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BOOK OF ABSTRACTS

**10th ANNUAL CONFERENCE FOR THE NAVIGATING
KNOWLEDGE LANDSCAPES (NKL) NETWORK**

Centre-Periphery in the AI-Informed Digital Society

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10th ANNUAL CONFERENCE FOR THE NAVIGATING
KNOWLEDGE LANDSCAPES (NKL) NETWORK

Centre-Periphery in the AI-Informed Digital Society

University West, Trollhättan, Sweden.

Organized in collaboration with Østfold University of Applied Sciences, Norway
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INTRODUCTION

We gratefully acknowledge the generous support of the Centre for Healthcare Architecture (CVA) at Chalmers University of Technology, Gothenburg, and the City of Trollhättan for sponsoring this conference. Their contribution has been invaluable in making this event possible.

The Conference is hosted by University West this year, 2026. University West in Trollhättan offers education collaborating with work-life in an attractive and modern study environment. We focus on the student and learning. Work-Integrated learning (WIL) as a perspective and method permeates the work at the university, together with an active collaboration with the surrounding society. Our campus with 13 000 students and 700 employees is centrally located in Trollhättan and is built with the students' needs in focus. The open surfaces make it simple for students, teachers and work-life to coexist.

The university offers study programs, second cycle programs, and a variety of courses in computing and IT, economy and leadership, health and care, teaching and languages, media, the individual and society as well as technology. University West is authorized to award degrees at the doctoral level in the field of Production Technology and Work-Integrated Learning. Research is conducted within the areas of technology, social science, health and caring sciences and the humanities. Work-Integrated Learning constitutes an important, interdisciplinary field of research. The research concerning production processes in the manufacturing industry is in certain areas world-leading. This research is conducted in close collaboration with a variety of businesses, national as well as international.

Ten years with NKL conferences - from digital society to AI

Ten years of annual international *Navigating knowledge landscapes* (NKL) conferences makes one wonder: how did this all come about, and where are we now? Regarding the latter, we can say that the conference has significantly outgrown the NKL network, as many joining us are not (yet) NKL members. In short, the NKL conference has become an expected annual event far beyond the specific interdisciplinary group that set it up.

The NKL network started out as a response to the need for a better understanding of health and care communication in a digitalized society. It is grounded in the recognition of the need to foster a multidisciplinary environment and to pay particular attention to the implications for the individual users and producers of new digital technologies and their content. The very first international NKL conference in April of 2017 critically included debates and theory from digital sociology.

Our work is grounded in questions such as: How does an individual navigate the online realm to acquire the information, knowledge, and services? How do professionals generate and disseminate information and knowledge? And does best practice reflect a relevant understanding of how communication in a digitalized society works? What does one find online? What kind of knowledge landscape presents itself to a person searching for information and knowledge? What are the risks and ethical implications of health in a digitalized society? (Svalastog et al CMJ 2015).

From 2015-2019, the NKL network produced a series of peer-reviewed articles for the Croatian Medical Journal. These articles were in turn organized in the anthology *Navigating Knowledge Landscapes* (Gajovic & Svalastog eds. 2018 <https://www.medicinskanaklada.hr/navigating-knowledge-landscapes>). The discussions on health in the digital society were further developed in the anthology *Navigating Digital Health Landscapes. A Multidisciplinary Landscapes* for Palgrave MacMillan's *Health, Technology and*

Society series (Svalastog, Gajovic, Webster 2021 <https://link.springer.com/book/10.1007/978-981-15-8206-6>), and the *Mapping New Digital Landscapes* special issue for the *Information, Communication and Society* journal (Webster, Svalastog, Allgaier, guest eds. 2020 <https://www.tandfonline.com/toc/rics20/23/8?nav=tocList>).

As we look back at that first NKL conference in May 2017, the world feels radically different. Back then, digital sociology was still a relatively new academic field, yet today, digital sociology is a starting point that we take for granted. Back in 2017, social media had just become a part of everyone's life. Slowly, the analysis of the implications of social media, and the new challenges of fake news, fraud, bullying, political interference, criminality and terrorism had begun. 2017 was also the year when the General Data Protection Regulation (GDPR) became law in Europe. Today, the digitalization is more about AI than information and communication. It is more about the development and implications of digitalized and AI-supported or driven tools and services. Digitalization and AI are not something that is about to become a new normal; it is already an integrated part of everyday life, professional life, health, and welfare services.

Centre-Periphery in the AI-Informed Digital Society

Thus, it is a pleasure to share with you the abstracts for the 10th international *Navigating knowledge landscapes* (NKL) network conference on the topic of *Centre-Periphery in the AI-Informed Digital Society*.

This book contains 34 abstracts accepted for the NKL conference. The contributions are structured in five thematic sessions: Learning and co-creation; Centre-periphery dynamics; Law and regulatory frameworks, identity and equality; Resistance, activism and other strategies for the future; and Digital health and welfare.

Outline of the Thematic Sessions

As NKL is a multidisciplinary research network focusing on the production and use of knowledge, we chose *learning and co-creation* to be the topic of the first session. In addition to being a central topic for the NKL network, learning and co-creation open up discussions about shared epistemology and offer an opportunity to clarify the implied theoretical premises. We find these to be of significant potential benefit in our attempt to create a shared foundation for mutual understanding across disciplinary discourses and modes of thinking. The topic of the second session is *centre-periphery dynamics*. This brings together the analysis of relationships, locales, and changes/transitions. The empirical examples discussed concern the effects and reshaping of our understanding of life, governance, and ethics. The topic of the third session is *Law and regulatory frameworks, identity, and equality*. The session discusses issues of identity and equality in relation to regulatory participation and regulatory frameworks and opens up discussion about the shaping of both connections and divisions in present society. The topic of the fourth session is *Resistance, activism and other strategies for the future*. Here we discuss past and present societal challenges, exclusions or atrocities, and give examples and suggestion on how to meet and prevent their repetition. The topic of the fifth and final session is *Digital health and welfare*, as it focuses on the integration of digital tools and apps in specific contexts or targeting specific challenges in everyday life. Examples are based on specific age groups, or specific contexts for health and welfare services inside or outside of health and welfare institutions, as well as prisons.

The conference is organized over two days, with the first two sessions on day one, and the next three sessions on day two.

The NKL PhD-course

The NKL PhD-course *Transdisciplinary research, life course and cross-cultural perspectives in the era of AI* was launched in the Spring of 2026. The course

gathered a multidisciplinary team of researchers from the NKL-network that facilitated lectures, seminars and a training workshop, where students got to know well-established researchers from the fields of political science, law and economics, medicine and health sciences, science and technology studies, indigenous studies, scientific theory and ethics, sociology, anthropology and engineering. As members of the NKL-network, the lecturers were all anchored in their own disciplines, and at the same time all having an extensive experience of multidisciplinary collaborations and a special interest in challenges related to the digitalization of society. The students' abstracts represent parts of their own PhD work, and the aim of the PhD course has been to strengthen and support transdisciplinary understanding.

As the local organizing team of this 10th conference, we hope that the presentations and discussions based on these abstracts will excite and interest the participants, inspire us to further our own thinking and research practices, and contribute to connecting our network with ongoing academic debates, especially as these ideas are prepared for full article publication.

April 2026

Anna Lydia Svalastog, Ann Svensson, Fredrik Andersen, Jonas Hermansson

ABSTRACTS

Beyond Barriers – Learning from the Periphery: Innovation, Resilience, and Knowledge Co-Creation with MSMEs in Namibia

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The research project *Beyond Barriers* examines how learning and knowledge emerging from micro, small and medium enterprises (MSMEs) in Namibia challenge established centre–periphery relations and dominant development narratives. Embedded in an ongoing collaboration between the University of Applied Sciences Bremen, the Namibia University of Science and Technology, and Namibian consultancies, the study foregrounds bottom-up perspectives on innovation and resilience in contexts often labeled as “peripheral.”

Empirically, the project is based on in-depth qualitative interviews with 15 Namibian entrepreneurs, focusing on lived experiences of opportunity, constraint, and adaptation in everyday business practice. Narrative interviews are combined with qualitative social network analysis to identify supporting and hindering actors within local entrepreneurial ecosystems. This approach highlights how knowledge, resources, and power circulate across formal and informal structures, and how social, cultural, and digital on- and off-line spaces shape learning processes and entrepreneurial agency.

Methodologically and epistemologically, *Beyond Barriers* explicitly challenges top-down knowledge production. The research is conducted by a white female researcher from Germany in close cooperation with colleagues from Namibian organizations (academia and consultancies), enabling intercultural dialogue and reflexive learning through joint coding and analysis. To further disrupt centre-driven interpretations, findings are validated in participatory

workshops with the interviewed entrepreneurs, who are invited to assess whether their perspectives are accurately represented and to contribute their interpretations. This repositions participants from research subjects to co-interpretors of knowledge.

A subsequent stakeholder workshop with Namibian actors discusses findings and derives implications for entrepreneurship education and development training in both Namibia and Germany. In doing so, the project illustrates how learning from the “periphery” can inform and reshape centres of knowledge production. The study contributes to debates on learning, development, and centre–periphery relations by demonstrating how context-embedded, bottom-up knowledge challenges established assumptions and supports more inclusive and resilient approaches to innovation.

The research is conducted between mid-February and mid-March 2026 and funded by the Fritz Thyssen Foundation.

Keywords: innovation, resilience, knowledge, co-creation, centre–periphery.

Learning Beyond City and Periphery: Developing an AI-Assisted Infrastructure Atlas

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The persistent dichotomy between “city” and “periphery” continues to shape urban and transport planning. However, it proves increasingly inadequate in light of contemporary global urbanisation processes. Across the world, suburbanised and hybrid landscapes are emerging. Although these new form of spaces were already the subject of intense and controversial debate in academic and planning and policy discourse in the 1990s (f.e. Sievert, 1995: Zwischenstadt) there is still no sufficiently differentiated and empirically grounded typology. Traffic planning is still focused on urban or rural mobility. There is no understanding of in between.

Against this backdrop, the project presents a teaching and research project in which students tested AI-assisted methods for aerial image interpretation and conducted methodologically consistent analyses using open-source data as part of an infrastructure atlas. Metropolitan regions in Europe, North America, Asia, and Africa were examined comparatively in order to identify functional, spatial, and infrastructural patterns of suburban and hybrid urban spaces. The aim was to develop analytical criteria that allow different settlement types to be identified beyond administrative classifications, without implicitly measuring them against established European or North American urban models.

From a didactic perspective, the project was designed as a form of work-integrated and research-based learning. Students experimented with digital tools, collaboratively developed analytical frameworks, and produced critical

forms of knowledge. The resulting atlas functions as an open knowledge artefact that visualises learning processes, uncertainties, and methodological negotiations. Knowledge is not transmitted top-down but generated co-creatively through iterative engagement with data, tools, and spatial contexts.

The project demonstrates that the unreflective transfer of European urban and North American suburban mobility and infrastructure concepts to metropolitan regions in Asia, the Middle East, Africa, South America, and even parts of Europe itself often results in inadequate planning outcomes, as it relies on an oversimplified understanding of centre-periphery and urban-rural relations. It therefore asks whether AI-assisted analytical methods can contribute to a re-mapping of these relationships, and where their epistemic and methodological limits lie. Maybe it is time to move beyond disciplinary knowledge silos and to strengthen integrated, interdisciplinary, and transdisciplinary approaches in planning education and research.

Keywords: hybrid urban spaces, AI-assisted spatial analysis, post-Eurocentric urbanism, research-based learning.

Is Theory Enough? Work-Integrated Learning and the Role of Student Internships in Communication Studies

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When carefully structured and meaningfully implemented, student internships are far more than a supplementary component of a study programme. They constitute a learning space in which the relationship between academic knowledge and professional practice is examined and redefined. University programmes represent the backbone of scientific development and aim to prepare students to become responsible members of the academic community. Yet an important question arises: is science sufficient unto itself, or must it also directly respond to the evolving demands of the labour market, particularly in rapidly transforming digital communication environments?

Drawing on the concept of Work-Integrated Learning (WIL), this paper analyses the role of student internships within university communication studies as a bridge between the “centre” of academic knowledge production and the “periphery” of professional media and communication organisations. Rather than treating universities as isolated knowledge centres, the paper conceptualises them as dynamic actors embedded in broader socio-economic structures. Particular attention is given to the Croatian higher education context, where public relations is still perceived as a relatively young academic discipline and where tensions between theoretical legitimacy and professional applicability remain visible.

The paper interrogates whether theoretical knowledge alone is sufficient for professional integration, or whether structured work experience during

studies is indispensable for the development of professional competence. It examines how internships contribute to the formation of students' professional identities, their orientation toward specific segments of the communication industry (journalism, radio, television, digital media, PR agencies, corporate communications), and their understanding of hierarchies, institutional cultures, and power dynamics within these sectors. In doing so, internships emerge not only as training mechanisms but as transformative spaces in which students critically reflect on their academic knowledge and test its relevance in practice.

Within the broader framework of centre-periphery relations, internships are conceptualised as sites of negotiation between different regimes of knowledge and as mechanisms capable of reducing the epistemological gap between universities and the labour market. By foregrounding student trajectories and institutional practices, the paper opens a discussion on the need for the systematic integration of internships into research-oriented university programmes and on the optimal balance between theoretical and practical learning in contemporary digital society.

Keywords: work-integrated learning, student internships, labour market, higher education, communication studies.

Centre–Periphery Dynamics in the AI-Informed Digital Society: The Transformative Role of Work-Integrated Learning

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In an AI-informed digital society, centre–periphery dynamics are increasingly structured through control over data, computational infrastructure, and algorithmic design. Technological “centres”—typically large corporations, advanced research institutions, and digitally dominant states—possess the resources to train large-scale artificial intelligence systems, set technical standards, and define ethical frameworks. Peripheral regions, by contrast, often function as data sources, testing grounds, or markets for AI systems developed elsewhere. This asymmetry shapes governance, public health, welfare services, and everyday citizenship: decisions about automated welfare eligibility, predictive policing, or health diagnostics may be based on models trained on datasets that underrepresent or misinterpret peripheral populations. Thus, centre–periphery in the AI era is best conceptualised as a layered network of algorithmic power, where authority lies in who builds, trains, audits, and secures intelligent systems.

Work-integrated learning (WIL) plays a crucial role in either reproducing or transforming these relations. If AI-related placements occur only within elite labs or major tech firms, students may internalise dominant assumptions about efficiency, surveillance, and optimisation without questioning whose interests these serve. Such pathways risk reinforcing a technical monoculture in which innovation flows outward from centres. However, WIL can challenge this structure when students engage with community organisations, public-sector agencies, or local tech initiatives working on

context-specific AI applications—such as low-resource language processing, accessible telehealth triage tools, or locally governed data platforms. In these settings, learning becomes reciprocal: students contribute technical skills while gaining insight into social realities that reshape how they understand algorithmic fairness, security, and accountability.

Non-governmental organisations and professional health and welfare services are key actors navigating AI-driven centre–periphery dynamics. Many rely on externally developed AI tools for service delivery, risk assessment, or resource allocation, which can create dependency on proprietary systems and opaque decision logics. At the same time, NGOs increasingly advocate for participatory AI governance, transparent algorithms, and community-owned data infrastructures. In wireless and networked environments, they may support digital literacy and security initiatives that help peripheral users understand how AI systems collect and interpret their data, strengthening agency and trust. By mediating between global technology producers and local communities, such organisations can both adapt central technologies to local needs and push back against inequitable design practices.

Crucially, many perspectives remain underrepresented in AI discourse: those of rural populations, informal workers, linguistic minorities, and digitally marginalised groups whose lived experiences reveal biases embedded in algorithmic systems. Their knowledge—practical, contextual, and often overlooked—is essential for democratic governance, human rights protection, and sustainable technological development. Co-created knowledge through WIL offers a pathway forward. When learners, professionals, and communities jointly design AI or digital solutions, they redistribute epistemic authority and foster systems that are socially robust as well as technically sound.

In digital environments, WIL increasingly occurs through remote collaboration, shared datasets, and virtual innovation labs. These formats can reduce geographic barriers and connect peripheral participants directly to global knowledge networks, but only if issues of connectivity, cybersecurity, and equitable access are addressed. Properly designed, AI-focused WIL can there-

fore act as a transformative bridge—linking centres and peripheries in more balanced ways, cultivating critically aware professionals, and supporting a digital society in which intelligent technologies serve collective wellbeing rather than reproducing structural inequality.

Keywords: AI, digital society, work-integrated learning, centre–periphery dynamics.

Insights on nursing leadership and delegation in hospital settings using reversed work-integrated learning- A focus group study with hospital managers

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Background: Nursing leadership and delegation of tasks are central parts of nurses' professional role in hospital settings for patient safety and quality of care. However, unclear professional responsibilities within healthcare teams can challenge nurses' ability to lead nursing care and delegate tasks safely. Exploring hospital managers' perceptions of nursing leadership and delegation of tasks is essential to grasp the complexity and organizational preconditions for nurses' role development in modern hospital settings.

Aim: To explore hospital managers' perceptions on nursing leadership and delegation in a hospital setting.

Design and Methodology: A qualitative focus-group study guided by Kreuger and Casey is planned to be conducted in the spring of 2026. 18 hospital managers has agreed to participate in the focus group study. The data collection is planned in March 2026 and will be performed online using the digital software Zoom Workplace. The focus group discussions will be outgoing from seven semi-structured key questions. The participants are representing all managerial levels in the hospital organization. The analysis will be drawn from the methodological guidelines by Krueger and Casey.

Expected results: The study will provide insights into managers' perceptions of nurses' daily leadership and delegation of tasks in nursing care by identifying organizational, professional, and personal factors that facilitate or challenge nurses' ability to lead nursing care and delegate tasks safely. The study will also highlight potential implications of recent legislative changes regarding delegation in Swedish health care. Furthermore, the findings will contribute to work-integrated learning (WIL) by linking managerial experiences in clinical practice with professional and organizational learning through a model of reversed WIL inspired by Areskoug Josefsson and Olsson.

Conclusions and implications: The findings are expected to contribute to insights of the organizational and managerial conditions influencing nurses' leadership and delegation in hospital settings. Such knowledge may support the development of strategies, educational initiatives, and organizational structures that could strengthen nurses' ability to lead nursing care and delegate tasks safely.

Keywords: delegation, focus-group, hospital management, nursing leadership, nursing responsibility, nursing role.

Digital inclusion and health communication: Mapping educational initiatives for older adults with low health and digital literacy in Sweden

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Digitalisation is transforming healthcare systems across Europe, creating new opportunities for improved access to services and patient participation. However, digital transformation also risks reinforcing inequalities, particularly among older adults with low health literacy and digital literacy (LHDL). In Sweden, where many healthcare services are increasingly delivered through digital platforms, a significant number of older adults struggle to access and use digital tools necessary for communication with healthcare services.

This study is conducted within the STARS Health project, an international research initiative aimed at improving communication and reducing inequalities in healthcare for older adults with LHDL. The aim of this study is to map existing education, training programs, and initiatives in Sweden that support (1) older adults with LHDL in developing digital competence related to healthcare and (2) healthcare professionals in communicating with and supporting patients with limited digital and health literacy.

The study adopts a two-step exploratory approach. First, a mapping of available educational initiatives and training programs will be conducted through systematic internet searches and analysis of grey literature. These initiatives will be categorized according to target group, purpose, and educational content. Second, a Scoping review of relevant literature will be conducted to identify evaluations and documented experiences of such programs world wide.

Preliminary results are expected to provide an overview of the current landscape of educational initiatives addressing digital inclusion in healthcare in Sweden. The analysis will identify strengths and limitations in existing training efforts and highlight gaps where further development is needed.

By analysing how educational initiatives support communication between healthcare providers and older adults with limited digital and health literacy, the study contributes to broader discussions about digital inclusion, knowledge production, and inequalities in the digital society. The findings will support the further development of training programs within the STARS Health project and contribute to efforts aimed at reducing inequalities in access to healthcare.

The research is conducted within a Work-Integrated Learning (WIL) framework, where knowledge is developed through the interaction between academic research and professional practice. The internship setting provides an opportunity to explore how knowledge about digital inclusion in healthcare is produced through collaboration between researchers, healthcare organizations, and policy initiatives. Work-Integrated Learning can help bridge centre-periphery dynamics by connecting academic knowledge with practical experiences from healthcare professionals and the needs of older patients.

Health and welfare organizations play an important role in reducing digital inequalities by providing training initiatives and support for older adults who struggle with digital health services. The study thus explores how digitalisation may create new centre-periphery dynamics in healthcare, where older adults with limited digital and health literacy risk being positioned at the margins of increasingly digital health services.

Keywords: work-integrated learning, training program, centre-periphery, healthcare health literacy, digital literacy.

Crafters' View on Technology and Change

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Traditional craft and emerging technology are often treated as dichotomies. Nevertheless, technological change has never been absent from craft practices. Through this inquiry, I explore the insights that motivate the balancing act between preservation and implementation of technology within the contemporary craft of silversmithing in Norway.

I draw in this case on ethnologist Terje Planke's term crafters' theory (Planke, 2001; Planke & Lorentzen, 2022). Planke's use of the term theory in this context is inspired by Polanyi's theories of tacit knowledge (Polanyi, 1966). Similar to other views on material agency—Planke highlights how materials influence cognition, theories, and concepts just as profoundly as ideas and concepts drive material innovation. Still, as Planke's theory of knowledge is specifically rooted in a craft context, his concepts have been particularly relevant in this project as a bridge between general theories of material agency and the material realities of traditional craft practices. Practical or embodied knowledge and theoretical knowledge becomes through this lens not the same, but possible to view as equally potent systems of knowing. This perspective challenges established hierarchies of knowledge and opens space for recognizing the epistemological potential within craft practices (Bratland, 2024).

In line with this reciprocal view on embodied and cognitive knowledge, I approach both the crafters and the materials as peers rather than objects in this

study. The project is therefore designed as a co-creative collaboration with a selected group of silversmiths. The empirical result of this research therefore builds on conversations that unfolded in practice, while working together. In this way, materials, tools, and processes became active participants in the conversations, allowing for direct observation of how matter and meaning are entangled in specific, situated ways.

The exploration reveals a deeply situated driving force behind both the continued use of low-tech tools and the careful adaptation and implementation of new technology. These silversmiths operate within a complex web of expectations—balancing innovation and preservation—while navigating material limitation and possibilities, collaborators, customers, economic pressures, and regulatory frameworks.

Within this complexity, deciding to maintain an old and simple technology is usually not made despite rational considerations, but because of them. Through their experience and skills, and technological “levels” do not form a dichotomy but operate as mutually reinforcing elements within a coherent practice.

This logic may appear straightforward; however the exploration also indicates a shared frustration among practitioners regarding how their understandings of technology and change are interpreted within broader social and regulatory frameworks. The exploration therefore suggests a revised regulatory perspective on traditional craft—one that grants greater autonomy and recognizes craft as a dynamic, rather than merely heritage-bound, practice. Contemporary innovation discourses often equate progress with adopting the newest technologies, leading to a romanticization of traditional craftspeople and obscuring their own self-perception of innovation.

Literature:

Bratland, L. S. (2024). Renovating Traditional Craft: Exploring the Potential of Craft as Part of Research. *Ethnologia Fennica*, 51(1), Article 1. <https://doi.org/10.23991/ef.v51i1.138525>

Planke, T. (2001). Tradisjonsanalys: En studie av kunnskap og båter. Universitetet i Oslo.

Planke, T., & Lorentzen, J. (2022). Håndverksforskning ved norske museer. Museumsforlaget.

Polanyi, M. (1966). The tacit dimension. The University of Chicago Press.

Keywords: silversmithing, crafters' theory, technological change, tacit knowledge, innovation, preservation.

Personal Digital Transcript – the Ultimate Legacy

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Human civilization evolved and accomplished tremendous achievements due to its ability to communicate complex thoughts. From spoken word, over writing, print and Internet to AI, technology enabled knowledge and experience to be communicated crossing spatial, but even more important, temporal boundaries.

However, Internet brought major breakthrough. Just any human individual is now able to send any data, information or thoughts to just anyone in the world, today, immediately, and to unlimited number of people, actually everybody. To do so without any limitations, technical or societal. Even if organizations or governments tried to impose limits, technologically, in the long term, it is not possible. What is more important, everybody can talk to everybody in the future. However, even that fantastic technology has a limitation. The thought is “frozen”. It cannot be discussed, reconsidered. It cannot be, what is most important in human communication, the driver for new cognition stemming from discussion.

But artificial intelligence might change it completely. If a person would externalize its knowledge, information, data, experience, attitudes, values, beliefs AI might be able to conduct discussions on behalf of that person. Such personal digital transcript might to some extent become a surrogate for eternal life, at least from the point of view of descendants.

Several important questions are emerging here. First, how important is it to capture, transcribe the personality. Data are present everywhere and one has

very limited data that no one else has. Information, our interpretation of data are valuable. Our thoughts, too. But maybe our personality, attitude towards time, society, life, values are the glue that makes sense form data, and makes our unique value. Our beliefs, as well as their change throughout the life represent the value for our descendants. They need not only our knowledge, the “how”, but also “why” and “why not”. This brings up next question: how to capture, transcribe personality? What questions a person should answer, elaborate on? Should there be assignments, tests to do? Can one describe his personality, express it without intense interaction with others? Should other people describe one’s personality, too? How long should that process be? Lifelong? Should we have a “flight-recorder” turned on from the day we are born recording our life and inner thoughts? Third question regarding the authenticity of the transcript as perceived by users is how important is our voice and appearance? Technology already can clone one’s voice and create fake video with astonishing accuracy. It is expected in the future to be perfect. However, in order for it to be not only believable, but rather authentic, do we need our “flight-recorder” to record audio and video, too?

If such a thing would be possible, if authentic digital transcript is truly possible, a range of new questions rise. Could it be allowed to legally act on our behalf when we are no longer live? Can other people be allowed to use it to work for them? Could multiple personalities be merger into one? Can such personality be edited, fine tuned? Can a perfect human be created in that way?

Keywords: AI, technology, human communication, digital transcript.

Digital Transformation on the Plate: How AI-Powered AgTech, FoodTech, and BigTech Reshape Centre-Periphery Power in Food Systems

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The rapid digitalisation of the food sector is forging a new centre-periphery order in which a handful of ag tech and global Big Tech firms occupy the digital core while farms, food system workers, and citizens remain at the periphery. This paper analyses how the concentration of data, proprietary algorithms, and platform services—now amplified by recent AI technologies—undermines food sovereignty, silences farmer voices, and creates hidden disadvantages and inequalities for both producers and consumers.

A document-based review of public reports and scholarly literature shows that modern ag tech platforms act as data brokers. They harvest fine grained agronomic information (soil moisture sensor readings, GPS tracked field operations, input usage logs) and feed it into AI driven analytics that generate precision fertiliser recommendations, automated market matching, and predictive pricing. Ownership of these data streams gives platform owners decisive influence over production choices, input procurement, and distribution logistics, shifting decision making authority away from the farms that generate the data.

The same AI capabilities reinforce monopolistic tendencies. Large technology conglomerates supply the cloud infrastructure and large language model services that power agricultural tech solutions, creating dependency loops in which smaller agribusinesses and cooperatives must rely on the same

proprietary ecosystems to stay competitive. Market power therefore concentrates, entry barriers rise, and the diversity of farming practices—especially agro ecological and culturally specific traditions—is marginalised.

Hidden disadvantages for farmers arise from loss of data ownership and algorithmic opacity. Closed AI driven ecosystems prescribe input levels and crop selections without transparent justification, eroding traditional knowledge and limiting bargaining power. Yield optimisation metrics sideline seed saving, crop diversification, and community-based decision making, weakening resilience and food sovereignty.

Hidden disadvantages for consumers stem from opaque AI generated pricing, reduced product variety, and diminished traceability. Real time algorithmic price adjustments—unseen by shoppers—can inflate costs when platforms anticipate shortages or prioritise high margin commodities. Recommendation engines favour a narrow set of profitable crops, narrowing nutritional diversity in retail outlets. Proprietary AI models also restrict access to provenance and safety data, delaying recalls and obscuring the true origins of food products.

By foregrounding these asymmetries, the contribution underscores the urgency of policy interventions that protect data sovereignty, promote open source tools and interoperability, mandate transparent algorithmic audits, and invest in community run digital infrastructures. Such measures aim to rebalance the centre-periphery dynamic, restore agency to farmers, and ensure a more democratic, resilient, and socially just digital food future.

Keywords: food sector, centre-periphery, AI, eco-system, asymmetries, agency.

From center-periphery discrepancy to the One Health concept: the rise of antimicrobial resistance in the post-liberal transition in the world

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The Liberal International Order (LIO), established after WWII, is especially threatened in the first decades of the 21st century. An open system of international relations, based on multilateralism, democracy, and respect for human rights, was embodied in international organizations such as the United Nations and has led to the establishment and wide acceptance of bioethical norms, as reflected in documents such as the Nuremberg Code, the Declaration of Helsinki, and the Belmont Report. One of the biggest crises that broke the LIO was the COVID-19 pandemic, during which the autonomy of the individual was limited, and the other bioethical principles of the American school of bioethics, beneficence/non-maleficence and justice, were thoroughly reevaluated. The most important factor affecting mortality from COVID-19 was the ratio of the number of medical staff to the number of patients, and this, as well as the other factors such as state-of-the-art preventive and therapeutic measures, were concentrated in the most developed Western countries, while other countries fought the pandemic in different, more or less successful ways. A subtle but long-term issue, the increase in antimicrobial resistance (AMR) in nosocomial bacteria (so-called “ESKAPE” pathogens), emerged in this arena and was driven by the uncritical use of antibiotics for a primary viral disease such as COVID-19. Taking into account that the number of new antibiotics in recent decades has been minor, the increase

in AMR, which has a long-term trend and, probably, frightening consequences, may introduce us to an era when antibiotics will no longer be effective enough, and mortality due to the increase in AMR will reach large, planetary proportions. Thus, it seems we have exhausted the irreplaceable resources of future generations and violated the principle of justice. Again, in such a situation, developed countries (“center”) are seemingly in a better position than less developed ones (“periphery”): in former countries, new prophylactic, diagnostic and therapeutic measures for bacterial infections are introduced every day: for example, Extreme Gradient Boosting (XGBoost) which uses machine learning for fast and reliable prediction of pathogens and the choice of the best antibiotics; also, artificial intelligence (AI) is increasingly used in prophylaxis, diagnostics and therapy, as well as in the development of new antibiotics. In contrast, in non-developed and developing countries, where expensive antibiotics are scarce and often used irrationally, digital technologies for prophylaxis, diagnostics, and therapy are unavailable, and there is often an insufficient number of qualified medical personnel. One thing is being forgotten: the One Health concept is not only a mantra for proponents of the WHO (which, by the way, the USA no longer financially supports), but also a reality and a path to healing humanity.

Keywords: international relations, democracy, human rights, antimicrobial resistance, AI, digital technology, future generations.

Digital Sovereignty at the Semi-Periphery: Serbian Example

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The presentation examines the conceptual relationship between semi-periphery and digital sovereignty, two contested and insufficiently theorized notions within contemporary political and social theory. While the *center* and the *periphery* are well defined terms in Imanuel Wallersteins world system theory, the concept of semi-periphery that lies between them is somewhat more nebulous. Although scholars generally acknowledge its existence and certain characteristic features, significant disagreement persists regarding its precise boundaries and the states or regions it encompasses.

In parallel, the concept of digital sovereignty has emerged in response to rapid technological transformation and has gained prominence in Political Science, International Relations, and Science and Technology Studies. Despite its growing policy relevance, digital sovereignty remains undertheorized and conceptually fluid. Current debates predominantly focus on supranational actors—most notably the European Union and, to a lesser extent, BRICS—framing digital sovereignty as a project of regional or bloc-level governance. Far less attention has been paid to whether, and under what conditions, the concept can be meaningfully applied at the level of the nation-state, particularly in countries occupying a semi-peripheral position within the global system.

To address this gap, the presentation analyzes Serbia as an illustrative case study. Located in the central Balkans and frequently characterized in the scholarly literature as semi-peripheral, Serbia occupies an ambivalent geopolitical position. It is formally committed to accession to the European Union and remains economically intertwined with it, yet it is not a member.

Simultaneously, it maintains strong cultural and political ties with Russia, with public opinion often expressing relative favor for Russia over European Union. Since the early twenty-first century, Serbian political elites have emphasized political and military neutrality, while sovereignty remains a central and highly contested theme in domestic public discourse.

Against this backdrop, and amid accelerated digitalization of the public sector, Serbia provides a compelling empirical site for assessing how digital sovereignty is articulated, interpreted, and potentially operationalized from a semi-peripheral standpoint. The presentation argues that examining digital sovereignty through the lens of semi-periphery not only clarifies the possibility of achieving digital sovereignty as a semi-peripheral state, but also contributes to refining both concepts theoretically.

Keywords: semi-periphery, digital sovereignty, system theory, political science, international relations, Science and Technology Studies.

Do Patterns of Scientific Collaboration among European Countries, Shaped by Geographical Factor and Historical Circumstances, Preserve the »Scientific Centre-Periphery« Relationship?

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The idea of a united Europe, interconnected across all social segments, began to be realized soon after the Second World War. These processes of European integration, which unfolded over several decades, encountered numerous challenges along the way. These challenges are even greater today in the context of complex geopolitical circumstances. The field of science has consistently been regarded as one of the most important linking elements in shaping common European principles. Moreover, in today's processes of scientific globalization, supported by the use of new digital technologies, the traditional cosmopolitan individualism of science is rapidly being transformed into what might be described as transnational collectivism. E.g., European Commission uses various policy instruments to encourage scientists from different European countries to connect with one another. At least at the level of principle, such networking among researchers was in certain periods promoted by European Commission in the spirit of overcoming the so-called scientific centre and scientific periphery, particularly after 2003, when the EU enlargement processes brought in countries from Eastern Europe.

Within the framework of our empirical research, we sought to reveal if the structure of different factors (geographical proximity between countries, shared history, similarities between national languages) plays any role in the

European scientific space in those forms of mutual scientific cooperation among scientists from European countries that relate to co-authored scientific publications (we used the category of the European scientific space in a broader sense and did not limit it only to EU member states). Namely, co-authorship serves as a strong indicator of scientific collaboration in basic science and allows the best insights into the flow of basic scientific knowledge across national borders. We examined patterns of collaboration among researchers from different countries in the European research space over the time period of the last thirty years. Using data obtained from data base »OpenAlex«, we applied various network block modeling approaches. The results of our bibliometric analysis of co-authored publications revealed interesting findings: although in the European research space—also due to the influence of new digital technologies and institutional (policy) incentives—there has been an observable trend of exponential growth in co-authored publications among scientists from different countries over the last thirty years, the patterns of these collaborations remain strongly conditioned by factors such as geographical proximity between countries, their shared history, and similarities in national languages. The insights from our empirical research also provide a strong basis for a more general (theoretical) discussion of the concept of the scientific periphery and the scientific centre.

Keywords: scientific collaboration, digital technologies, transnational collectivism, bibliometric analysis, scientific periphery, scientific centre.

Nuclear powered AI infrastructure as a material base for emancipation of the Periphery – the case of Serbia

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The main question we raise is whether the upcoming technological revolution is a chance for the emancipation of states on the periphery, but also for a return to the geopolitical scene of small nation - states? In light of the development of an AI-driven digital society and economy, the main infrastructural prerequisite turns out to be data centers. Just as when the railway line conditioned the capitalization of the power of the steam engine, so today data centers represent an infrastructural, material prerequisite for the development of AI. As it becomes obvious that states on the periphery, whose economies are predominantly powered by coal and oil, will not be able to start the operation of the aforementioned infrastructure, it becomes obvious that states on the periphery will not be able to join the green agenda as well. The capacities of biofuels and renewable energy sources that will be sufficient for the next technological revolution will certainly not be available to states on the periphery. The political practice of small countries on the periphery shows that the only way to achieve material emancipation is to join the AI technological revolution through nuclear energy, which is still dominantly driving many states in the Centre. Modern data centers are large consumers of electricity, and all those countries that want to build, maintain, and efficiently use this infrastructure will have to abandon old energy sources, but also renewable energy sources such as wind, water, solar and biomass, to the extent that they will have to direct all capital to building sufficient nuclear capacities. These nuclear capacities can be achieved through the construction of small modular reactors, but also through the construction of classic nucle-

ar power plants. Those countries on the periphery that were missed by the benefits of previous technological revolutions now have a golden opportunity to catch up. The material foundations are being laid for the return of sovereignty to nation-states on the periphery through nuclear energy autarky, which will increase their economic capacities to unprecedented levels. In the case of Serbia, we can see that the construction of data centers increasingly demonstrates the energy problem that will arise in the near future. Political leadership plans to solve that problem through the construction of nuclear energy capacities. We hypothesize that the dialectical collision of the Centre (globalized society that emerged in 1989) versus the political resistance of the losers and renegades from the Periphery is inevitable. In the geopolitical context of the creation of the New World Order this collision can also be manifested as the return of the nation-state as a sovereign self-government through an AI-led digital society, powered by its own sources of nuclear energy.

Keywords: nation-state, centre-periphery, energy, AI, Serbia.

Digital Health at the Periphery: Centre–Periphery Dynamics and Work-Integrated Learning in Ageing Care Networks

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The digital transformation of healthcare systems, increasingly shaped by AI-informed infrastructures, risks reinforcing centre–periphery dynamics in contemporary societies. Older adults with low health literacy and digital literacy (LHDL), particularly in geographically peripheral regions, may become structurally positioned at the margins of digitally mediated health services. This paper presents findings from the STARS-Health project conducted in Tenerife (Canary Islands), an outermost European region, examining how digitalisation reshapes access to care, communication practices, and knowledge distribution.

A mixed-methods design was employed, including 262 surveys across older adults, informal caregivers, and healthcare professionals, complemented

by 36 semi-structured interviews and six focus groups. The study explored experiences with digital health services, literacy barriers, communication dynamics, support networks, and perceptions of usability and accessibility. The aim was not statistical generalisation but contextualised understanding of how digital health technologies are embedded in everyday care practices.

Findings reveal a layered centre–periphery structure. Older adults with LHDL experience digital systems as cognitively and communicatively exclusionary. Informal caregivers function as knowledge mediators, translating digital information and compensating for systemic complexity. Healthcare professionals, although digitally competent, report organisational constraints limiting their capacity to adapt communication and technologies to vulnerable users. Digital tools designed to increase autonomy often redistribute responsibility towards peripheral actors without sufficient institutional support.

The study highlights the relevance of work-integrated learning (WIL) within daily care practices. Learning emerges relationally—through accompaniment, experimentation, and informal guidance—rather than exclusively through formal training structures. These bottom-up knowledge processes challenge top-down digitalisation strategies and reveal opportunities for more participatory, person-centred design.

By framing digital health through centre–periphery theory, this paper argues that digital inclusion is fundamentally a question of power, communication, and democratic knowledge production. Strengthening co-created digital strategies and integrated support networks is essential to prevent further marginalisation within AI-informed health systems and to foster more sustainable and equitable centre–periphery relations.

Keywords: digital transformation, healthcare systems, health literacy, digital literacy, AI, centre–periphery dynamics, work-integrated learning, formal training.

Which healthy lifestyle apps are suitable for older adults: a mixed method study

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Introduction: In the Netherlands, an ageing population contribute to rising healthcare costs. Mobile health apps can support self-management and healthier lifestyles, which may reduce pressure on healthcare. However, adequate digital skills and health literacy are needed to use these apps effectively, and these skills are often lower among older adults. This study had three objectives: 1) identifying lifestyle and health apps, 2) locating suitable measurement instruments for evaluating digital skills and health literacy within these apps, and 3) assessing the apps while determining inter-rater reliabil-

ity of the instruments. Two test leaders conducted the evaluation to produce an overview of suitable apps for older adults.

Methods: This mixed-methods study included an internet search, literature review, and a cross-sectional quantitative component. Apps were identified through app stores and relevant websites and were preselected based on Dutch language, free availability, and additional criteria across seven lifestyle and care domains. Validated measurement instruments were searched in PubMed, IEEE Xplore, ACM Digital Library, and the Pharos knowledge base. Two independent assessors evaluated all apps using 42 dichotomous criteria based on a protocol. Inter-rater reliability was calculated using Cohen's kappa and the weighted Cohen's kappa.

Results: A total of 126 apps were identified, of which 78 were accessible for evaluation. The PEMAT A/V instrument was used for assessing low health literacy, and the instrument by Silva et al. provided 25 heuristics for digital skills. Of the 25 highest scoring apps, 18 were also suitable according to PEMAT A/V. Weighted Cohen's kappa indicated good agreement for all components.

Conclusion: Eighteen apps were assessed as suitable for users with low digital skills and low health literacy. The measurement instruments showed good inter-rater reliability. These results provide a foundation for developing a database of evaluated health apps for healthcare professionals, informal caregivers, and older adults.

Keywords: mobile health apps, evaluation, health literacy, digital skills, older adults.

How do we keep the spirit of the research ethical codes at the centre of research practices in a digitalized and AI informed society?

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In this presentation our aim is to discuss how research ethics today is approached as an equation, leaving out the very human and democratic society that the research ethical framework was developed to secure and protect.

Our experience from teaching, supervision, and ethical review work in the aftermath of the implementation of GDPR (which put a new level of responsibility for research ethics on local academic institutions) is that research ethical codes, and codes of conduct, tend to be approached as a calibration to ensure that 'the equation of ethics and conduct' is aligned.

Digitalized data driven research (Biobank research) further expanded as social media platforms was launched and challenged privacy issues in a more traditional way ('is it ok to be an undercover researcher on a social media platforms?'), and the broader digital data harvesting approaches towards all types of digital activities. In response, research today needs to go through several hall marks and processes – to ensure that GDPR is upheld to ensure that collection of material is safely gathered and secured through the usage of a particular AP for recording that ensures that the interview is encrypted and secured properly (our College University uses the servers of the University of Oslo), and there after deleted in due time. It has created a broad and thorough process that creates a relatively large virtual paper trace that is later deleted.

In our discussion we will introduce the concept 'spirit of research ethics'. 'The spirit' is a phenomenological concept that is known from theoretical discussions and empirical analysis in architecture, cultural geography ('the spirit of place'), and law ('the spirit of the law'), and refers to immaterial value and content that is understood as an immaterial but essential part of a building, a location, a law. The concept is phenomenological in the sense that it refers to qualities that are understood as inherent in for example a building, a location, or the law. We define the spirit of research ethics as the implied references to, and presents of past and present life in research ethical guideline that should not, and cannot be separated from the research ethical guideline.

We will identify what we find to be key historical causes and arguments for research ethical conventions in the three domains (i) social sciences – humanities – law – theology, (ii) health and medicine, (iii) technology, and based on this, discuss what aspects of research ethical reflection are lost in the contemporary focus on legality, guidelines, and publication.

Keywords: research ethics, GDPR, social media, ethical conventions.

Navigating the Regulatory Anchor: Top-Down Constraints and Bottom-Up Identities in Swedish Senior Housing

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As global demographics shift toward an increasingly aging population, the design of age-friendly societies has become a critical economic and social priority. In Sweden, where those aged 70 and older are projected to constitute nearly 25% of the population by 2070, the real estate sector faces a significant challenge in balancing institutional regulations with the heterogeneous identities of aging citizens. This study examines the strategic dilemma of real estate developers navigating the “55+” chronological age limit, a ubiquitous regulatory anchor in Swedish senior housing, and explores how top-down legal frameworks interact with bottom-up social identities.

The research investigates a fundamental discrepancy between formal supply-side regulations and demand-side consumer identification. Through qualitative, semi-structured interviews with major Swedish real estate developers, the study reveals that while the 55+ age limit is a non-negotiable legal requirement within the statutes of cooperative housing associations (*bostadsrättsföreningar*) to prevent concept dilution, it serves as a relatively weak basis for market segmentation. Empirical evidence indicates that the actual “periphery” of customers, active, healthy individuals in their 50s and early 60s, typically do not identify with the “senior” label, with move-in ages more frequently ranging between 68 and 74 years.

This tension is further complicated by pervasive societal ageism, which often causes individuals to postpone planning for future housing needs due to the

negative connotations associated with aging. The study highlights an epistemic gap: while the “centre” (represented by legal and bureaucratic norms) enforces a static chronological threshold, the lived reality of the target demographic is characterized by wide variations in preferences, health, and social commitment.

The findings emphasize a necessary shift from supply-side chronological segmentation to a demand-side analysis focused on functional and life-phase criteria. Successful communication strategies must move beyond the potentially alienating 55+ numerical limit to prioritize “soft values” such as community, security, and the “pensioner” life phase. By leveraging practice-based knowledge produced through the interaction of industry practitioners and market realities, this research illustrates how bridging the gap between institutional regulations and functional needs can foster more sustainable societal outcomes, such as increased self-sufficiency and the efficient redistribution of the housing stock. Ultimately, the study suggests that the 55+ limit functions as a necessary legal safeguard for the integrity of the housing concept, yet the true success of these developments depends on recognizing the diverse social and functional identities that exist far beyond arbitrary age thresholds.

Keywords: ageing population, senior housing, real estate developers, supply, demand, ageism.

Beyond the Chronological Threshold: The Strategic Dissonance Between the 55+ Regulatory Anchor and Senior Consumer Identity in Housing Markets

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By 2070, the population aged 70 and older in Sweden is projected to constitute nearly 25% of the total population, placing unprecedented pressure on the housing sector to provide environments that support healthy aging. Central to the development of this sector is the “55+ age limit,” a ubiquitous regulatory anchor used in cooperative bylaws and market communication to define the target demographic. This study examines the function of this chronological threshold and investigates the significant dissonance between institutional regulations and consumer self-identification. Utilizing a quantitative survey of 470 prospective customers from a real estate developer’s database, the research explores how current and future generations of seniors perceive the marketing communication surrounding specialized housing concepts.

The findings reveal a profound misalignment between administrative age limits and the social norms of the target group. Only 7% of respondents designate 55 years as the defining age for a “senior,” while the majority identify 65 years, the traditional retirement age, as the primary marker of old age. This gap is exacerbated by societal ageism and the psychological tendency for individuals to identify with an age approximately ten years younger than their chronological age, which causes many active individuals to postpone future housing planning. Furthermore, the study demonstrates that the style

of marketing communication is a critical factor in target group identification. A concept focused on functional accessibility and age-specific design successfully aligned with 58% of the core demographic (pensioners and homeowners). Conversely, a lifestyle-oriented communication strategy resulted in significant misidentification, with 44% of seniors perceiving the concept as targeting those under the age of 55, and only 3% of the core target group identifying with it.

The study concludes that while the 55+ limit serves as a necessary legal safeguard within cooperative housing statutes to prevent concept dilution by younger groups, it remains a weak basis for market segmentation. The research suggests that to effectively reach the actual move-in demographic, which frequently ranges between 68 and 74 years of age, real estate developers must transition from supply-side chronological thresholds toward demand-side positioning. This approach should prioritize functional capability, life-phase benefits such as active retirement, and “soft values” like security and community over arbitrary numerical limits that risk alienating the intended audience. Ultimately, bridging the gap between institutional regulations and consumer identity is essential for creating sustainable housing solutions that reflect the heterogeneous needs of a diverse elderly population.

Keywords: housing sector, healthy ageing, institutional regulations, consumer self-identification, market communication.

Professional Identity and Innovation in Contemporary Legal Education

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The legal profession is undergoing profound transformation driven by digitalization, artificial intelligence, global regulatory complexity, and shifting societal expectations concerning access to justice and sustainability. These developments are reshaping service delivery, redefining professional value, and expanding the competencies required within legal practice. In this evolving landscape, many students in the subject of law experience uncertainty about how they will contribute meaningfully in their forthcoming professional roles. Although innovation has become a central feature of contemporary legal practice, it remains unevenly embedded in traditional legal education.

Legal education has long emphasized doctrinal analysis, critical reasoning, and the interpretation of legal sources. While these foundations remain indispensable, contemporary professional contexts increasingly require complementary capabilities such as digital literacy, interdisciplinary collaboration, entrepreneurial awareness, and engagement with legal technologies and new organizational models. Students in the subject of law must therefore navigate a changing professional identity landscape in which expectations extend beyond technical expertise toward broader forms of value creation for clients, organizations, and society.

At the same time, the growing accessibility of generative artificial intelligence is influencing how students in the subject of law approach their studies. AI tools are used to support research, clarify complex legal doctrines, structure

arguments, draft texts, and prepare for examinations. These practices may enhance efficiency and comprehension, but they also raise questions concerning learning processes, skills development, academic integrity, and the formation of professional judgment. The integration of AI into everyday study practices thus intersects with broader issues of competence, confidence, and professional identity formation.

This paper investigates how students in the subject of law use AI during their studies and how they perceive uncertainty related to value creation and innovation in their future careers. Adopting a qualitative research design, the study is based on interviews with participants at different stages of education in courses in the law subject. It identifies key sources of uncertainty, explores understandings of innovation in legal contexts, and examines how educational environments shape confidence, agency, and emerging professional identities.

By generating empirically grounded insights, the paper contributes to scholarship on professional education and the evolving nature of legal work. The findings aim to inform curriculum development and pedagogical strategies that more effectively integrate technological competence, innovation, and sustainable value creation into legal education.

Keywords: students, education, professional identity, digitalization, AI, value creation, innovation.

Digital Inequality and Participation

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Digital platforms are often presented as spaces that enable broader participation in communication, learning, and knowledge production. They can potentially lead to reduced importance of traditional centers. However, participation in digital environments remains uneven and is closely tied to individuals' positions in offline contexts. This paper explores how center-periphery relations are shaped across online and offline spaces, with a particular focus on visibility, recognition, and participation.

Rather than treating digital environments as separate from everyday life, this paper approaches them as interconnected with offline experiences. Access to digital spaces, as well as confidence in using them, is influenced by social markers such as language, education, socioeconomic background, and geographic location. These markers shape not only opportunities for participation, but also individuals' perceptions of whether they are entitled to speak, be heard, or contribute. In this sense, online spaces often reproduce existing inequalities, even when they appear to offer open participation.

A key feature of digital communication is the rapid and uneven circulation of content, which can be described as a wildfire-like effect, where certain messages, perspectives, or actors gain sudden and widespread visibility, while others remain largely unnoticed. This process is not random. It tends to favor content that aligns with dominant norms, networks, and expectations, while other contributions struggle to gain attention. Such dynamics influence how individuals evaluate themselves and others through processes such as social comparison, perceived legitimacy, and recognition, shaping both participation and withdrawal.

The paper examines how individuals navigate these conditions across contexts such as online learning environments, professional networks, and social media. Participation often involves adapting to dominant forms of expression, managing impressions, or engaging selectively. For some, online environments may also function as a form of escapism, providing temporary relief from constraints experienced in offline settings. However, such engagement does not necessarily lead to greater influence or recognition and may coexist with continued marginalization.

In relation to work-integrated learning, digital platforms are increasingly used to connect participants across different contexts. While these environments can support collaboration and knowledge exchange, they may also reproduce hierarchies if certain forms of knowledge are prioritized. The paper considers how these dynamics affect participants' sense of belonging, self-efficacy, and willingness to contribute.

By focusing on the interplay between online and offline experiences, the paper contributes to discussions on center-periphery relations in digital societies, highlighting how visibility, recognition, and participation remain unevenly distributed.

Keywords: digital platforms, communication, collaboration, learning, knowledge production, work-integrated learning, center-periphery, digital societies.

Perceived Discrimination, Historical-Collective Traumas, and Mental Health Among Young Sámi in Norway – The Mihá Study

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The Sámi population in Norway has reported significantly higher rates of discrimination compared to the general population, with Sámi ethnicity frequently cited as the primary reason for such experiences. Over the past two decades, research has consistently demonstrated the strong association between discrimination, racism, and adverse mental and physical health outcomes. Studies among the adult Sámi population in Norway and Sweden corroborate these findings, emphasizing the detrimental effects of systemic discrimination and minority stress.

The Sámi Public Health Report (2024) highlights the profound impact of historical trauma, harassment, and violence stemming from the Norwegianization policy, which has left deep scars on the mental health and well-being of the Sámi people. This policy, combined with contemporary experiences of prejudice, ignorance, and systemic discrimination, has significantly affected the quality of life for many young Sámi. The Truth and Reconciliation Commission has documented the long-standing injustices and assimilation policies imposed on the Sámi, revealing the pervasive consequences of these actions on both individuals and society.

This study, The Mihá Study, explores the intersection of perceived discrimination, historical-collective trauma, and mental health among young Sámi (age 16-31 years old) in Norway. It examines how the legacy of the Norwegianization policy, coupled with ongoing experiences of racism and prejudice, contributes

to mental health challenges, including minority stress and suicidal ideation. By analyzing personal stories and contributions shared in public hearings, the study sheds light on the generational impact of oppression and abuse, as well as the psychological and emotional reactions that continue to affect the Sámi population.

The findings underscore the urgent need for systemic change to address the historical and contemporary injustices faced by the Sámi people. This research contributes to the broader discourse on minority rights, mental health, and societal sustainability, offering insights into how historical trauma and discrimination shape the lived experiences of indigenous Sámi youth populations in Norway.

Keywords: Sámi population, discrimination, historical trauma, mental health, Norwegianization policy, minority stress, Truth and Reconciliation Commission, systemic discrimination.

Digital Accessibility Assessment of Swedish Healthcare Platforms: A Compliance Study with the EU Accessibility Directive

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The rapid digitalization of the Swedish healthcare system has led to a proliferation of mobile applications and websites, making digital platforms the primary point of contact for patients seeking medical advice, prescriptions, and appointments. This study evaluates the digital accessibility of fifteen prominent Swedish health services, including the national portal 1177 Vårdguiden, regional services within Västra Götalandsregionen (VGR), and private providers such as Kry, Doktor.se, and Capio Go. Adherence to accessibility standards is not only a matter of usability but a legal requirement under current frameworks.

The methodology was based on the requirements stipulated in Chapter 9 of the EU Accessibility Directive (EN 301 549 V3.2.1), focusing on publicly accessible information that does not require authentication. The assessment utilized a standardized scoring system, where 1 represented full compliance, 0.5 partial compliance, and 0 non-compliance across four fundamental pillars: Perceivable, Operable, Understandable, and Robust.

The results indicate significant variation in compliance levels across the sector. Within the Perceivable category, 1177 Vårdguiden demonstrated superior performance by providing comprehensive support for plain Swedish, minority languages, and English. In contrast, several private portals, such as Praktikertjänst, lacked adequate text alternatives for non-text content.

Analysis of Operable criteria revealed that while most platforms successfully mitigated seizure risks and managed time-based media constraints, keyboard navigability and the inclusion of “bypass blocks” were inconsistent. Under the Understandable pillar, predictability was generally high; however, regional applications like Närhälsan Online showed notable deficiencies in input assistance and error identification compared to specialized tools like AsthmaTuner. Finally, the Robust category revealed widespread technical challenges, with many services scoring low in parsing and technical compatibility.

In conclusion, while foundational accessibility is present in most Swedish digital health services, substantial gaps remain regarding media alternatives and technical robustness. Adherence to these international standards is essential to prevent digital exclusion in healthcare and to ensure equitable access for all inhabitants.

Keywords: healthcare system, digital platforms, health information, accessibility, equity.

From Ngukurr to Newcastle: how new methods of engagement can reignite interest in stories of Aboriginal activism

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The focus of our research in the Ngukurr to Newcastle project is a largely forgotten figure in Australian History; Dexter Daniels whose work as a union organiser led to one of the most important Aboriginal strikes and ultimately to land rights in the Northern Territory of Australia. In the 1960s, Daniels operated very much at the centre, working in mainstream Australia with Trades Unions, far away from his home communities of Darwin and Ngukurr in the Northern Territory. His activities were widely reported in the media and he appeared on television. He travelled widely through the southern states of Australia raising knowledge and interest in his campaign for equal rights for Aboriginal workers and land rights. Dexter's story has now retreated to the periphery, to be sequestered in archival boxes of newspaper clippings and Australian Intelligence Security Organisation records. His associations with the Communist Party of Australia, made his story less palatable to a mainstream audience, and less easy to mythologise than those of some of the other key actors in the campaign. Our aim in the Ngukurr to Newcastle project is to bring the Dexter Daniels story back into the centre, whilst reigniting the interest in his life and achievements at the periphery. Our archival work, supported by oral histories with his family forms the basis of stories to be told in his home community of Ngukurr, in Darwin and

in mainstream Australia. Digital technologies are being used to maximise our education and impact. His story is being translated into Kriol, the local language of Ngukurr for on-line stories and animated films and his journeys are being plotted and mapped on to a digital map, so that people are able to experience the extent of his journeys in space and over time. Through these methods contemporary audiences are able to re-engage with the work of Daniels and his impacts and also reflect on the processes by which he became forgotten and marginalised.

Keywords: aboriginal activism, trade unions, equal rights, digital technologies.

Songlines in the Age of Algorithms: Aboriginal Knowledge in Algorithmic Music Platforms

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Contemporary Aboriginal music in the 21st century primarily exists within digital spaces and streaming platforms, raising urgent questions about governance, accountability, and cultural sovereignty. While Aboriginal musicians share their work through Western music industry frameworks, the cultural foundations of Aboriginal song originate in Songlines, an embodied knowledge system that is carried by the human body and shared with others through performance, centered around physical and visual feature in the Country (Neale & Kelly, 2020). Song is not merely artistic expression; it is a carrier of knowledge, story, language, and lore. Central to Aboriginal culture is the acknowledgement of where knowledge comes from and who holds authority to share it.

As Aboriginal music circulates globally through platforms such as Spotify and other algorithm-driven services, governance shifts away from community-based authority toward corporate and algorithmic systems. In this shift, Aboriginal knowledge risks becoming reclassified as platform content; detached from relational accountability and cultural protocol. Streaming infrastructures prioritise data, engagement, and recommendation logics that are structurally indifferent to the cultural specificity, sacredness, or custodianship embedded in Aboriginal song traditions. In this sense, colonial extraction has not ended; it has shifted form, moving from material and cultural dispossession into digital infrastructures.

Before digital distribution, Aboriginal knowledge and story were governed through relational systems by in Elders and Knowledge holders. In the contemporary digital landscape, global platforms increasingly function as cultural centres, while Indigenous governance systems risk being repositioned to the periphery. At stake are not only recognition and attribution, but also questions of royalties, ownership, and the responsibility to give back to community; issues that resonate within a longer history of Australia's colonial history.

Positioned as a Kamilaroi musician navigating both traditional knowledge systems and Western institutional frameworks, the paper aims to reflect the tension between digital visibility and cultural responsibility. Rather than rejecting digital circulation outright, it calls for greater attention to Indigenous digital sovereignty and culturally informed governance models within the music industry. By situating Aboriginal music within debates on centre-periphery dynamics in the AI-informed digital society, this paper argues that algorithmic platforms must be critically examined as sites where power, knowledge, and cultural authority are being reconfigured.

Keywords: contemporary Aboriginal music, artistic expression; carrier of knowledge, story, language, and lore, digital distribution.

Understanding mass atrocity prevention in a digital age – The case of Myanmar

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In my paper, I propose to examine some challenges to mass atrocity prevention posed by the adoption and use of digital technologies, based on research primarily related to Burma/Myanmar, the US and Norway.

In international relations theory, the conceptual pair of centre and periphery denotes locations in a global system with differing and unequal accesses to power and resources, and an exploitative relationship that allows for the continued dominance of the centre over the periphery. Further theoretization has focused on centre-periphery relations within the centre and within the periphery.

In such analysis, Burma/Myanmar usually belong to a global South, while the US and Norway belong to a global North. The liberalization of the telecommunications sector in Myanmar, which was a significant part of the political changes that were initiated in 2011 and paved access to the Myanmar market for international/global companies such as Facebook from the US and Telenor from Norway, appears to confirm such analysis.

The telecom liberalization after 2011 originally resulted in smartphones, sim cards, and access to the internet becoming more widely available for a Myanmar public; social media (SoMe) platforms, notably Facebook, became the main access point to the internet for many people. In this context, it has been documented that both the state and civil society in Myanmar used Facebook to foment violence and mass atrocities against the Rohingya and other vul-

nerable minorities after 2011. It has also been documented how the Myanmar state was able to access resources and information from Norway's Telenor during the genocidal persecution of Rohingya in Rakhine in 2017 and in the wake of the military coup in 2021 and subsequent political repression. Myanmar is a country where SoMe and internet have served and continue to serve as spaces and tools both for human rights activism and for inciting human rights abuses against vulnerable minorities, largely due to technologies made available by companies from the Global North.

Access to internet and digital tools is often seen as a potential pathway for more equal relations between centres and peripheries. However, the response (or lack thereof) of SoMe such as Facebook and various internet service providers, including telecom companies such as Telenor, from these countries to past and current political repression and mass atrocities in a country such as Myanmar highlights challenges for internet and SoMe governance that expose gaps in the global business and human rights architecture when it comes to mass atrocity prevention in a digital age, disproportionately affecting the peripheries in the periphery. In my paper, I propose to use the notions of centre and periphery and of centre-periphery relations as analytical devices to better understand some of these gaps and to question how the use of digital technologies from the centre to facilitate mass atrocities and human rights violations in the periphery pose new challenges both in the periphery and at the centre as well as how centre-periphery relations may play out in a digital age.

Keywords: mass atrocity prevention, centre-periphery relations, telecom liberalization, human rights, digital technologies.

Green portals of the digital society

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The unique feature of the digital society is a seamless transition between two independent realms (eg. parallel universes). The one realm is a real world with 3 space dimensions and the 4th time dimension, and the second is a virtual realm being an imagination provided by digital technologies.

I have previously argued that the constraints of space and time do not apply to the virtual realm. This results by the (unexpected and surprising) features of the virtual spaces and the corresponding social interactions. In addition, the virtual spaces are not only inhabited by human beings. Together with humans there is a plethora of technological entities, which as non-humans inhabit, contribute to, and shape the virtual realm. The existence of the non-human beings is - to its extreme - currently represented by entities based on artificial intelligence capabilities.

In the current study I discuss the challenges that humans encounter in the virtual realm produced by digital technology. The technological entities undergo process of embodiment, where they acquire the human features to be recognized by humans and to be able to interact with them. The process of embodiment, assigned to technology, has its counterpart referred as disembodiment. The disembodiment is assigned to the human beings, which lose their human features as they participate in the virtual interactions. Literally, humans lose their body and mind in the virtual realm. During the process of disembodiment, the humans adapt their bodies and minds to fit the virtual spaces, according to the requirements of the digital technologies. Through

the disembodiment process, they risk being deformed and mutilated, and this affects both - their bodies and their minds.

Subsequently, although the digital society is indeed characterized by seamless transitions between interconnected real and virtual spaces, it could be beneficial to provide real world anchors influencing these transitions and assisting the humans during their stay in the virtual parts of the digital society. These anchors would be inevitably positioned at the interface between reality and virtual realms serving as portals that connect them. They would keep (like an umbilical cord) humans anchored in the reality. Here I suggest that the plants, as a traditional part of human lives and real-world architecture and urbanism, should serve as the green portals into the virtual realm. The plants develop and grow in realistic space and time dimensions; moreover, they have abilities to represent the complexity of human emotions and relationships. Adding the green elements to the digital society and assigning them the portal values would provide a remedy against the challenges and distortions of the virtual realm.

Competing interests: SG is the owner and CEO of BrainPrime Ltd, and the consultant of Klara Gardening Ltd, dealing with health and green walls.

Keywords: digital society, reality, virtual realm, challenges, human beings.

Integrating Digital Health in Elderly Care: A Stakeholder Study

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As healthcare systems increasingly transition toward digital platforms, there is a significant risk of marginalizing older adults, particularly those characterized by low health and digital literacy (LHDL). This research aims to explore the multifaceted challenges and opportunities associated with digital health adoption in elderly care by examining the perspectives of various stakeholders involved in the care process.

The study utilizes a qualitative design based on semi-structured individual and focus group interviews. The methodology is structured around four distinct interview guides tailored to experts, healthcare professionals, older adults, and informal caregivers. These instruments were designed to capture a comprehensive picture of the care journey, focusing on how information is accessed, understood, and utilized in an increasingly digital environment.

For healthcare professionals and experts, the research focuses on identifying the primary indicators of LHDL and the development of effective communication strategies to engage patients with varying literacy levels. A central theme is the level of confidence among formal caregivers in using digital tools to support patient self-management, alongside the ethical and practical concerns regarding patient safety, data privacy, and the risk of misunderstanding.

Older adults provide critical insights into their technical comfort and the specific barriers they face when using health apps, online portals, or video calls.

The study examines their preferences for blended care, a combination of digital and in-person services, and identifies the support mechanisms that help them feel more confident in managing their health digitally. Simultaneously, the role of informal caregivers is highlighted as a vital yet often overlooked component of the digital transition. These caregivers often act as intermediaries, yet they report significant challenges in understanding health information and a lack of formal training or institutional support to manage digital tools effectively.

The research seeks to identify institutional and policy-level changes required to improve integrated care. The findings suggest that an ideal training program have to be developed for both formal and informal caregivers to mitigate resistance and foster a more inclusive digital environment. By addressing the structural and interpersonal barriers identified across these stakeholder groups, the study contributes to a more sustainable and democratic development of healthcare services that respect the diverse needs of the aging population.

Keywords: health literacy, digital literacy, older adults, professional caregivers, informal caregivers, inclusive digital environment.

Innovating Optimizing Ageing: Integrating Physical Activity, Digital Technologies and Health-Promoting Environments

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Background: Healthy ageing is increasingly recognised as a multidimensional process shaped not only by biological factors but also by social participation, physical activity, digital engagement and the quality of the built environment. Although many older adults possess both the motivation and ability to live independently well into old age, their opportunities are strongly determined by the support, environments and resources available to them. At the same time, persistent myths such as the assumption that older adults cannot master digital technologies risk restricting both policy decisions and the design of health-promoting interventions. Considering that today's older population has been part of the digital workforce for decades, there is a need to develop ageing models that acknowledge their capabilities and support active, autonomous and meaningful living.

Problem Statement: Despite strong evidence that physical activity is essential for maintaining health, functional capacity and independence in older age, structured physical activity is not naturally integrated into everyday life for many older adults. Senior living environments are often not designed with a focus on movement, participation or health-promotion, and there is a lack of coordinated, scientifically evaluated approaches that combine physical training, digital support and health-promoting environments. Older adults frequently face limited access to structured training programs, insufficient

tools to support daily physical activity and fragmented support systems. Consequently, there is a pressing need for models that unite physical exercise, digital monitoring, social support and environmental design to promote sustainable and active ageing.

The overarching aim: To strengthen older adults' health, independence, physical capacity and quality of life while creating a scalable model that can inform community planning and support sustainable ageing for future generations.

Method: A longitudinal intervention study will be conducted in Bovieran senior housing. Data will be collected repeatedly from the same participants over time, with each individual serving as their own control through baseline comparisons. The intervention comprises tailored endurance and strength training, digital health monitoring and structured social support activities embedded within a green, nature-based residential environment. This within-subject design reduces inter-individual variability and enhances internal validity. The study will analyse changes in physical capacity, independence, participation and well-being to evaluate the medical and social effects of integrated Age Optimization strategies.

Expected Results: The intervention is expected to lead to improvements in physical function, independence, participation and overall well-being among older adults. On a societal level, enhanced health outcomes may reduce the need for elderly care services and promote more sustainable ageing trajectories. A key outcome of the project will be a generic educational package and standardized materials suitable for older adults, relatives, care professionals and policymakers. By integrating physical training, digital technology and environmental design into a unified approach, the project contributes novel scientific insights and practical solutions that can counteract ageism, support equitable access to health-promoting resources and improve the quality of life for a broad range of older individuals.

Keywords: healthy ageing, ageism, digital technologies, physical capacity, quality of life, digital health monitoring.

Reimagining the digital welfare state: Street social work in the self-service society

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In the project *Street social work and the self-service society* we are investigating how people in vulnerable situations experience digitalisation. More specifically we investigate ethnographically how a digitalised and standardised welfare infrastructure is experienced from the perspective of “unstandardised” people who are not capable of or willing to live an ordinary and conventional life. The study is conducted through participant observations and interviews with people seeking assistance from “Gatesosionomen”, a low-threshold service offered by the Norwegian City Church Mission. We ask, how is vulnerable people’s welfare influenced by digital technologies and the subsequent self-service society? How can their stories and understandings become part of a re-imagining of how a digital welfare society might work? What role does NGO’s like the City Church Mission play in translating between worlds in what emerges like a digital divide between the welfare state and those who need welfare services most?

Acts of translation always runs the risk of losing information on the way. Science and technology scholar (STS) John Law points out that since translation is about making two words equivalent, and this is in effect impossible, there is always a potential of treachery and betrayal in acts of translation (2007: 5). The loss of meaning when translating from one cultural or historical logic to another has been a central theme in philosophy and social anthropology, especially when it comes to understanding what rationality is (Tambiah, 1990;

Wittgenstein, 2020). Similarly, translating human communication into purely digital media can potentially risk losing, changing or distorting substantial meaning. Classic works like *The Tacit Dimension* (Polanyi, 2009), *Situated Learning* (Lave & Wenger, 1991) or *Situated Knowledges* (Haraway, 1988) make the point that knowledge is situated and unfolds in settings, and cannot, without problems, be transferred and translated. Whether or not technology travels well is an empirical question, and central to the field of STS (de Laet & Mol, 2000). The process of domesticating new technology unfolds in practice, and as such, we need to be sensitive to the particular settings where knowledge translation takes place, when digitalising welfare infrastructure.

References

- de Laet, M., & Mol, A. (2000). The Zimbabwe Bush Pump: Mechanics of a Fluid Technology. *Social Studies of Science*, 30(2), 225–263. <https://doi.org/10.1177/030631200030002002>
- Haraway, D. (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), 575–599. <https://doi.org/10.2307/3178066>
- Lave, J., & Wenger, E. (1991). *Situated learning : legitimate peripheral participation*. Cambridge University Press.
- Law, J. (2007). Actor Network Theory and Material Semiotics. *version of 25th April 2007*.
- Polanyi, M. (2009). *The tacit dimension*. University of Chicago Press.
- Tambiah, S. J. (1990). *Magic, Science, Religion, and the Scope of Rationality*. Cambridge UP.
- Wittgenstein, L. (2020). *The Mythology in Our Language : Remarks on Frazer's Golden Bough*. Chicago: HAU Books.

Keywords: welfare state, digital, social work, self-service, knowledge.

Punishment, Restorative Processes, and Reintegration from Prison in the Digital Society: Centre–Periphery Dynamics, and the Digital Divide

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This paper examines what punishment as deprivation of liberty means in a digitally mediated society, and how restorative processes can support reintegration from that perspective. Drawing on three interlinked empirical elements — (a) longitudinal participant observation and interviews from a Street Mediation initiative run in partnership between Halden Prison and the Red Cross (since 2017), (b) interview data with prison staff on reintegration practices in Norwegian high-security prisons and (c) follow-up research with users of the Church City Mission’s Gatososionomen service that helps people released from custody organise their “digital lives” — the paper analyses how digital exclusion, institutional practices, and restorative practices interact to shape centre–periphery relations in and beyond prison walls.

Methodologically, the study combines participant observation of instructor training, semi-structured interviews with incarcerated participants, staff and volunteers, and comparative analysis of unpublished datasets to map knowledge flows, local innovations, and institutional barriers. Conceptually, it situates prisons as peripheral analogue spaces within an increasingly digital social order and uses a restorative justice framework to explore practices that bridge epistemic and material divides.

Findings highlight how analogue confinement produces a “digital penalty” that complicates citizenship, welfare access and social reintegration upon release. Conversely, restorative practice-based initiatives (peer mediation,

trainer co-production, NGO mediation services) function as sites that can reconfigure centre–periphery relations by building digital competencies, repairing relational harms, and enabling access to institutional knowledge and services. The paper argues for integrating restorative process-approaches in reintegration policy to reduce the digital gap and to decentre mainstream models of digital inclusion.

Keywords: digital divide, prisons, restorative justice, centre–periphery, reintegration, NGOs, comparative empirical research.

A Known Challenge - an Unknown Tool

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Halden fengsel is one of the largest prisons in Norway, with a capacity of 230 inmates. Prisoners have rights that must be safeguarded within the prison walls, including the right to healthcare. For this reason, the municipality provides a dedicated healthcare unit inside the prison. This service follows the so-called import model and operates independently of the correctional services. The purpose of the healthcare unit is to assist inmates with the physical and mental health challenges they may encounter during their imprisonment.

The correctional services' annual report for 2024 describes several challenges facing the sector, including an "increasing proportion of inmates with complex and combined needs." At the same time, «the core mission remains to ensure that pre-trial detention and sentences are carried out in a way that is safe for society and helps prevent reoffending, while also enabling offenders to make efforts to change their criminal behavior».

The correctional services ensure that the necessary conditions for imprisonment are maintained. Nevertheless, prison officers frequently encounter inmates with health-related challenges and therefore need to seek assistance from the healthcare unit. The healthcare staff respond by assessing the inmate's needs and providing appropriate follow-up.

Prison officers often feel insufficiently prepared to deal with inmates' mental health problems and therefore seek advice from healthcare personnel. Although healthcare staff can provide guidance, confidentiality regulations present challenges. On the one hand, confidentiality can limit information sharing; on the other hand, healthcare staff possess information that could be valuable for correctional services and could improve the care and support provided to inmates. If challenges related to confidentiality can be addressed, inmates' health problems may be identified and managed earlier, serious incidents caused by misunderstandings or lack of knowledge about an inmate's health condition may be avoided, and mutual understanding between staff and inmates may be improved.

To address these challenges, Harald Lund developed a digital tool designed to facilitate collaboration. With support from Innovasjon Norge and the DAM Foundation, the tool has been tested in Halden Prison during two project periods. The prison and the municipality approved testing in two units. Prison officers were given access to the digital tool and used it in their daily work. The healthcare unit was also granted access, enabling healthcare personnel to provide guidance to prison officers on how to support inmates without breaching confidentiality.

The project has been considered successful, and the prison intends to continue using the tool after the project period. The institution now wishes to examine whether the tool will continue to be used after project funding has ended.

Evaluating the tool and its practical use is therefore highly relevant from a research perspective. A collaboration has been established between Helsenøkkelene and the research group in psychosocial work at Østfold University College to initiate research on the tool and its practical functioning. The research will focus on the intersection between mental and physical health, substance use problems, and correctional services within a prison context where multiple professional groups collaborate in supporting inmates with complex challenges.

The preliminary aim of the research is formulated as follows: The aim of the study is to investigate the use and usefulness of a digital tool for information sharing and collaboration between healthcare services and correctional services in prison, and how the tool may contribute to improved follow-up of inmates with complex health needs within the framework of confidentiality regulations.

A process to obtain external research funding has been initiated. Partners in the process include Mental Helse, the research group in psychosocial work at Østfold University College, and Helsenøkkelen/digital tool developer. The research is planned to be carried out as a postdoctoral project affiliated with Østfold University College.

Keywords: prison, safeguard, healthcare, mental health, substance use, digital tool, collaboration.

Mapping digital applications developed in Spain to promote active ageing: Preliminary identification within the STARS-Health Project

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Background: Population ageing represents one of the main demographic challenges in Europe. Digital health technologies may contribute to promoting active ageing by enhancing health literacy, autonomy, social participation and well-being among older adults. Within the framework of the STARS-Health European project, a preliminary identification of digital applications developed in Spain was conducted to map available technological resources potentially suitable for people aged 65 and over, their caregivers and health-care professionals.

Objective: To preliminarily identify and characterize mobile applications developed in Spain that may contribute to promoting active ageing, without assessing their quality or effectiveness at this stage.

Methods: A non-systematic desk-based exploratory search was conducted between November 2025 and January 2026. Searches were independently performed by three researchers using app store queries (Google Play and Apple App Store), open web searches, and artificial intelligence-based tools to complement manual identification. Inclusion criteria required apps to: (1) be developed by Spanish entities, (2) be publicly accessible, (3) have been updated within the previous 12 months, and (4) demonstrate potential usefulness for older adults or their caregivers in domains aligned with active ageing. A predefined taxonomy of thematic domains structured both the search and classification processes

For each eligible application, structured data extraction was conducted, including: developer and type of entity; pricing model; target population; main functionalities; usability and accessibility features; security and privacy characteristics (e.g., privacy policy availability, data handling, GDPR references); and certifications or endorsements. An internal refinement process was subsequently implemented to standardize extracted information and ensure consistency across reviewers

Results: A total of 113 applications were initially identified. After removal of duplicates and non-eligible records, 79 mobile applications and 8 web-based resources met the inclusion criteria. The majority of apps were oriented toward medical care, chronic disease management, nutrition, and mental health, reflecting a predominantly biomedical focus. Fewer solutions addressed areas such as fall prevention, sleep, social participation, or identity-related aspects of ageing.

Conclusions: The Spanish digital landscape for active ageing appears heterogeneous and health-oriented, with stronger development in disease management than in psychosocial or community participation domains. This

structured inventory provides a comparative baseline for subsequent in-depth and cross-country analyses within the STARS-Health Project and facilitates the identification across domains and functionalities relevant to digital health policy and innovation for ageing populations.

Keywords: digital application, active ageing, exploratory search, medical care, chronic disease management, nutrition, mental health.

Which healthy lifestyle apps are suitable for older adults: a mixed method study

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Introduction: In the Netherlands, an ageing population contribute to rising healthcare costs. Mobile health apps can support self-management and healthier lifestyles, which may reduce pressure on healthcare. However, adequate digital skills and health literacy are needed to use these apps effectively, and these skills are often lower among older adults. This study had three objectives: 1) identifying lifestyle and health apps, 2) locating suitable measurement instruments for evaluating digital skills and health literacy within these apps, and 3) assessing the apps while determining inter-rater reliability of the instruments. Two test leaders conducted the evaluation to produce an overview of suitable apps for older adults.

Methods: This mixed-methods study included an internet search, literature review, and a cross-sectional quantitative component. Apps were identified through app stores and relevant websites and were preselected based on Dutch language, free availability, and additional criteria across seven lifestyle and care domains. Validated measurement instruments were searched in PubMed, IEEE Xplore, ACM Digital Library, and the Pharos knowledge base. Two independent assessors evaluated all apps using 42 dichotomous criteria based on a protocol. Inter-rater reliability was calculated using Cohen's kappa and the weighted Cohen's kappa.

Results: A total of 126 apps were identified, of which 78 were accessible for evaluation. The PEMAT A/V instrument was used for assessing low health literacy, and the instrument by Silva et al. provided 25 heuristics for digital skills. Of the 25 highest scoring apps, 18 were also suitable according to PEMAT A/V. Weighted Cohen's kappa indicated good agreement for all components.

Conclusion: Eighteen apps were assessed as suitable for users with low digital skills and low health literacy. The measurement instruments showed good inter-rater reliability. These results provide a foundation for developing a database of evaluated health apps for healthcare professionals, informal caregivers, and older adults.

Keywords: ageing population, mobile health apps, self-management, healthier lifestyles, measurement instruments, evaluation.

Optimizing close care from a hospital perspective – special focus on challenges surrounding the increasing number of older people or people with migrant background in the population

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Healthcare systems are undergoing organizational and technological transformation to address demographic change, rising costs, and increasing demands for quality and efficiency. In Sweden, these challenges are intensified by the simultaneous growth of an ageing population and a steadily increasing proportion of people with migrant background, many of whom live in socioeconomically segregated areas. These developments highlight structural inequities in access to care and health outcomes and underscore the need for innovative, sustainable service models.

This project aims to develop, implement, and evaluate a co-creation model for hospital at home (HaH), with particular attention to older people and individuals with migrant backgrounds. HaH provides hospital-level care in patients' homes as an alternative to inpatient admission. While HaH has expanded globally, it remains relatively new in Sweden and insufficiently evaluated in relation to heterogeneous and vulnerable populations. Although HaH holds promises for reducing hospital-acquired infections, improving patient experience, increasing bed availability, and strengthening close and person-centred care, many top-down healthcare innovations fail to become sustainably integrated into routine practice. To address this implementation gap, the present project adopts a co-creation approach involving patients, healthcare professionals, managers, and other stakeholders throughout model development and testing.

The project employs a mixed-methods design grounded in sociocultural and epidemiological perspectives and is structured into four sub-studies: (1) development of a co-creation model for implementing HaH; (2) testing and evaluation of the model in practice; (3) assessment of patient and personnel satisfaction and health-related quality of life in relation to HaH; and (4) quantitative evaluation of safety and effectiveness outcomes such as length of stay and readmissions. The data for this project will include interviews, workshops, surveys, registry data, and patient-reported outcome measures. The project is made in collaboration between University West, Region Västra Götaland in Sweden, and Østfold University College in Norway.

A central analytical dimension of the project is the center–periphery dynamic in healthcare systems. From a geographical and organizational perspective, hospitals traditionally function as centralized centres of expertise, authority, and resources, while primary care, municipal services, and patients’ homes constitute the periphery. Implementing HaH shifts specialized care from the institutional centre to the periphery, challenging established hierarchies, governance structures, and models for resource allocation. For older people and individuals with migrant backgrounds this shift may either reduce inequities by increasing accessibility or risk reinforcing disparities if digital infrastructure, health literacy, language support, and social resources are unevenly distributed.

The co-creation model explicitly addresses center–periphery by employing horizontal collaborations across hospital, municipal, and community actors and by actively involving patients and their networks in decision-making. By integrating insider action research and participatory design, the project seeks to redistribute knowledge production and influence from central managerial levels to frontline professionals and service users. In doing so, it aims to enhance legitimacy, contextual fit, and sustainability of HaH while supporting equitable access to close care across demographic and geographic subgroups.

The expected outcome is a validated and scalable co-creation model that facilitates safe, effective, and equitable implementation of hospital at home, contributing to sustainable healthcare transformation in ageing and increasingly diverse societies.

Keywords: healthcare systems, technological transformation, migrants, segregation, center-periphery, co-creation, horizontal collaboration.

