# ANNUAL REPORT SHAPE 2024





#### SHAPE ANNUAL REPORT 2024

Produced by SHAPE – Shaping Digital Citizenship Edited by Simone Bech and Rasmus Kornbek

#### Contents

WORDS FROM THE DIRECTOR
CENTER ADMINISTRATION
ADVISORY BOARD
THEMES
INCLUSION
DIALOGUE
WELFARE
KNOWLEDGE1
RESEARCH NETWORKS
HIGHLIGHTS24
GRANTS
DEMOCRACY & DIGITAL CITIZENSHIP CONFERENCE
DEMOCRACY & DIGITAL CITIZENSHIP CONFERENCE
CITIZEN ENGAGEMENT ACTIVITIES

## WORDS FROM THE DIRECTOR

For three years now, SHAPE has been working to promote democracy and citizenship in a world where data and algorithms play an increasingly important role. The centre's researchers have hosted successful events, published everything from scientific articles to opinion pieces, and established themselves as an active voice in public debates.

At the same time, the centre has expanded its interdisciplinary activities, for example, through SHAPE's collaboration with the Aarhus Institute of Advanced Studies (AIAS) and the Platform for Inequality Research at Aarhus University (PIREAU). The clear takeaway has been that the distance between disciplines is not always as great as one might assume.

It is also worth noting that several of SHAPE's research activities are conducted in direct collaboration with authorities, organizations, and citizens. We are pleased to be building bridges in this way, and it is encouraging for the future that there is such a strong commitment to digitalisation, democracy, and citizenship beyond the university as well.

In 2024, the centre focused more on the opportunities and challenges posed by digitalisation. This is reflected on the SHAPE website, where research projects are now centred around the themes of 'inclusion,' 'knowledge,' 'dialogue,' and 'welfare.' The website also features presentations of the centre's researchers, news, and much more worth exploring. The website is <u>here</u>.

I would like to thank everyone who has helped make SHAPE an open and socially engaged research centre. We look forward to continuing our work in the coming year. We are on a mission to find solutions for a more responsible and inclusive digital future—and we are well on our way!

Flor Cun bur



Peter Lauritsen, Professor & centre director

## **CENTER ADMINISTRATION**

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## THEMES

In 2024, SHAPE has focused more on the opportunities and challenges that come with digitalisation. This is reflected on the SHAPE website, where research projects are now centred around the themes of 'inclusion', 'knowledge', 'dialogue and 'welfare'.

In September, the centre also welcomed four new AIAS-SHAPE fellows, each with their own research projects as part of an interdisciplinary research group at AIAS under the leadership of SHAPE.

### INCLUSION

The theme 'inclusion' focuses on how digitalisation can strengthen equality, accessibility and representation on the one hand, but also challenge societal cohesion on the other. Unequal internet access, limited technological capabilities, and lack of influence over digital developments make it difficult for marginalised groups to participate in the digital transformation.

This theme includes research projects that explore these challenges and develop solutions to make digital technologies more equitable, accessible and relevant for all. These projects are presented below.

#### Al image practices in the context of digital citizenship

The technological background of the project is the emergence of new Al computer models capable of automatically generating synthetic images that resemble real-life photographs or transforming text input into images with increasing levels of detail and syntax. This raises several questions about how these 'artificial' image practices - through their training based on collected big (image) data - are shaped by specific existing image cultures and how synthetic images shape our visual citizenship going forward. The democratic challenge here is that everyone potentially participates in the creation of these images (e.g. through their data), but that the premises for active participation are opaque.

Project participants: Lotte Phillipsen (PI, Associate Professor)

#### Another Al

Al is often understood across scientific fields as a Western phenomenon. This project uses analytical and experimental practices from the humanities and social sciences to develop an understanding of Al in the Global South and assess its impact on democracy



and colonial divides. By analysing the relationship between modernity, democracy, colonialism and AI in the Global South, the project explores how AI is seen as both an opportunity for innovation and an obstacle to decolonial ambitions. The project uses fieldwork, document analysis and a strategic framework for democratic civic engagement. The aim is to question the techno-, knowledge-, body-, and geopolitics of AI, assess current AI policies, and inform future design and governance of AI from a decolonial and democratic perspective.

**Project participants:** Pablo Valesco (PI, Associate Professor), Christian Ulrik Andersen (Co-PI, Associate Professor), Ra-chel Charlotte Smith (Co-PI, Associate Professor), Kasper Hedegaard Schiølin (Co-PI, Associate Professor)

#### Digital participation of young people with disabilities

For young people, digital technologies are an integral part of everyday life. Young people with disabilities use digital technologies in line with other young people, but there are differences in both access to and use of these media. This points to a digital divide where some groups of young people with disabilities experience difficulties, discrimination and inequality in their opportunities for digital participation. Social media can offer solutions to practical challenges and strengthen young people's social connection, but at the same time, young people with disabilities also experience higher rates of e.g. cyberbullying. The project aims to strengthen the research on media and disability, which is under-researched in a Danish context, and to establish an interdisciplinary focus on media and disability at Aarhus University.

**Project participants:** Stine Liv Johansen (PI, Associate Professor), Louise Bøttcher (PI, Associate Professor)

#### Digitalisation and access to justice

Several studies have shown that a digital divide exists, that some citizens find it easier to use digital solutions in public administration than others, and that some find it more difficult to access relevant information and obtain the rights and social benefits intended by legislation. In other words, digitalisation can be a barrier to some citizens receiving the services they are entitled to. This is particularly problematic if citizens with a special need for help are the ones who are excluded. Thus, there is a risk that social inequality is reinforced through digital inequality. The aim of the project is to analyse legal developments, including possible implications for the concept of law and the application of law.

Project participants: Bettina Lemann Kristiansen (PI, Professor)

#### Digitisation of law - implications for practical legal work

This project involves the creation of a textbook. It is intended as a basic introduction to what digitisation is and the implications it has for law and practical legal work. The book's topics cut across different areas of law and deal with digitalisation in different types of practical legal work, for example in public administrative authorities. The contributors to the book are leading legal researchers in the field as well as practitioners with specific experience in the respective forms of practical legal work, including law-yers. The primary target audience is law students and lawyers who work practically with digitalisation or in legal areas where digitalisation is happening/has happened.

Project participants: Bettina Lemann Kristiansen (PI, Professor)

#### Democratic implications of TTS-assisted communication

Based on the new European Accessibility Act, which comes into force on 28 June 2025, this project investigates how text-to-speech technology and synthetic voices affect website communication between Danish public authorities and citizens, as well as the democratic implications of these effects. A qualitative user study is conducted alongside the development of a theoretical framework centered on the concept of the 'resonant citizen.' Being a citizen in a democracy requires not only responsiveness and resonance but also ethical accountability and reason. The empirical study includes a podcast production exploring the experience of synthetic voices.

Project participants: Iben Have (AIAS-SHAPE fellow 24/25, Associate Professor)

#### Digital service journeys among socially marginalised people

The project explores the relationship between digitalisation and health inequality. Working with ethnographic data collected in 2023-2025, it explores and maps street-level service journeys of people at the intersection of homelessness and drug use as they attempt to navigate digitised health solutions.

**Project participants:** Maj Nygaard-Christensen (AIAS-SHAPE fellow 24/25, Associate Professor)

#### The impact of metaverse marketplaces on people with disabilities

The project examines what happens to active citizenship, inclusion, and representation in digital marketplaces. One in five people worldwide lives with a disability. Yet, people with disabilities remain one of the most marginalized groups in the world. Previous studies have shown that a lack of accessibility in physical marketplaces has a profound impact on the well-being of people with disabilities. Through an interdisciplinary approach that combines the inclusion/exclusion of people with disabilities, consumer wellbeing, digital consumption, retail, event management, and transformative marketing, the project aims to investigate the inclusion of people with disabilities in metaverse marketplaces and how this shapes their behavior and well-being.

**Project participants:** Lizette Vorster Larsen (PI, Assistant Professor), Anne Odile Peschel (PI, Associate Professor)

#### Network for digital vulnerability

Digitalisation already has a major impact on society, but for the most vulnerable citizens in disadvantaged positions, technological change can create even greater challenges. The aim of the network is to gain a deeper understanding of how digitalisation affects the most vulnerable citizens and to find out how we can create solutions that meet their needs. The network will foster collaboration between researchers from different professional backgrounds and organisations to explore how digitalisation can both exacerbate and potentially alleviate the social problems faced by vulnerable citizens. There is a growing need for research and debate on how the impact of digitalisation on society's most vulnerable can be addressed and how technology can be used as a tool to improve their lives.

**Project participants:** Lasse Balleby (PhD student), Peter Danholt (Associate Professor), Antoinette Mary Fage-Butler (Associate Professor), Stine Liv Johansen (Associate Professor), Iben Have (Associate Professor), Patrick Heiberg Kapsch (Postdoc), Amanda Karlsson (Postdoc), Peter Lauritsen (Professor), Bettina Le-mann Kristiansen (Professor), Loni Kraus Ledderer (Associate Professor), Maj Nygaard-Christensen (Associate Professor), Mikkel Rask Pedersen (Postdoc).

#### The Invisble Men (TIM)

Research suggests that participation in online communities of peers can provide chronic disease patients with knowledge and care in ways that family and friends cannot. However, there is a large gender imbalance in these online communities, which are predominantly dominated by women. In Scandinavia, we have a strong tradition of democratic participation and citizenship. A tradition that the ever-increasing digitalisation of society both expands and challenges. The focal point of the project is to shed light on this gender imbalance in digital participation by investigating why so few men choose to share their illness narratives in online patient-led communities, and what consequences this could potentially have from a digital citizenship and gender equality perspective.

#### Project participants: Amanda Karlsson (PI, postdoc)

### Using AI to test effects of inclusive narratives on notions of citizenship and support for democracy

Concern about the state of democracy has grown because of new evidence that many citizens do not value democratic principles or accept election results. At the heart of these anti-democratic beliefs is a rejection of some voters - ethnic minorities - as inferior members of the nation. This project asked: 'Can an increased perception of the centrality of ethnic minorities to the nation strengthen citizens' commitment to democratic principles? In experiments in India and the US, the project investigated whether inclusive historical narratives could change minorities' perceptions of their place in the nation and majority members' commitment to democratic principles.

Project participants: Nicholas Haas (AIAS-SHAPE fellow 23/24, Associate Professor)

#### DIALOGUE

Digitalisation both promotes and threatens democratic discourse. While we have better opportunities to communicate, many debates are polarized and resemble entrenched battles. As a result, there is little shared exploration of problems, opportunities, and perspectives.



The theme 'dialogue' focuses on how research-based meth-

ods and technologies can support and strengthen democratic dialogue in a digital age. These projects are presented below.

#### People's use of social media in the 2022 election campaign

Since 2007, social media has been a regular part of Danish election campaigns. For politicians, social media presence is now inevitable, and both communication and target group selection have become professionalised with a large part of campaign budgets directed towards social media. The project initially focused on analysing and publishing data from a survey focusing on FV22 and comparisons with four previous elections. The longitudinal perspective is based on time series analyses of social media use from 2007 to 2022. This data provides a unique insight into citizens' relationship with social media in political communication and can lead to investigations of the schism between the intense use of and lack of trust in social media that has also been previously documented.

Project participants: Jakob Linaa Jensen (PI, Associate Professor)

#### Chat Democracy: AI, democratic talk, and a new shared language

In democracy, language is crucial. With the ongoing integration of Large Language Model-based technologies like ChatGPT into a multitude of digital platforms, Al technologies will soon be an integral part of the processes of cultural meaning-making, civic deliberation, and community-building in the democratic public sphere. Therefore, this project asks what kinds of publics and communities emerge when discussions on political topics are influenced and assisted by Al-powered 'info-discursive aids'? Who gets to speak? In whose language? What kind of citizens will, and can we become?

**Project participants:** Jan Løhmann Stephensen (AIAS-SHAPE fellow 24/25, Associate Professor)

#### The digitally supported democratic dialogue on urban development

The aim of the project is to explore how technology can help reduce polarisation and promote more inclusive citizen participation in urban development and green transition. Through a design process, the project will test and evaluate how digital platforms, and technological solutions can create better conditions for a more constructive and equal dialogue between citizens, decision-makers and other stakeholders. The project aims to develop and implement innovative technologies that can both promote participation across social groups and strengthen collaboration on complex issues such as urban planning and green transition.

**Project participants:** Peter Lauritsen (PI, professor), Kim Halskov (PI, professor) Caroline Gjørtsvang Kock (Scientific Assistant)

### Watchdogs of democracy - the relationship between journalists and researchers in a changing media environment

The project focuses on the viability of the relationship between journalists and researchers. Both journalists and researchers act as 'watchdogs,' speaking out against those in power. Studies have shown that this relationship generally functions well in well-functioning liberal democracies. In recent years, however, the watchdog role has come under increasing pressure from political and economic stakeholders, further exacerbated by digital developments. These processes are eroding the foundations of both media and research institutions and may also drive a wedge between journalists and researchers.

Project participants: Lene Kühle (PI, Professor), Morten Brænder (PI, Associate Professor)

#### Digital technologies and infrastructures as significant others

Digital systems and data play a central and increasing role in all facets of everyday and working life. The aim of the project is to increase individual and collective awareness, resilience and agency in the encounter with digital technologies based on the idea of digital technology as 'significant others'. That is, as things and actors with which we as users enter co-creative, mutually transformative relationships that involve joy, pain, doubt, etc. The project also aims to develop and test formats, such as workshops, that can contribute to achieving agency and robustness in the encounter with digital technologies as situated practices, rather than as decidedly solution- and design-oriented. This strengthens digital citizenship.

**Project participants:** Peter Danholt (PI, Associate Professor), Patrick Heiberg Kapsch (Postdoc)

#### Human-AI co-creativity to engage policy makers, general public and researchers in societal issues

The project explores the use of co-creative human-Al tools to promote public engagement in societal and civic dialogues. The project, 'crea.visions', empowers the public to create images and narratives about current issues. The project integrates input from researchers and decision-makers from Aarhus University and creates both an online and a physical forum to discuss the societal implications of ongoing research. This initiative aims to increase public participation in research and demonstrate how Al technologies can benefit society.

Project participants: Janet Frances Rafner (AIAS-SHAPE fellow 23/24 & 24/25, Postdoc)

#### Methods and approaches to the study of activism and social movements

Over the past decades, social movement scholars have become fascinated by the connections between digital technologies and activism. Technologies have become embedded in social movements, posing ethical, methodological and theoretical challenges. Against this backdrop, the project organized a two-day seminar titled <u>'Contentious Data, Algorithms, & Digital Activism</u>' at Aarhus University in 2023. The aim was to provide researchers with a useful toolbox when facing the challenges of studying digital technologies and social movements and to strengthen ties and build research networks with leading international researchers.

Project participants: Cristina Maria Flesher Fominaya (PI, Professor)

#### Social media in Indonesia - trends and challenges

Social media has taken on a unique role in Indonesia's social, economic, religious and political life, transforming the country in ways that are still poorly understood. It is reshaping social relationships, disrupting and creating new opportunities, for example in business. At the same time, social media is being used to limit democratic processes as interest groups and 'buzzers' manipulate public opinion and influence elections. The aim of the workshop: 'Social media in Indonesia: Trends and challenges' was to bring together researchers and critically examine the impact of social media on Indonesia's society, economy and politics. The workshop took stock of how social media is changing Indonesia and its impact on a global scale.

Project participants: Nils Ole Bubandt (PI, Professor)

#### Social media examples and democratic citizenship

The project addressed why some types of social media examples are particularly effective in triggering digital engagement and shaping factual perceptions of social problems and attribution of government responsibility, while other types of examples have no impact. How can the impact of misleading, non-representative examples on social media be minimised? The results of the project contributed knowledge about a) the degree of diversity in how societal problems are illustrated with social media examples, b) how social media examples influence democratic engagement and c) the digital sources of mobilisation, factual (mis)perceptions and attribution of demo-cratic responsibility in the general public.

Project participants: Lene Aarøe (AIAS-SHAPE fellow 23/24, Professor)

#### Empowering active citizenship through virtual reality experiences

Although citizens often support means to achieve the green transition on a general level, their tolerance or approval is not automatically given when it comes to 'their own backyard.' The project proposes an interdisciplinary approach where the social sciences bridge the gap between the technical sciences and the public by offering virtual reality (VR) experiences of socially necessary, system-disrupting innovations. It allows citizens to experience and interact with 360-degree visualisations of innovations in development.

**Project participants:** Gabriele Torma (PI, Researcher), Marta Victoria (PI, Associate Professor), Anne Odile Peschel (PI, Associate Professor), Jessica Aschemann-Witzel (PI, Professor)

#### WELFARE

The theme 'welfare' focuses on how digital technologies can be used constructively in digitalised welfare areas. This digitalisation opens new opportunities for both citizens and welfare professionals, but it also brings challenges related to skills, professionalism, transparency, and control.



This theme includes research projects that investigate these challenges and develop solutions to strengthen the connection between digitalisation and welfare. These projects are presented below.

#### Testing Democracy from the Bottom Up: Plan and Reality of Civil Defense in Cold War Aarhus

While city planners designing for civilian protection previously estimated people's movements by looking at the distribution of places on maps, today we can use mobility statistics, 3D models, and road networks to quantify people's daily movement through the urban landscape and the accessibility of shelters. Using computer simulations and agentbased modeling (ABM), the project aims to assess the evacuation potential of Aarhus' shelters to evaluate how effective, even, and complete their coverage was in relation to the population and building distribution of the 1970s-80s.

**Project participants:** Adéla Sobotkova (PI, Associate Professor), Rosanna Farbøl (PI, Assistant Professor), Petra Hermankova (PI, Assistant Professor)

#### Cybersecurity from a Humanistic Perspective

As a digitalised society, Denmark faces an increasing challenge with cyber threats affecting citizens, private companies, and public institutions. With the rapid development of cyber threats, there is a growing need for research and education in cybersecurity also focusing on humanities perspectives, which are currently lacking in the field. This project asks: 'How can the humanities contribute to research and education in cybersecurity?' Firstly, it aims to uncover humanities research and thus contribute humanities perspectives to the field. Secondly, it focuses on strengthening the development and integration of humanities within cybersecurity through interdisciplinary educational activities.

**Project participants:** Peter Lauritsen (PI, Professor), Karina Dollerup Brunsvig (Research Assistant)

#### The Digital Citizen in Social Work

The project aims to investigate, describe, and conceptualize digital citizenship in social work at the intersection of vulnerable citizens, social work professionalism, digital systems, and data through the involvement of citizens, social workers, and leaders who use and manage digital data at a governance level. The project will also provide insight into case management, professional change, and the involvement of vulnerable citizens as a socio-technical work practice. This will provide detailed empirically based knowledge about digital citizenship for the benefit of developing organizational practice, supporting the involvement of vulnerable citizens, and professional development in social work education.

**Project participants:** Peter Danholt (PI, Associate Professor), Peter Lauritsen (Professor), Mikkel Rask Pedersen (Postdoc), Patrick Heiberg Kapsch (Postdoc)

#### From Smart Campuses to Smart Cities: Democracy, Digital Citizenship, and Higher Education

The project evaluated the development of smart campus initiatives in Denmark and Scotland compared to the USA and assessed how these initiatives affect students' and teachers' right to privacy, working conditions, and academic freedom. The focus was on the connections between smart campus and smart city initiatives using case studies of smart campus initiatives designed specifically to function as test areas for smart city technology. These initiatives promise to improve student learning and maximize universities' environmental sustainability. However, in practice, they can greatly expand industry power over higher education while raising pressing questions about privacy and independence from unwarranted institutional oversight. The project also involved interviews with university data personnel on the use of data visualization software for monitoring student success and faculty research productivity.

Project participant: Lindsay Weinberg (PI, AIAS-SHAPE fellow 23/24)

#### History of the Civil Registration Number

A system like CPR (Central Population Register) does not exist in many places outside the Nordic countries. Therefore, this project will bring this infrastructure to light and examine the consequences of using personal identification numbers for the relationship between citizen and state. The project works primarily with archival material from committees, councils, and supervisory bodies in the civil service to map the decisions behind the introduction of CPR in 1968. At the same time, the project examines how these decisions have been received in public debate. Based on this, it will actualize previous debates and issues about CPR with more current perspectives. By highlighting CPR as infrastructure, the project will show how CPR can be seen both as an expression of cohesion in our welfare society and as challenging that very cohesion.

Project participants: Peter Lauritsen (PI, Professor), Rasmus Kornbek (Research Assistant)

#### Moral Revolution, Reform, or Stabilization?

A pilot study of the moral consequences of using algorithmic decision-making systems in the Danish welfare state. Digital technologies are often touted as revolutionary, but it is debated whether technology use can contribute to moral revolutions. Denmark, with the world's most digitised public sector, is an obvious place to investigate this. The study mapped the public sector's moral landscape up to 2001, when digitalisation really took off. A meta-study of government digitalisation strategies and research into the use of al-gorithmic decision-making systems in the public sector was conducted, as well as an analysis of the now closed EFI system. The result was that the use of digital technology can be a significant factor in moral revolutions, but that it is an open question whether the digitalisation of the Danish welfare state leads to a moral revolution, a shift in values or the status quo.

Project participants: Cecilie Eriksen (PI, AIAS-SHAPE fellow 23/24)

#### Still learning? Al in educational settings – exploring a must-have or nice-to-have learning future

Artificial Intelligence (AI) and other new technologies are gaining importance in the Danish education system, presenting both new opportunities and challenges for teacher education. The project aims to develop methods that strengthen educators' didactic competencies and help them adapt teaching to meet the skills central to a digitalised society. It also aims to promote critical reflection, constructive use of AI, and create dialogue about technology's role and influence on teachers, students, and education. Finally, the project seeks to enhance learners' understanding of technology's possibilities and limitations and promote a balanced use of human and digital resources to develop active digital citizens.

**Project participants:** Ole Sejer Iversen (PI, Professor), Antonia Clasina Södergren (Postdoc)

#### The CAVA-project: Comparing Adverse Vaccine Event Reporting

The Danish Medicines Agency's adverse event database contains data on suspected side effects reported in Denmark for specific types of medicines and is used to support post-marketing safety surveillance. A limitation of pharmacovigilance is the assumption that 'stimulated reporting' of adverse events occurs in response to warnings, alerts, and label changes issued by health authorities. By comparing communication environments surrounding the implementation of different vaccination programs in Denmark, the project aims to identify and explore self-oscillating effects of drug surveillance to understand how these contribute to a new form of digital health citizenship emerging from early 21st-century vaccine policy.

Project participants: Marie Louise Tørring (PI, Associate Professor)

#### KNOWLEDGE

The theme 'knowledge' focuses on how digitalisation and dependence on Big Tech affect our beliefs, behaviour, and access to information. For example, search algorithms and Al models can create information bias by prioritizing certain views over others.



This theme covers research projects that seek to develop solutions that support a more informed and democratic future. These projects are presented below.

#### Knowledge Infrastructures of Searching

The emergence of generative AI is changing how we search for information by providing concise answers or summaries instead of ranked links. This development raises important questions about the complex data structures behind search results and how they can best be understood and studied. This interdisciplinary research explores the ethics and politics of search ecosystems, examines open-source alternatives to dominant platforms, highlights the social consequences of mis/disinformation and measures the environmental effects of data centres. By examining the knowledge infrastructures of search, the project aims to gain a better understanding of their influence on digital citizenship and their broader implications for society.

Project participants: Renée Ridgway (PI, Postdoc)

#### **Knowledge Servers**

This project examines the growing dependence on corporate knowledge services and

the associated risk of diminishing critical thinking abilities. Using theories and experimental methods from humanities and social sciences, it investigates how certain digital grassroots communities, often overlooked, offer alternative collective, reflective, and autonomous participation models. In collaboration with communities, it develops and explores how these models inspire radical visions for knowledge infrastructures - operating on a smaller, peer-to-peer scale (instead of relying solely on client-server models) and attentive to minorities, diversity, justice, and sustainability.

**Project participants:** Christian Ulrik Andersen (PI, Associate Professor), Pablo Velasco (Co-PI), Nicolas René M. Maleve (Postdoc)

#### Curating data - developing a toolkit for data literacy

Data curation is not merely a technical process but an epistemic and cultural practice. This project develops a data literacy toolkit by drawing on curatorial methodologies traditionally used in art and culture. Through the Curating Data Diagram, it reframes data curation as an active, interpretive process, making data practices more legible and critically accessible. In contemporary societies, data is omnipresent. Yet, data is often understood as an abstract, technical domain. This framing not only obscures data's sociotechnical dimensions but also limits broader engagement with its implications. By adapting curatorial practices to data, this project advances a practice-based methodology for interrogating datafication. It situates data and curating within a wider discourse of critical data studies, questioning how digital infrastructures shape knowledge, power, and agency. In doing so, it offers a new framework for understanding data beyond its purely computational logics.

Project participants: Magdalena Regina Tyzlik-Carver (PI, Associate Professor)

#### News flow analytics: A data science method for eliciting censorship and showing bias

In authoritarian countries, news media are under pressure from the government, the media landscape is polarized, and media tend to adhere to either official propaganda or independent coverage of events. To estimate censorship and show bias in news coverage, the project develops methods based on measuring and comparing agendas from various Russian media as well as some NLP techniques. The method uses an annotated database with recognized named entities, and the estimates of agenda differences are based on data on the proportion of texts mentioning specific individuals.

Project participants: Ilia Utekhin (AIAS-SHAPE Fellow 24/25)

#### YouTube as an infrastructure for influence on citizens' belief and behavior

YouTube democratises information by allowing different actors to share content. However, this democratisation can also enable new actors to gain political power and inappropriately influence democracy and citizens. Using computational and survey-based methods, this project will investigate correlations between YouTube viewing and engagement habits, conspiracy thinking, institutional trust, and mental well-being. In addition, the project will examine the extent to which social media influencers can shape citizens' political values, attitudes, and actions. By analysing behavioural data and survey responses from 1,000 representative Danish YouTube users, it aims to map such patterns and influence effects. The results will inform national and EU tech policies and strengthen resilience against the hidden dynamics of social media.

**Project participants:** Anja Bechmann (PI, Professor), Miriam Brems (Postdoc), David Josias Wegmann (Ph.D. student), Jessica Gabriele Walter (Assistant Professor), Anton Elias Holt (Ph.D. fellow), Marcus Kjærgaard Olesen (Student Assistant)

## **RESEARCH NETWORKS**

A key focus of SHAPE is to establish connections between researchers from different disciplines.

Associate professors Maj Nygaard-Christensen, Jan Løhmann Stephensen, and Stine Liv Johansen share their experiences of being part of networks established under the auspices of SHAPE. This includes collaboration at AIAS and the 'Network for Digital Vulnerability'.

#### MAJ NYGAARD-CHRISTENSEN

Maj Nygaard-Christensen is an associate professor at the Department of Psychology at Aarhus University and an AIAS-SHAPE fellow for 2024/2025. During her fellowship, she is working on the project: 'A street-level examination of digital service journeys among socially marginalized people.'

#### How would you describe the academic and social community in AIAS-SHAPE?

"The academic community in AIAS-SHAPE, with new colleagues who approach digitalisation, AI, etc. in different ways - and know different things about the subject than I do - is a very rewarding learning environment for expanding my understanding of digitalisation. It provides completely different professional perspectives on my current work compared to the academic circles I usually move in.

It's easy, and necessary, to be critical of the consequences that increasing digitalisation of public and private services has for people in vulnerable positions. But it's also necessary to approach investigations of, for example, the new landscapes or infrastructures created by digitalisation more openly and curiously.



Associate Professor Maj Nygaard-Christensen

This is precisely what the academic and social community in AIAS-SHAPE helps to support, because despite several overlaps we work so differently with the subject.

Specifically, this has led to a further development of my project, in which I'm currently working on planning a user-engaging workshop.

Additionally, I would highlight our fantastic trip to Bologna in the autumn. The trip strengthened both our social and academic community and gave us a solid common foundation for our further discussions, especially about the influence of digitalisation on society."

#### What have you gained so far from your AIAS-SHAPE fellowship?

"In the research project that is the focal point of my AIAS-SHAPE fellowship, I focus on the consequences of digitalisation for socially vulnerable citizens. The topic is a direct extension of a long-term focus on everyday life among people in very vulnerable positions and the barriers they experience in accessing various services in the welfare system. In this work, I have increasingly observed how digitalisation poses a challenge for employees in municipal systems who meet citizens but also for people living on the streets or having problematic substance or alcohol use.

Some of these challenges relate to low-practical issues such as lack of access to electricity, phones often being lost when spending a lot of time on the street, not checking digital mail, or difficulty navigating digital solutions and lacking support persons who can help navigate digital platforms.

With a focus on digital service journeys that often take place outside the digital realm for example, on the street and through outreach street work - my view on digitalisation has thus been more analogue than in other approaches to studying digitalisation."

#### JAN LØHMANN STEPHENSEN

Jan Løhmann Stephensen is an Associate Professor at the Department of Communication and Culture - Aesthetics and Culture at Aarhus University and an AIAS-SHAPE fellow for 2024/25. During his fellowship, he is working on the project: 'Chat Democracy: AI, Democratic Talk, and a New Shared Language.'

### How would you describe the academic and social community in AIAS-SHAPE?

"For me personally, AIAS-SHAPE strikes a good balance between collective obligations and individual freedom both in terms of academic and social aspects. We are, of course, all different. Some, like me, are 'AU natives' with an already existing, relatively large local



Associate Professor Jan Løhmann Stephensen

academic and social network, and a personal need for many such contact points. Others come from outside and may have similar or completely different desires and needs – both in terms of time to work on individual projects and to connect with others or be free.

My impression is that the opportunities are present to satisfy all of this within the framework of AIAS-SHAPE. But among this year's SHAPE fellows, there is clearly a pronounced interest in prioritizing both the academic and social community."

#### What have you gained so far from your AIAS-SHAPE fellowship?

"What I have gained so far from my AIAS-SHAPE fellowship is a series of good meetings and contacts, which in various ways have provided fruitful perspectives on my own research - both in relation to the SHAPE-related research and all the other things I'm working on. But also, the encounter with all the other fellows from all imaginable (and unimaginable) disciplines has been rewarding on so many parameters."

#### STINE LIV JOHANSEN

Stine Liv Johansen is an Associate Professor at the Department of Communication and Culture - Children's Literature at Aarhus University and is one of the 12 participants in the Network for Digital Vulnerability, which was facilitated by SHAPE in 2024.

#### How does your professional background relate to the work in the Network for Digital Vulnerability, and why did you want to be part of the network?



Associate Professor Stine Liv Johansen

"I am a media researcher and have for many years studied children and young people's media use without paying particular attention to their

backgrounds and prerequisites, and what that could mean for their experience of using media.

In my current research, I investigate how young people living with various forms of disabilities use and experience digital media. These are young people who in some ways can be said to be in a more vulnerable or marginalized position - but they are of course just as diverse as all other young people.

Typically, the use of social media for these young people is associated with both opportunities to express themselves and tell their own story, and with increased vulnerability, where they risk receiving nasty messages, etc. And it is these apparent paradoxes that I am interested in understanding better."

### What benefits do you experience from being part of an interdisciplinary network like this?

"Besides the obvious that it is exciting and inspiring to gain insight into others' research, I find that with the quite general heading 'Digital vulnerability' we open for some very interesting conversations.

Firstly: What do we each mean by that? How is it expressed in our research? What is vulnerability? And what is 'the digital'? Fortunately, we have only just begun to explore these questions. In addition, I am getting to know new colleagues from other departments at AU. I just had coffee with one of them while we discussed connections between our research interests - and I look forward to exploring that even more in the future."

### HIGHLIGHTS

#### FEBRUARY

'Research Workshop: Content/Form', Transmediale Festival

Peter Dalsgaard receives the EliteForsk Prize for his innovative research on the interaction between humans and technology

#### JANUARY Nicholas Haas receives Aarhus University

Research Foundation's NOVA grant for project on political ideology in the global south

#### MARCH

Ole Sejer Iversersen is keynote at OffDig with the presentation: 'Technology understanding for all'

#### APRIL

Announcement of AIAS-SHAPE fellows

'The Data-Driven Welfare State II: Revolution, reform or calm on values?' In collaboration with AIAS, Aarhus University, ADD (Algorithms, Data & Democracy), The Data Ethics Council of Denmark

Panel debate on law and justice in a pressured healthcare system at the Festival of Research in collaboration with AIAS

#### MAY

Workshop: 'Hosting Online Experiments.' In collaboration with DataLab and Center for Hybrid Intelligence

Dissemination video: 'They get rich when you get angry' with Anja Bechmann. Produced by Videnskabernes Selskab and

#### JUNE

Panel debate: 'Democratic AI -Transparency, Accountability and Freedom of Speech', Folkemødet. In collaboration with AIAS

#### AUGUST

Peter Lauritsen participates as a panelist in a debate on: 'What can we learn from each other across generations', Kulturmødet på Mors

Establishment of: 'Network for Digital Vulnerability'

#### SEPTEMBER

Workshop: 'The societal contract(s) of the university.' In collaboration with AIAS

'Democracy and Digital Citizenship Conference.' In collaboration with Digital Democracy Centre (University of Southern Denmark), Centre for Digital Citizenship (Roskilde University) and Copenhagen Centre for Social Data Science (University of Copenhagen)

#### OCTOBER

Peter Danholt receives a grant from DFF for the research project: 'Cultures of Data Collaboration'

Peter Dalsgaard receives a grant from DFF for the research project: 'Experimental Surprise: Pursuing Unexpectedness in Scientific and Artistic Practices'

Workshops: 'Cybersecurity in curriculum.' In collaboration with Aarhus University and Happy42

#### NOVEMBER

Webinar: 'Bonus Cyber Knowhow.' In collaboration with Happy42, Aarhus University, Industriens Fond, IDA and Aarhus Job Center

Open workshop: 'Re:search - comparing, critiquing and contemplating search results', Dokk1. In collaboration with Code & Share and artist/programmer Anders Visti

#### DECEMBER

Webinar: 'Cyber Campus Denmark and Cyberskills'. In collaboration with Security Tech Space and Aarhus University (Arts and Tech)

Christian Ulrik Andersen receives a Carlsberg Foundation monograph scholarship for the book: 'Minor Tech'

Rachel Charlotte Smith receives a grant from DFF for the research project: 'Participatory AI for Alternative Sustainable Futures'

#### **HIGHLIGHTS**:

#### GRANTS

In 2024, four SHAPE researchers/affiliates received grants. Peter Danholt, Peter Dalsgaard, and Rachel Charlotte Smith have received grants from the Independent Research Fund Denmark (DFF), while Christian Ulrik Andersen has received a monograph scholarship from the Carlsberg Foundation.

#### Peter Danholt: 'Cultures of Data Collaboration'

Peter Danholt, Associate Professor at the School of Communication and Culture at Aarhus University and PI in the SHAPE project: 'The Digital Citizen in Social Work', has received 3.17 million DKK from DFF for the project: 'Cultures of Data Collaboration.' The goal is to strengthen the collaborative culture around the use of digital data in social interventions aimed at children and young people.

"The purpose of the project is to create a deeper understanding of the role digitalisation plays in social interventions, and to examine how collaboration between citizens and social workers can be strengthened and developed with digital solutions," explains Danholt.

The broader aim of the project is to develop recommendations for data collaboration, democratize digital data, and strengthen technological understanding in society. The researchers, who in addition to Danholt include Mikkel Rask Pedersen, Patrick Heiberg Kapsch, and Peter Lauritsen, will conduct ethnographic studies of social work and will involve citizens, social workers, and leaders in workshops on developing a culture for data collaboration. Norddjurs and Aarhus Municipality are participating as partners in the project.

#### Peter Dalsgaard: 'Experimental Surprise: Pursuing Unexpectedness in Scientific and Artistic Practices'

Peter Dalsgaard, professor at the Department of Communication and Culture at Aarhus University and SHAPE-affiliated, together with postdoc Frederik Vejlin, has received 3.17 million DKK from DFF for the project: 'Experimental Surprise: Pursuing Unexpectedness in Scientific and Artistic Practices.' The project examines how surprises can function as a driving force and source of new knowledge in creative and innovative processes.



Associate Professor Peter Danholt



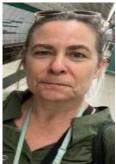
Professor Peter Dalsgaard

"We want to uncover the potential of surprise and develop a theory about how the right framework can create space for it," says Dalsgaard. Together with postdoc Frederik Vejlin, he collaborates with GV Lab at the University of Tokyo and Studio Olafur Eliasson in Berlin to compare the role of surprise in science and art through ethnographic studies.

The goal is to develop a new understanding of the significance of surprise across disciplines and provide organizations with tools to use unpredictability as a resource in innovation processes. Dalsgaard emphasizes that the project can change the perception of unpredictability from an obstacle to a productive force.

#### Rachel Charlotte Smith: 'Participatory AI for Alternative Sustainable Futures'

Rachel Charlotte Smith, Associate Professor at the School of Communication and Culture at Aarhus University and Co-PI on the SHAPE project: 'Another AI', has received 3.17 million DKK from DFF for the research project: 'Participatory AI for Alternative Sustainable Futures' (P-AIA). The project examines how participatory design, communities, and diversity can play a central role in developing digital technologies that support the green transition.



Associate Professor Rachel Charlotte Smith

P-AIA focuses on two cases – net-zero emissions and responsible AI in Namibia, and sustainable energy futures in Denmark – and applies a de-

sign anthropological approach to promote participatory AI. Smith explains that the goal is to contribute new insights into how social dynamics, everyday practices, and intelligent technologies can be used to co-create AI solutions that support the green transition in local communities.

The project also aims to develop a new, scalable design anthropological framework and research methodology for working with sustainable AI futures. Through this, the project will contribute alternative models and knowledge on how AI can be explored and codesigned with local communities, as well as provide input to abstract values and political visions for responsible and ethical AI in practice.

The project is based in DIGTCOM - Centre for Digital & Green Transformation in Cities & Communities, along with the project's other participants Co-PI, Associate Professor Rikke Hagensby Jensen and Senior Scientific Advisor, Adrienne Heijnen. Collaboration partners include Namibia University of Science and Technology (NUST) and Danish energy communities in Copenhagen and Aarhus.

ence on Democracy and Digital Citizenship (DDC) was held. The conference was organized by SHAPE in collaboration with the Digital Democracy Centre at the University of Southern Denmark, the Centre for Digital Citizenship at Roskilde University, and the Copenhagen Centre for Social Data Science (SODAS) at the Uni-

The conference brought together researchers from various disciplines focusing on the in-

Minor Tech focuses on smaller technologies, and how digital art and underground culture can challenge the influence of dominant technolo-

Christian Ulrik Andersen, Associate Professor at the Department of Communication and Culture at Aarhus University and both Co-PI and PI on the SHAPE projects: 'Knowledge Serves' and 'Another Al', has received a mon-

gies. The book explores how values such as pluralism, diversity, and sustainability can be incorporated into technology practices.

Andersen explains that the project uncovers how digital grassroots culture imagines alternative ways of living with technology and offers insights that both criticize Big Tech and point to new ways of designing technology - including what competencies this requires, especially in relation to education.

The project and book will be published by a leading international publisher and is aimed at researchers and educators in digital art, Science and Technology Studies (STS), and media studies.

#### ograph grant of 978,000 DKK from the Carlsberg Foundation to write the book 'Minor Tech'. The book examines how digital art, and underground

Christian Ulrik Andersen: 'Minor Tech'

culture can illuminate Big Tech's environmental, cultural, and societal impacts from minority perspectives.

On September 3rd and 4th, 2024, the second international confer-

**DEMOCRACY & DIGITAL CITIZENSHIP CONFERENCE** 

versity of Copenhagen.

terplay between democracy and digital technology. A central theme was how new technologies influence democratic processes and political practices. The program included panel discussions, presentations, and dialogues exploring the relationships between technological development, democratic systems, and societal dynamics.

Several researchers affiliated with SHAPE presented talks during the conference:

Anton Elias Holt – 'Maliciously flagged content on Facebook'

28



Associate Professor Christian Ulrik Andersen

digitaldemocracy

Democracy & Digital **Citizenship Conference 2024** Digital Democracy Centre, University of Southern Denmark, Odense. September 3rd - September 4th

- Anja Bechmann 'The influence of YouTube influencers on political opinions and behavior'
- David Wegmann 'Introducing a new method: mapping YouTube usage with computational analysis of online video content'
- Peter Danholt 'Digital citizenship as folding'
- Miriam K. Brems 'A left-right divide? Alternative news use and political trust, populist attitudes, and populist vote intentions in the case of Denmark'
- Renée Ridgway 'Screenshotting partial perspectives: a digital method for comprehending search results and empowering citizen agency'

#### **CITIZEN ENGAGEMENT ACTIVITIES**

#### Folkemødet

In June 2024, SHAPE was represented at the annual democracy festival Folkemødet on Bornholm, where citizens, politicians, universities, and organizations gather to discuss societal issues and strengthen democracy.



Dalsgaard (Professor of Digital Design and Information Science) represented SHAPE in a panel debate organized by AIAS and SHAPE titled: 'Democratic AI: Transparency, Accountability, and Freedom of Expression'. The panel also included Andreas Roepstorff, Professor and Director at AIAS.

The debate focused on artificial intelligence's impact on freedom of expression, accountability, and transparency. The panel discussed how these principles can be used to protect and strengthen democracy in light of rapid technological development. The discussion provided new perspectives on the interplay between artificial intelligence and democratic values.

#### The Danish Science Festival (Forskningens Døgn)

In April 2024, the Danish Science Festival (Forskningens Døgn) was held, organized by the Ministry of Higher Education and Science. The festival's purpose is to strengthen the connection between research, researchers, and the Danish population. During Forskningens Døgn, AIAS-SHAPE fellows 23/24 Lene Aarøe and Cecilie

Eriksen, along with AIAS-PIREAU fellow Jes Bak Sørensen, participated in the panel





debate: 'Law and Justice in a Strained Healthcare System' organized by SHAPE and AIAS. The debate was moderated by Andreas Roepstorff, Professor and Director of AIAS.

The debate focused on questions of justice, prioritization in the healthcare system, and political solutions that can promote equality - not only in formal rights but also in actual access to and quality of treatment. The panel discussion centred on the question of whether equality in healthcare can be maintained in Denmark, which is often high-lighted for its universal welfare state and equal access to treatment.

The debate was made particularly relevant by the cancer scandal at Aarhus University Hospital in 2024, where serious violations of waiting times and treatment inequalities were uncovered.

# ACTIVITIES

In 2024, SHAPE researchers and affiliates have engaged in a range of activities, including publishing research articles, giving presentations at seminars and conferences, and actively participating in public debates about digitalisation. Below is a selection of these activities.

#### PRESS

Anja Bechmann was interviewed in the DR podcast: 'Ubegribeligt' about data and collective behavior on social and digital media, February.

Mikkel Rask Pedersen participated in <u>an interview in the university newspaper Omnibus</u> about how digital self-help platforms can help prevent child abuse, February 21st.

**Ole Sejer Iversen** is co-author of the debate article: '<u>Fire uddannelsesledere: Teknologi-</u> <u>forståelse bør være obligatorisk på skoleskemaet</u>' published on Altinget.dk, February 28th.

Ole Sejer Iversen participated in an interview about the new school agreement and the development of digital technology understanding as an elective in primary school, folkeskolen.dk, March 22nd.

**Ole Sejer Iversen** is co-author of the debate article: '<u>5 it-eksperter: Sådan får vi mere di-versitet på it-uddannelserne</u>' published on Altinget.dk, April 3rd.

**Peter Dalsgaard** participated in <u>an interview in DM Digi</u>, where he talked about how new technology affects our idea development, April 8th.

**Peter Dalsgaard** participated in <u>podcast24: 'Videnskab fra vilde hjerner'</u> about computer-assisted creativity in practice, April 27th.

**Anja Bechmann** appears in the YouTube video: <u>'De bliver rige, når du bliver sur'</u>, produced by Videnskabernes Selskab and supported by the Carlsberg Foundation, Lundbeck Foundation, and Novo Nordisk Foundation. The video is about the spread of misinformation on social media, May 6th.

Miriam Kroman Brems participated in an <u>interview about alternative news media</u>, Nordic Journalism Center, May 14th.

Ole Sejer Iversen participated in the <u>Novo Nordisk Foundation's podcast series</u>: '<u>Mikros-kop</u>' and talked about the importance of teaching children and young people digital technology understanding, May.

**Stine Liv Johansen** commented on a new proposal for regulating social media on TVA, DR - Danish Radio, May 27th.

Miriam Kroman Brems is the author of an <u>op-ed about alternative news media</u> in Altinget, May 31st.

**Stine Liv Johansen** is the author of <u>a comment about social media and children and</u> <u>young people's well-being</u> in Altinget, June 25th.

Ole Sejer Iversen participated in an <u>interview about technology understanding in pri-</u> <u>mary school</u> in DM Digi, September 12th.

**Peter Dalsgaard** participated in <u>an episode of the podcast series</u>: '<u>Hvordan ved vi det</u>?' and discussed how artificial intelligence pushes our view of art and creativity, October 2nd.

**Ole Sejer Iversen** participated in an episode of <u>Center for Karakterdannelses podcast</u> <u>series</u>, focusing on moral digitization, character formation, and fallibility in a digital era, October.

**Stine Liv Johansen** participated in <u>an episode of: 'Podcast for nye medier' focusing on</u> <u>not only talking about dependency and poor well-being when it comes to children's</u> <u>screen time</u>, November 22nd.

**Stine Liv Johansen** participated in <u>an episode of Kulturen on P1, focusing on how to</u> make radio for 4- to13-year-olds, November 25th.

Ole Sejer Iversen is co-author of the column: '<u>Vi skal bringe cybersikkerhed ind i klasselo-</u> kalet, hvis vi skal sikre vores demokrati' in ITWatch, December 13th.

#### PRESENTATIONS

**Patrick Heiberg Kapsch** gave the presentation: 'Datafication as mundane sociotechnical practices: An ethnographic study of placed vulnerable children' at a research seminar at the University of Copenhagen on January 12th.

**Cecilie Eriksen** gave the presentation: 'Bias, Blind Spots, and Cherry-picking: Methodological Challenges in Contextual Ethics' at an AIAS seminar at Aarhus University on January 29th.

**Peter Danholt** and Gitte Kragh gave the presentation: 'On Citizen Science: A Dual Talk' at an AIAS seminar at Aarhus University on February 5<sup>th</sup>.

**Ole Sejer Iversen** was keynote at the OffDig conference with the presentation: '<u>Teknologiforståelse for alle</u>', on March 6th.

**Peter Dalsgaard** gave the presentation: 'Kreativitet og computere: Hvordan påvirker brugen af IT menneskelig kreativitet?' at the Kongelige Danske Videnskabernes Selskab on March 12th.

**Renée Ridgway** presented: 'Reverse search warrants: how leaky legislation facilities Google locative data surveillance' at the Technical University of Dresden from March 19-22.

**Peter Lauritsen** and Signe Sophus Lai gave the presentation: <u>'De spor vi efterlader'</u> as part of MatchPoints 2024: Vores digitale sikkerhed at Dokk1 on April 15th.

**Peter Danholt** gave the presentation: 'Algoritmers etik og etik som algoritmer' at the conference 'Den datadrevne velfærdsstat: Revolution, reform eller ro på værdierne?' at Aarhus University on April 18th.

**Miriam Brems** gave a presentation about alternative news media in Denmark at Brønderslev Gymnasium on April 23rd.

**Cathrine Hasse** and **Maja Hojer Bruun** presented their SHAPE project on students' use of generative AI at universities at a cross-disciplinary SHAPE lunch meeting on April 26th.

Nicholas Semi Haas gave the presentation: 'Evaluating the Effect of Inclusive Historical Narratives on Support for Undemocratic Measures: Evidence from India and the United States' at an AIAS seminar at Aarhus University on April 29th.

Magnus Høholt Kaspersen presented the paper: <u>'From Primary Education to Premium</u> <u>Workforce: Drawing on K-12 Approaches for Developing Al</u>' at ACM (Association of Computing Machinery) CHI in the USA on May 13th.

**Ole Sejer Iversen** gave a presentation at the Søborg Meeting about artificial intelligence in primary school, focusing on the need for an AI strategy to guide school leaders, teachers, and students on May 15th.

**Miriam Brems** gave a presentation to the Media Council about alternative news media and their users on May 23rd.

Lene Aarøe gave the presentation: <u>'Do The Facts Matter? How Do Politicians and Citi-</u> zens use Different Evidence to Update Their Policy Preferences' at an AIAS seminar at Aarhus University on May 27th. **Christian Ulrik Andersen** was keynote at the <u>CRAFT-OA Summer School</u> in the Czech Republic with the presentation 'APRJA - A Peer-Reviewed Journal About\_' from May 27 to June 1st.

**Patrick Heiberg Kapsch** and **Peter Danholt** participated in the <u>DASTS Conference 2024</u> at the Technical University of Denmark from June 6-7th.

**Stine Liv Johansen** and **Louise Bøtcher** presented their SHAPE project on digital participation for youth with disabilities at a cross-disciplinary SHAPE lunch meeting on June 11th.

**Renée Ridgway** gave the presentation: 'Ethics and values in FOSS: sustainability of open-source development' at the <u>OW2 conference</u> in Paris, France from June 11-12th.

**Jessica Walter** and **Anja Bechmann** participated in the ICA 2024 post-conference about P3: Power, Propaganda, Polarisation in Brisbane, Australia from June 26-27th.

**Christian Ulrik Andersen** gave a presentation at the Center for Language Generation and AI (CLAI) about: <u>'A.I. situated in colonial divide'</u> at Aarhus University on August 29th.

Anton Elias Holt, David Wegmann, Miriam Brems, Anja Bechmann, Peter Danholt, and Renée Ridgway participated in the Democracy & Digital Citizenship Conference 2024 at the University of Southern Denmark from September 3-4th.

**Ilia Utekhin, Janet Frances Rafner,** and **Christian Ulrik Andersen** participated in the NetIAS debate at the University of Bologna from September 9-10th.

**Amanda Karlsson** participated in the <u>Popular Health & Social Media conference</u> with the presentation: 'Peer-patienthood on social media: the interplay of knowledge, illness and platformed affordances' at Uni Siegen in Germany from September 12-13th.

**Renée Ridgway** presented the working paper: 'Embodied Ethics: Alternative search, LLMs and the question of provenance' and participated in the symposium/workshop Search Engine Ethics at the University of Birmingham, Centre for Digital Cultures on September 13th.

Maj Nygaard Christensen gave the presentation: <u>'Digital service journeys at the urban</u> <u>margins'</u> at an AIAS seminar at Aarhus University on September 16th.

**Renée Ridgway** presented the working paper: 'The future of search is semantic: exploring Google's Knowledge Graph and chatbot Gemini as political artefacts' at the 7th Innovation in Information Infrastructures Workshop at ESADE Business School in Barcelona on September 17th. **Iben Have, Miriam Brems,** and **Stine Liv Johansen** participated in <u>ECREA 2024 – 10th European Communication Conference at the University of Ljubljana, Faculty of Social Sciences</u> from September 24-27th.

**Peter Dalsgaard** gave a presentation and participated in a debate about: 'AI: The End of Creativity' at the Architectural School in Aarhus on October 1st.

**Stine Liv Johansen** gave a presentation about media, representation, and communities for youth with disabilities at the BUSTER Children's Media Conference on October 1st.

**Anja Bechmann** gave a presentation at FO-Aarhus' Senior Days High School about misinformation and generative AI on September 26th and October 2nd.

**Peter Lauritsen** was keynote at <u>the Digital Curriculum Conference</u> at Aarhus University with the presentation: 'Towards Digital Citizenship – Unlocking the societal and civic dimensions of digitalisation' on October 3rd.

**Anja Bechmann** gave the presentation: 'Dark Collective Behavior: The Exposure and Emotional Imprint of Misinformation on Social Media' at <u>the Homeland Security Confer</u><u>ence</u> in Copenhagen on October 8th.

**Renée Ridgway** gave the presentation: 'From Free Software to Open Source: Traversing the Values and Ethics of Open Search Infrastructures' at the <u>OSSYM conference at the Leibniz Supercomputing Centre in Munich</u> on October 11th.

**Ilia Utekhin** gave the presentation: <u>'Analysis of news flow to detect bias and censorship'</u> at an AIAS seminar at Aarhus University on October 21st.

**Peter Dalsgaard** and **Magnus Høholt Kaspersen** gave a keynote at the Central Denmark Region Innovation Day under the title: 'The Creativity Machine' on October 23rd.

**Ole Sejer Iversen** gave the presentation: 'Kunstig intelligens i folkeskolen: Du sætter retningen' at the Skolelederforeningens Annual Meeting on October 31st.

Jan Løhmann Stephensen gave the presentation: <u>'Chat Democracy: AI, Democratic Talk,</u> <u>and a New Shared Language'</u> at an AIAS seminar at Aarhus University on November 4th.

**Peter Lauritsen** gave a presentation about the CPR register as a surveillance infrastructure within the SHAPE project 'The History of the Personal Number' at the <u>LIVSTEGN con-</u> <u>ference</u> at Aarhus University on November 8th.

**Renée Ridgway** presented the article: 'The Politics of F(L)OSS/open source as an open (knowledge) infrastructure' at the STS Autumn School and conference, <u>RUMOS</u>: Building

bridges in times of crises: knowledge exchange about science and technology, held by Universidade Nova de Lisboa in Portugal from November 20-22.

Jan Løhmann Stephensen gave the presentation: 'DemBots and Chat-Democracy' at the international workshop 'Artificial Intelligence, Politics and Societies', held by the Department of Political and Social Sciences at the University of Bologna from December 11-13.

**Miriam Brems** participated in the conference: 'Look Who's Talking: Voices and Sources in the News' at the Vrije Universiteit Brussel with the presentation '(De)selection and (de)legitimization: How alternative media users see perceived biases manifest in mainstream media's source practices' from December 12-13.

### PUBLICATIONS

The publications below are not necessarily funded by SHAPE. They may also be funded by external foundations.

Andersen, C. U., & Cox, G. (Eds.). (2024). Content/Form. APRJA, 13(1).

Brems, M. K. (2024). Brugen af alternative nyhedsmedier i Danmark. Essay til Magtudredningen 2.0.

**Brems, M. K.**, & Olivera, C. A. (2024). An integrated guide to thematic analysis: Combining top-down and bottom-up approaches. *Journalistica*, *18(1)*. <u>https://doi.org/10.7146/journalistica.v18i1.150091</u>

Brems, M. K. (2024). A left-right divide? Alternative news use and political trust, populist attitudes, and populist vote intentions in the case of Denmark. *The International Journal of Press/Politics*. <u>https://doi.org/10.1177/19401612241301647</u>

Ceh, S. M., **Rafner, J.**, & Benedek, M. (2024). Creativity in digitally mediated times: How digital tools support creativity across domains. Psychology of Aesthetics, Creativity, and the Arts. *Advance online publication*. <u>https://doi.org/10.1037/aca0000729</u>

**Charquero-Ballester, M., Walter, J. G.**, Rybner, A. S., Nissen, I. A., Enevoldsen, K. C., & Bechmann, A. (2024). Emotions on Twitter as crisis imprint in high-trust societies: Do ambient affiliations affect emotional expression during the pandemic? *PLoS ONE, 19(3), Article e0296801*. <u>https://doi.org/10.1371/journal.pone.0296801</u>

**Danholt, P.**, Andersen, L. B., & **Lauritsen, P.** (2024). To care for the possible: Configuring care in the teledialogue project. In D. Lydahl & N. C. M. Nickelsen (Eds.), Ethical and methodological dilemmas in social science interventions: Careful engagements in

healthcare, museums, design and beyond (pp. 69-81). *Springer.* <u>https://doi.org/10.1007/978-3-031-44119-6\_5</u>

Flesher Fominaya, C. M., Milan, S., & Beraldo, D. (2024). Contentious Data in Movement. London: Routledge.

Milan, S., Beraldo, D., & **Flesher Fominaya, C.** (2024). Contentious data: The social movement society in the age of datafication. *Social Movement Studies, 23(3).* 

Johansen, S. L. (2024). Hvis digital dannelse er svaret, hvad er så spørgsmålet? I M. S. Dahle & G. S. Meyer (Red.), Danning i digitale praksiser. Digital danning i barnehage, skole, hjem og fritid (s. 29-42). *Fagbokforlaget*. <u>https://doi.org/10.55669/oa380303</u>

Johansen, S. L. (2024). 'I just want to show that I am living a normal life'. Young people with physical disabilities on social media. *Nordisk tidsskrift for ungdomsforskning*. <u>https://doi.org/10.18261/ntu.5.2.4</u>

Karlsson, A., Stage, C., & Ledderer, L. (2024). Engage and withdraw: The role of peer-led online communities in the configuration of knowledge on chronic illness. *Qualitative Health Communication*, *3(1)*, *4-16*. <u>https://doi.org/10.7146/qhc.138193</u>

Kaspersen, M. H., Musaeus, L. H., Bilstrup, K.-E. K., Petersen, M. G., Iversen, O. S., Dindler, C., & Dalsgaard, P. (2024). From primary education to premium workforce: Drawing on K-12 approaches for developing AI literacy. *Proceedings of the ACM on Human-Computer Interaction*. <u>https://doi.org/10.1145/3613904.3642607</u>

Lauritsen, P., & Danholt, P. (2024). Socialrådgiveres oplevelse af digitale systemer. *Analyse & Tal og SHAPE i samarbejde med Dansk Socialrådgiverforening.* 

**Ledderer, L., Karlsson, A.**, & Stage, C. (in press). Online care for patients with chronic conditions - a dynamic and temporal care practice in peer-led patient communities on social media. *Tidsskrift for Forskning i Sygdom og Samfund.* 

Mao, Y., **Rafner, J**., Wang, Y., & Sherson, J. (2024). HI-TAM, a hybrid intelligence framework for training and adoption of generative design assistants. *Frontiers in Computer Science, 6.* <u>https://doi.org/10.3389/fcomp.2024.1460381</u>

Nygaard-Christensen, M. (2024). Street-level service journeys: Serendipity in outreach work with unstably housed people who use drugs. *Social & Cultural Geography, 1-15.* <u>https://doi.org/10.1080/14649365.2024.2424859</u>

Pedersen, M. R., Høybye-Mortensen, M., & **Danholt, P.** (2024). The logic(s) of data in social work management. *Nordic Working Life Conference 2024, Roskilde, Denmark.* 

**Ridgway, R.** (2024). Screenshotting partial perspectives: The case of Danish mink in Google search results. *Journal of the Association for Information Science and Technology, 1-15.* <u>https://doi.org/10.1002/asi.24892</u>

**Ridgway, R., & Malevé, N.** (2024). Synthetic data and reverse image search: Constructing new surveillant indexicalities. *Surveillance & Society, 22(4).* <u>https://doi.org/10.24908/ss.v22i4.18332</u>

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### GRANTS, AWARDS AND OUTREACH

Nicholas Haas receives <u>Aarhus University Research Foundation's NOVA grant for a project on political ideology in the Global South</u>.

**Peter Dalsgaard** receives the <u>EliteForsk Prize</u> for his innovative research on the interaction between humans and technology in February.

Christian Ulrik Andersen and Pablo Velasco participated in <u>the 'Research Workshop</u> <u>2024: Content/Form'</u> at Transmediale in Berlin on February 3rd.

**Christian Ulrik Andersen** participated in the panel: 'Content/Form' at Transmediale in Berlin from January 31st to February 4th.

**Renée Ridgway** participated in the workshop: 'Rethinking Web Search: Laying the Foundations for a Value-Based Open Internet Search and an Open Web Index' at CAIS (Centre for Advanced Internet Studies) in Bochum, Germany on February 13th.

Cecilie Eriksen visited the DIS-TRUST Research Team at Roskilde University on April 2nd.

**Lene Aarøe**, **Cecilie Eriksen**, and Jes Bak Sørensen participated in <u>the panel debate: 'Ret</u> <u>og retfærdighed i et presset sundhedsvæsen'</u> at the Festival of Research at Aarhus University on April 24th.

Christian Ulrik Andersen, Pablo Velasco, and Nicolas Maleve receive a grant from Open Book Futures (OBF) to publish an experimental publication exploring new approaches to academic publishing, focusing on open access, workflows, and technical infrastructure on April 26th.

Anton Elias Holt, David Wegmann, and Anja Bechmann participated in the knowledgesharing workshop: 'Hosting Online Experiments' at Aarhus BSS on May 2nd.

Anton Elias Holt, David Wegmann, and Anja Bechmann participated in the 'Workshop on Social Media and its Impact on Society' at Aarhus BSS on May 27th.

**Anja Bechmann**, **Lene Aarøe**, **Peter Dalsgaard**, and Andreas Roepstorff participated in the panel debate: <u>'Demokratisk Al! Transparens</u>, <u>ansvarlighed og ytringsfrihed'</u> at Folkemødet on June 15th.

**Anja Bechmann** participated in a conversation about <u>AI, algorithms, and expert</u> <u>knowledge</u> at Folkemødet on June 15th.

**Peter Lauritsen** participated in a panel debate titled: <u>'Hvad kan vi lære af hinanden på</u> <u>tværs af generationer?'</u> at Kulturmødet on Mors on August 28th.

**Peter Danholt** receives a grant from DFF for the research project: 'Cultures of Data Collaboration' in October.

**Peter Dalsgaard** receives a grant from DFF for the research project: <u>'Experimental Surprise: Pursuing Unexpectedness in Scientific and Artistic Practices</u>' in October.

**Anja Bechmann** participated in the panel debate: 'Misinformation: Challenges and Solutions' at the D3A Conference in Nyborg on October 23rd.

**Christian Ulrik Andersen** receives a Carlsberg Foundation monograph scholarship for the book <u>'Minor Tech'</u> in December.

**Rachel Charlotte Smith** receives a grant from DFF for the research project <u>'Participatory</u> <u>Al for Alternative Sustainable Futures'</u> (P-AIA) in December.

# **EVENTS**

In 2024, SHAPE was the organizer and co-organizer of a series of events, including workshops and conferences, which were realized in collaboration with various partners. Below is a selection of these events.

**SHAPE-PIREAU Wednesday Seminar with Cecilie Eriksen**, January 31st & June 5<sup>th</sup> Presentation and discussion of the research project: 'Mapping Movements in the Moral Landscape of Danish Democracy: A Philosophical Investigation of the Use of Algorithms in Public Administration'. Organized in collaboration with PIREAU.

#### Research Workshop: 'content/form', February 3rd

Research workshop about our relationship to content and the ways it is published and released at the transmediale festival in Berlin. Organized by Associate Professor Christian Ulrik Andersen in collaboration with Digital Aesthetics Research Center (Aarhus University), Centre for the Study of the Networked Image (London South Bank University), and transmediale festival.

**SHAPE-PIREAU Wednesday Seminar with Lene Aarøe,** March 20th & May 15<sup>th</sup> Presentation and discussion of the research project: 'Social Media Exemplars and Democratic Citizenship'. Organized in collaboration with PIREAU.

**SHAPE-PIREAU Wednesday Seminar with Nicholas Semi Haas,** April 10th & June 26<sup>th</sup> Presentation and discussion of the research project: 'Using AI to Test Effects of Inclusive Narratives on Notions of Citizenship and Support for Democracy'. Organized in collaboration with PIREAU.

#### Conference: 'Den datadrevne velfærdsstat II – Revolution, reform eller ro på værdierne?' April 18<sup>th</sup>

The conference brought together various actors to discuss the impact of digitalisation on welfare state values, as well as its consequences and implementation. Organized in collaboration with AIAS, Aarhus University, ADD (Algorithms, Data & Democracy), and the Data Ethics Council.



### Panel Debate: 'Ret og retfærdighed i et presset sundhedsvæsen', April 24th

Panel debate on justice, healthcare system priorities, and political solutions that promote equality during Research Day. Organized in collaboration with AIAS.

Interdisciplinary SHAPE Lunch with Cathrine Hasse and Maja Hojer Bruun, April 26<sup>th</sup> Presentation about students' use of generative AI at universities.

#### Workshop: 'Hosting Online Experiments', May 2<sup>nd</sup>

Knowledge-sharing workshop on conducting online experiments at Aarhus BSS. Organized by PhD students Anton Elias Holt and David Wegmann, and Professor Anja Bechmann in collaboration with Datalab (Arts) and Center for Hybrid Intelligence (BSS).

**Interdisciplinary SHAPE Lunch with Stine Liv Johansen and Louise Bøtcher,** June 11<sup>th</sup> Presentation about digital participation for young people with disabilities.

**Panel Debate: 'Demokratisk Al! Transparens, ansvarlighed og ytringsfrihed'**, June 15th Panel debate on Al and democracy at Folkemødet. Organized in collaboration with AIAS.

#### Panel Debate: 'Digital deltagelse for unge med handicap', August 28th

Moderator Professor Peter Lauritsen was to facilitate a conversation with Associate Professor Stine Liv Johansen about the digital life of young people with disabilities at the Cultural Meeting in Mors (cancelled due to weather conditions). Organized in collaboration with the Muskelsvindfonden.

#### Democracy & Digital Citizenship Conference, September 3rd-4<sup>th</sup>

Two-day conference at the University of Southern Denmark about democracy, citizenship, and digitalisation. Organized in collaboration with the Digital Democracy Centre (University of Southern Denmark), Centre for Digital Citizenship (Roskilde University), and Copenhagen Centre for Social Data Science (University of Copenhagen).

#### Workshop for SHAPE Participants, September 19th

Full-day workshop for SHAPE participants on the occasion of many new additions, focusing on networking and themes/directions in SHAPE.

#### Workshop: 'The Societal Contract(s) of the University', September 25th

Workshop for researchers at Aarhus University about the university's social contract, with the aim of creating a shared vision for the university's role in both the present and future. Organized in collaboration with AIAS.

**Workshops: 'Cybersecurity in Curriculum',** October 23rd and 24th, and November 8<sup>th</sup> Workshops for teachers at Aarhus University – Arts and BSS – focusing on how cybersecurity can be integrated into teaching. Organized by Scientific Assistant Karina Dollerup Brunsvig in collaboration with Happy42 and Aarhus University.

#### Webinar: 'Bonus Cyber Knowhow', November 22<sup>nd</sup>

Webinar for job centers about the 'Bonus CyberKnow' course – upskilling unemployed individuals for a cyber generalist function. Organized by Scientific Assistant Karina Dollerup Brunsvig in collaboration with Happy42, Aarhus University, Industry Foundation, IDA, and Aarhus Job Center.

### Workshop: 'Re:search - Comparing, Critiquing and Contemplating Search Results', $\ensuremath{\mathsf{No-vember}}\xspace$ vember $30^{\ensuremath{\mathsf{th}}\xspace}$

Public workshop about searching in knowledge infrastructures and launch of the 'research-site' platform at Dokk1 in Aarhus. Organized by Postdoc Renée Ridgway in collaboration with Code & Share and artist/programmer Anders Visti.

#### Webinar: 'Cyber Campus Denmark and Cyberskills', December 13th

Webinar focusing on cyber campus and cyberskills. Organized by Scientific Assistant Karina Dollerup Brunsvig in collaboration with Security Tech Space and Aarhus University (Arts and Tech).

# **COLLABORATION PARTNERS**

The following presents a selection of SHAPE's external collaboration partners, which include various private, semi-public, and public organizations.

Aarhus Jobcenter, Aarhus Kommune, Aarhus Universitetshospital, Akademiet for Talentfulde Unge, Code & Share, Creative Crowds (Varia), Datacentralens (DC) Arkivgruppe, Dansk Socialrådgiverforening, DEFACTUM - Region Midt, Dokk 1, Folkeuniversitet, Ghost Agency, Happy42, In-Grid, Ingeniørforeningen i Danmark (IDA), Kulturministeriet, Københavns Professionshøjskole, Muskelsvindsfonden, Advisory Board for Nordic Observatory for Digital Media and Information Disorder – NORDIS (including several private companies), Norddjurs kommune, Systerserver, Transmediale Festival, UC Lillebælt, VIA University College, Videnskab.dk, Videnslyd.

### RESEARCHERS

Adéla Sobotkova Amanda Karlsson Anja Bechmann Anne Odile Peschel Anton Elias Holt Antonia Clasina Södergren Antoinette Mary Fage-Butler Betting Lemann Kristiansen Caroline Gjørtsvag Kock Cathrine Hasse Cecilie Eriksen Christian Dindler Christian Ulrik Andersen Cristina Flesher Fominaya David Josias Wegmann Gabriele Torma Iben Have Ilya Utekhin Jakob Linaa Jensen Jan Løhmann Stephensen Janet Frances Rafner Jessica Aschemann-Witzel Jessica Gabriele Walter Karl-Emil Kjær Bilstrup Karina Brunsvig Kasper Schiølin Kim Halskov Lasse Balleby Lene Aarøe Lene Kühle Lindsay Weinberg Lizette Vorster Larsen

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### **NEW RECRUITMENTS**

Anders Visti Hansen, 'Knowledge infrastructures of searching'

Antonia Södergren, Postdoc, 'Still learning? Al in educational settings'

**Caroline Gjørtsvang Kock**, Research assistent, 'Den digitalt understøttede demokratiske samtale om byudvikling'

**Iben Have**, AIAS-SHAPE fellow, 'Resonating synthetic voices and listening citizens: Democratic implications of TTS-assisted communication'

**Ilia Utekhin**, AIAS-SHAPE fellow, 'News flow analytics: A data science method for eliciting censorship and showing bias'

Jan Løhmann Stephensen, AIAS-SHAPE fellow, 'Chat Democracy: AI, Democratic Talk, and a New Shared Language'

Karina Birgit Dollerup Brunsvig, Research assistant, 'Cybersecurity from a humanistic perspective'

Maj Nygaard-Christensen, AIAS-SHAPE fellow, 'A street-level examination of digital service among socially marginalized people'

**Miram Brems**, Postdoc, 'YouTube as an infrastructure for influence on citizens' belief and behavior journeys'

Nicolas Malevé, Postdoc, 'Knowledge servers'

Rasmus Kornbek, Research assistant, 'History of the civil registration number'

Simone Naja Helleberg Bech, Academic employee

### **STUDENTS**

Andreas Hyldegaard Hansen, 'YouTube as an infrastructure for influence on citizens' belief and behaviour'

Ida Terp Høybye, Student assistant

Katarina Marie Hermansen, 'The Invisible Men (TIM)'

Luna Sol Korsholm Mathiesen, 'YouTube as an infrastructure for influence on citizens' belief and behaviour' Marcus Kjærgaard Olesen, 'YouTube as an infrastructure for influence on citizens' belief and behaviour'

Markus Alexander Bjerremand, 'Knowledge infrastructures of searching'

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