized this assumption (Berka & Creamer, 2018; Radtke & Ohlhorst, 2021). Indeed, some people are still excluded from participation in collective energy projects (Wierling et al., 2020). Additionally, the energy transition brings along new technologies and digitalization of practices (e.g., smart meters, blockchain technology) of which some argue that these offer new possibilities for consumers to actively play a role in the energy market (Andoni et al., 2019). ECs can, due to ICT, change the way the technologies are used in order to increase their agency in the energy system (Van Summeren et al., 2021). However, a critical point is that knowledge about and the ability to work with new technologies in an EC cannot only lead to inclusion, but also exclusion of people, which results in questioning their democratic character (Hanke et al., 2021). In this project the impact that technologies and digitalization of practices have on the potential of ECs in the transition to energy democracy is explored.

A community digitized: Can digital technology save a cultural identity?
Shobhit Shakya, Tallinn University of Technology

"If the language survives, so will the community" – was a defining slogan of the Bhasa Andolan (language revolution), the struggle of the Newars of Kathmandu valley to save their language and identity. Deprived and discriminated in their ancestorial land, the Newars, the dwellers of the historical cities and towns of Kathmandu valley and surrounding areas with a distinct cultural identity, believed that the survival of their culture and identity depended on the survival of their language – Nepalbhasa. As the speakers of the language dwindled and the community gradually dispersed, resultantly taking the language into the endangered list, the new affordances provided by the advent of Information and Communication Technology (ICT), has given, what is seemingly, a lifeline. Through community activists and tech-savvy youth, a revival of the language appears possible with heightened grassroots activities leveraging the internet and social media to promote and preserve the language. But if at all so, how big a part can "going digital" be for a solution to the complex issue of identity and cultural preservation? We reflect on the ongoing digitally leveraged grassroots activities of the Newars of Kathmandu Valley in a struggle to save a community and their language.

Technological articulations and the question of presence
Jens Røyrvik & Håkon Fyhn, NTNU Social Research

In this paper we make visible a perspective that underlies the importance of artifacts, and which makes it possible to talk about different forms of knowledge that relate to each other as different entities. By this, we will show how the dominant understanding of reality today makes the world appear as technology. As an alternative to the technological perspective on the world, we suggest letting a sense of *presence* serve as an entrance to the understanding of life and what exists. Being present is an essential aspect of being human, no matter who we are and what we do. In our technological society, the question of presence has gained renewed relevance in that presence is increasingly mediated by technologies such as mobile phones, apps and the internet. The starting point for the question, as we ask it, is related to technology, but we will still raise the issue beyond the technological context, and ask more generally: What is presence? The question can also be formulated as: What does it mean to be present?

Panel 19:
Work Practices and Work Ethos

PARALLEL SESSIONS 5

Friday, 5th November, 13:20–14:40

Theme: Ethics, Values, and Morality

Chair: Minna Ruckenstein

Location: Meeting room 2.3 (building 1420)

Engineers Make the World Go Round

Tabitha Andersen & Dylan Cawthorne, University of Southern Denmark

Engineers worldwide make numerous material design decisions every day that hold great social and ethical implications for our world, our resources and our consumption. Yet as a group engineers tend to be thought of as a very low-agency stakeholder, even by engineers themselves (Karwat 2020; Karwat et al, 2015; Verbeek, 2008; Spiekermann, 2015; Morsing & Schultz, 2006). This project takes a grounded theory empirical exploratory approach to understanding the relationship between engineers' sensemaking of their role in the development of technologies and their choice of materials. Research has tied engineers' notion of low agency to the paradigmatic (Kuhn, 1962) and cultural underpinnings of engineering science (Cech, 2014; Knorr- Cetina 2013) and education which is made out almost exclusively by positivist thought (Cech, 2014; Andersen & Cawthorne, 2021) in which technology is predominantly conceptualized of as being value-neutral, and the researcher strives to be separate from the object of study (Kuhn, 1962). This ideal makes counterintuitive to engineers the notion of having personal impact on the design decisions. Yet historical and design research (eg. Schatzberg, 1999; Cawthorne & Iversen, 2021; Hansen, 2020) shows clearly how trends in perceptions of materials comes to guide design processes in terms om choice of material. Natural materials like wood outperforms synthetic complex composited materials or metals in many situations, without that leading to greater uptake with engineers of usage of wood (Cawthorne & Iversen, 2021).

Felt dimension of ordinary ethics: notes on the experience of losing one's agency

Kristina Popova, KTH Royal Institute of Technology

This presentation reports on the early stage of a PhD project exploring the felt dimension of ordinary ethics. The project aims at locating ethics in the experiences of those creating and interacting with technology. I will present the results of an exploratory study based on the interviews with academic designers working in the field of interactional design. I will focus on the instances when the interviewees found themselves deprived of agency and acting against their moral views. In line with the Actor-network theory-based conception of agency, these situations demonstrate that agency is fluid, but also that the loss of agency is not unproblematic and not unnoticed – it is felt through high physical and emotional discomfort. The presentation would discuss empirical data, conclusions for theoretical discussion on agency in the ethics of technology and outline further research direction.

Neglect as a seed of mistrust: Reframing invisible work in cultural heritage

Quoc-Tan Tran, University of Hamburg

Embracing the advent of participatory and community-engaged practices, cultural heritage institutions find themselves entangled in the politics of caring—for the communities that surround them (Sandell, 2007), for their diverse heritage and memory practices (Robinson, 2012), while still maintaining stewardship over cultural heritage objects (Cameron & Robinson, 2003; Clough, 2013). Drawing on semi-structured interviews conducted with professionals working in European GLAM institutions (galleries, libraries, archives, and museums), the paper aims to relate the fragility of caring and digital mistrust in two dimensions. First, the social dimension of care provides a plausible way to understand collections documentation as maintaining "the webs of relationality" (Puig de la Bellacasa, María, 2010) that form between humans, non-human agents, and objects. While no institution can possibly care for everything, care(ful) approaches imply the inclusion of different voices and minor narratives. Second, it is the politics of caring that remain at the heart of the hidden fabric of information and technical work. Though frequently regarded as "ordinarily invisible" (Bowker & Star, 1999), information and documentation work keeps the institutional fabric from fragmenting in ways that could encourage the discomfort and mistrust of users.

Making Meaningful Information: The Data Work of BI Developers in Healthcare

Asbjørn Malte Pedersen, Aarhus University

The digitization of the Danish healthcare system has prompted the implementation of electronic healthcare records and other IT systems. Vast volumes of accumulated data produced with these systems are now being repurposed for secondary uses such as quality assessment and optimizing workflows in clinical care. However, whereas much attention is often placed on the larger processes and the benefits of healthcare datafication, the practices of working with data on-site are often overlooked. This paper offers a new understanding of this oft-invisible data work and the efforts going into repurposing data. Based on an ongoing investigation of data work in healthcare, this paper uses ethnographic fieldwork and qualitative methods to engage in a study of a Business Intelligence unit. Here, BI developers produce data reports with the purpose of supporting the work of healthcare staff members with meaningful information. I analyze the BI developers' challenges of turning repurposed data into meaningful information which is a sociotechnical endeavor that requires not only technical skills, but also domain knowledge as well as close collaboration between BI developers and healthcare staff. This study will contribute to our understanding of datafication as human practice and show the importance of approaching it from the actors' perspectives.

Panel 20:
Water Infrastructures and Renewable Energy

PARALLEL SESSIONS 5

Friday, 5th November, 13:20–14:40

Theme: Infrastructures, Linkages, and Livelihoods
Chair: Astrid Oberborbeck Andersen
Location: Meeting room 2.2 (building 1420)

Pump it up: oil, hydraulic technology and the allure of renewable energy in the European bioeconomy
Alexander Paulsson & Oscar Krüger, Lund University

Despite a long-standing interest in global and urban flows, ethnographic research has not sufficiently studied the technology that enable such flows to circulate: pumps. Inspired by debates in STS and in the anthropology of technology, this study examines how pumps, as a key hydraulic technology in capitalism, underwrites the flows that make up our fossil-dependent and deeply carbonized societies. Based on almost one and a half years of digital fieldwork and interviews with representatives from state agencies, industry professionals and university professors working on 'the bioeconomy' in Sweden and Europe, we explore the intricacies of pumpability and how this complicates a move from an integrated energy system based on oil to one based on biomass. While biomass is attributed great promise to provide 'renewable' energy within 'the bioeconomy' discourse, its solid substance and non-viscosity makes it difficult to pump, which is seen as necessary if existing energy infrastructures are to be used in an eco-social transition – and not end up as 'stranded assets'. By exposing how pumps are nested in infrastructural networks, this study contributes to current debates about technological devices and the politics of energy under capitalism.

Digital becomings. How water is made digital
Jonas Falzarano Jessen, Aalborg University

Whether it is in the form of railways, roads, buildings or information networks, infrastructures typically exist in the shadows of what operates because of them, and are taken for granted once established (Bowker et al. 2010). This goes for networks of water and wastewater, too, as data and digital technologies become introduced to the management of water-flows and infrastructures. With this contribution to the theme ''Infrastructures, Linkages, and Livelihoods'', I take the fantasies, water regimes, and forms of expertise that emerge out of – and are stored within – smart water infrastructures as objects ethnographic of inquiry. I aim to explore the technological and human processes through which water is datafied within Danish water and wastewater utilities, and through which professional identities and skills are made, unmade and changed. How are socio-technical, networked digital water infrastructures, being 'surfaced' in Denmark? I will discuss, also, how studying digital water infrastructures in the making challenges the traditional anthropology as a following science (Jensen 2012), posing methodological challenges when studying what is yet to become.

Putting a heat pump to work
Caroline Anna Salling, IT University of Copenhagen

In this paper I explore the thermodynamic efforts of making heat pumps work for a range of different causes. This includes the Facebook corporation, which owns a data center in Odense that I have studied by ethnographically following the engineers working on the district heating. Heat pumps are increasingly used in transforming electricity into hot air, particularly as electricity in Denmark is produced more from wind turbines and other renewable energy technologies. They also enable the use of excess heat from Big Tech's data centres in Denmark for district heating infrastructures. Air accumulating around the servers is lukewarm and the pumps powered by electricity increase temperatures enough for the use of heating. In this site, heat pumps function as intermediaries and objects of transformation in connecting different infrastructures as well as changing temperatures of both water and air flows. My encounters with these machines and the engineers excited by their potentials tell a story of how they are rapidly integrated within infrastructures. Simultaneously, they reside in locations, such as next to the Facebook data center, transforming materials from the landscapes in which they are made to work within.