

Panel 12. Coloniality, Technoscience, and the Margins: Spatial and Conceptual Topologies of Power

Convenors:

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Keywords: Coloniality, Margins, Technoscience, Topology

This panel examines the intersections of coloniality, technoscience, and the margins, conceptualizing margins not only as spatial peripheries but also as sites of epistemic exclusion. Margins, both geographical and conceptual, are constituted through historical and ongoing processes of power that are often entangled with coloniality but remain hidden within the normative order of institutions as well as disciplines. Technoscience plays a central role in shaping these dynamics, both in disrupting and in rearticulating the marginalization, particularly those pertaining to coloniality. The panel emphasizes the complicity of different "centers" in making and remaking of margins, while also recognizing the dynamic nature of margins as spaces of negotiation and resistance.

Coloniality refers to the legacies of colonialism in shaping global power relations, knowledge production, and technoscientific practices. In the context of technoscience, this framework highlights how dominant knowledge systems, with roots in colonial and imperial history, marginalize epistemologies that disrupt the dominant discourses. These margins are produced through technoscientific practices that define what counts as valid knowledge or expertise (including the norms of knowledge production), reinforcing hierarchies and marginalization of certain knowledges and practices. Margins are active spaces of hybridization where a range of actors engage with, resist, and transform dominant technoscientific practices, often creating alternative epistemologies and practices. Topology, in this context, refers to the fluid, uneven, and shifting nature of power relations, where margins and centers are not fixed locations but their boundaries are contested, constantly renegotiated, and reshaped by technoscientific practices. Margins are not simply distant or subordinate spaces; they are integral to the constitution of the center itself, as the center defines its dominance in relation to the margins.

This panel will explore how technoscience has contributed to the making of margins. From colonial-era scientific practices that excluded indigenous knowledge to contemporary technologies like data governance that perpetuate inequalities, technoscience continues to reproduce spatial and conceptual margins. The panel will also explore how marginalized communities actively engage with technoscientific knowledge, contesting the center's hegemony and creating new forms of knowledge. By reflecting on the conceptual toolkit of STS, the panel will also explore the issue of incommensurability of knowledge systems and the difficulties of hybridizing dominant and marginalized technoscientific practices. More broadly, this panel invites critical reflection on the complicity of dominant technoscientific frameworks in producing and maintaining margins. At the same time, it highlights the agency of the marginalized in resisting these impositions, creating a dynamic, albeit hierarchical and exclusionary, interplay between centers and margins.

Key Questions:

- How does technoscience contribute to the construction of spatial and conceptual center(s) and margins?
- What role does coloniality play in shaping the relationship between the center(s) and the margins?
- How can a topological approach help us understand the constitution of margins and the possibilities for epistemic resistance, while highlighting epistemic violence and erasures?

By addressing these questions, the panel aims to deepen our understanding of how colonial power structures and technoscientific practices intersect in the production of center(s) and margins, both spatial and conceptual.



ID 245 - Agency on the Peripheries: Case Studies of Grassroots Innovation in the Global South

Regina Sipos, Technische Universität München

Keywords: grassroots innovation, epistemic contributions, postcolonial computing

This paper addresses three critical research gaps related to grassroots innovation, with a specific focus on how marginalized communities actively engage with technoscientific knowledge, challenge dominant paradigms, and create new forms of knowledge. It illustrates findings through five brief ethnographic vignettes that explore the activities of Indonesian grassroots innovator collectives.

The first research gap lies in the lack of attention given to the diversity, situatedness, and heterogeneity of grassroots communities. Unlike large-scale movements, grassroots initiatives are often small-scale, localized, and context-specific. These nuances are frequently overlooked in academic research, which tends to prioritize uniform, large-scale solutions (e.g., Smith et al., 2017). Within these spaces, practitioners utilize tools and methods to address localized challenges, producing innovations that reflect the diversity of their contexts (Lindtner & Lin, 2017). The second gap concerns the invisibility of intrinsic design processes within grassroots innovation. While innovative capabilities increasingly shift toward the periphery, the design processes underpinning grassroots innovation often remain hidden. This is particularly relevant in the Global South, where grassroots approaches often operate "beneath the radar" of academia and industry, producing valuable but underexplored insights (Smith et al., 2017). The third research gap involves the exclusion of non-canonical knowledge from the academic sphere, particularly critical and socio-technical knowledge that challenges dominant paradigms. Marginalized communities often produce knowledge that reveals uncomfortable truths about societal injustices and structural inequalities. This paper seeks to document and integrate these critical knowledge practices into the academic discourse, highlighting the contributions of grassroots innovators in the Global South. By uncovering knowledge that would not exist without the practices of marginalized groups, this paper aims to address epistemic exclusions and expand the boundaries of what is considered valuable knowledge.

These three research gaps will be explored through the lens of postcolonial computing. The paper will present five ethnographic vignettes, which are used to study how social change arises from conflict, using a description of a social situation (vignette), followed by analysis and theorization (Hohn et al. 2020). The vignettes illustrate the plurality of relevant grassroots approaches and the many sociotechnical issues collectives attempt to solve in Indonesia: a decolonial mapping project, the revival of vernacular technologies to create belonging, the combination of rapid prototyping tools and traditional crafts, biohacking for safe drinking water and a postcolonial-collaborative hackathon during the pandemic. These vignettes thus show how people "on the periphery", marginalized by hegemonic infrastructures (Ehn et al. 2014), collectively create and build upon locally relevant knowledge while actively engaging with technology.

ID 745 - From Kitchen to Laboratory: the Socio-Technical Transformations of Pizza

Manuel Battigaglia, Università degli Studi di Padova

Keywords: Modernization, Standardization, Actor-Network-Theory (ANT), Food Studies

The academic discourse on culinary modernization is often polarized between two opposing viewpoints: one emphasizing social dynamics and the other prioritizing material factors. This dichotomous framing limits a holistic understanding of the ongoing transformations in culinary practices and other related domains. Consequently, modernization is either viewed as the product of cultural choices made by a select group of individuals or, within a technologically deterministic framework, as an inevitable outcome of technological advancement beyond human control.



This study employs a Science and Technology Studies (STS) perspective, drawing particularly on Actor-Network Theory (ANT) and Star's ecological approach, to reintegrate agency across human and non-human actors. By doing so, it explores how the interaction between social and material elements shapes the emergence and perpetuation of dominant knowledge systems while marginalizing alternative culinary practices and expertise. Through an analysis of the interplay between social and technological dimensions in food preparation, this research critically examines both the content and the implications of culinary modernization.

Focusing on the sociotechnical differences between traditional and modern approaches to cooking, this study uses pizza-making as a case study. Thirteen semi-structured interviews were conducted with pizza makers—who self-identified as either traditionalists or contemporary practitioners—as well as with a flour producer in Crotone, a city where pizzerias play a significant role both economically and gastronomically. Data collection and analysis followed the methodological principles of grounded theory, allowing participants to articulate their own conceptual frameworks rather than imposing preconceived theoretical models.

The findings reveal that traditional pizza makers primarily rely on tacit knowledge and artisanal techniques transmitted through generations, whereas their contemporary counterparts employ academically informed knowledge and intellectualized practices. These differences are particularly evident in the use of recipes, which contribute to distinct economic models of repetition and definitional frameworks. Traditional recipes are predominantly sensory-driven and adaptable, while contemporary recipes exhibit a high degree of textual inscription and standardization. Traditional pizzas exhibit plurality, as their production process allows for variation, resulting in a broad spectrum of possible outcomes. In contrast, modern pizzas adhere to a singular form, produced through standardized processes that ensure uniformity across iterations.

This study underscores that the modernization of culinary practices is neither solely directed by cultural elites nor dictated exclusively by technological imperatives. Instead, it emerges from intricate sociomaterial transformations. The culinary field exemplifies how modernization constitutes a complex sociotechnical assemblage that increasingly prioritizes standardized labor processes. While such standardization enhances global scalability and consistency, it also entails a reduction in diversity and flexibility. A critical understanding of these standardization processes is essential to safeguarding the richness of sociomaterial culinary practices, which face the risk of homogenization under the expansion of so-called modern cuisine.

12 JUNE 2025 11.30 - 13.00

SESSION 1

ID 416 - Weaving MAPS: historiographical perspectives on writing postcolonial histories of the colonial hospital

Joseph Aaron Joe, Johns Hopkins University

Keywords: colonial hospitals, history and architecture, postcolonial technoscience, anthropology and affect, Philippines and Southeast Asia

In this historiographic essay, I explore how we can write about the postcolonial history of colonial hospitals. To approach this question, I use the Philippine General Hospital (PGH) as a starting point to situate the 'colonial hospital' in the broader and often separate historiographies of the 'modern hospital' and of the postcolonial history of science, technology, and medicine in Southeast Asia. Established by the American colonial government in 1907, the PGH is a pavilion-style, public general hospital that operates in tandem with a laboratory and a medical school. Currently, the PGH is regarded as the largest modern government tertiary hospital in the Philippines. Framing hospitals as technoscientific assemblages, this colonial medical infrastructure is a critical site of knowledge production, subject formation, and socio-material relations among colonized, colonizing, and postcolonial actors. Histories of the 'modern hospital' have largely focused on management and less on the changing architecture and social processes that shape it as a built environment. While the current historical corpus holds valuable discourse on the complex and



reciprocal influence of medical and architectural ideas on hospital design, these histories are concentrated on the 'Western centers' of innovative design and often employ Whiggish narratives of medicine and architecture's mutual advancement. Emerging lenses of post-colonialism and affect theory, however, allow us to interrogate hospital institutions as artefacts of Western medicine, projects of modernity, and affective infrastructures of colonial sentiment thrust on the 'peripheral colonies'. The second historiographic stream traces the formation of more critical and agential postcolonial histories of science, technology, and medicine in Southeast Asia.

While critical studies of hospitals have produced some compelling analyses of colonial governance through biopolitical regimes, colonial hospitals persist as fertile ground for revealing 'autonomous' histories and new subjectivities in Southeast Asia's postcolonial reconfigurations. Looking into the postcolonial history of hospitals, particularly through the lens of architecture and space, may reveal alternative historical narratives of scientific nationalism and medical syncretism. Constructive discourse on epistemological and methodological approaches to STS in the region also provide potential directions for writing postcolonial histories of colonial hospitals, suggesting more engagement with anthropological methods. By weaving the two historiographic streams, I carve a methodological path that crosses history and ethnography, while proposing an analytical lens that combines material culture, affect, and postcolonial studies, which I call MAPS. Entwining historical analyses of architecture with ethnographic approaches to affective space may uncover histories rendered invisible in archives that reproduce monolithic narratives of the hospital's role in Western colonial projects of modernity and in postcolonial nation-building in Southeast Asia.

12 JUNE 2025 11.30 - 13.00 SESSION 1

ID 344 - Assessing ML Travelling Models

Diletta Huyskes, Università degli Studi di Milano Statale

Maria Sapignoli, Università degli Studi di Milano Statale

Giuseppe Primiero, Università degli Studi di Milano Statale

Keywords: machine learning, technoscience, decoloniality, technological translation, socio-technical systems

The design and deployment of artificial intelligence (AI) are based on Western implicit cultural assumptions and worldviews which perpetuate solutionist, one-size-fits-all approaches and systems of oppression when uncritically applied across contexts (Birhane 2020; Gabriel 2020; Milan & Treré 2024; Østerskov Gammelgaard et al. 2023). While these systems often reflect universalistic ambitions and are celebrated for their ability to generalize, AI actually operates based on the peculiarities of data and models. Machine learning (ML) systems generalize by discovering correlations that depend heavily on the context described by the data they have learned from, and the purpose and design choices under which the models are constructed. These values and assumptions, rooted in the socio-political, economic, and cultural contexts of their creators, fundamentally shape the functionalities and decision-making processes in AI systems (Grey & Witt 2021; Suresh 2021).

When these systems are transferred across geographies and repurposed for tasks without critical adaptation, they risk reinforcing global inequities, erasing local specificities, and perpetuating punitive logics and hegemonic norms. This paper discusses how cultural values, positionality, and socio-cultural contexts deeply influence technological systems, highlighting the risks of transferring AI models across tasks and geographies without meaningful "translation" (Lu & Qiu 2023). Building on a socio-technical approach, we apply the concept of travelling technologies (cfr. Rottemburg 2002) to machine learning (ML), proposing a framework for designing models that are aligned with both context and purpose.

Central for the framework are the concepts of "context" as a dynamic set of situational conditions that are created in a specific socio-cultural environment (Bronfenbrenner 2009); and "purpose" as the intended and unintended aims of a system and the broader project in which it is embedded. Through these two axes, we develop a framework that delineates four scenarios of technological travel, distinguishing them based on



how contexts and tasks are transposed across sites, and which technical elements of the ontology of ML systems (Manganini, Primiero, Termine 2024) they imply in the redesign and reconfiguration of systems.

Finally, this paper explores how such a framework can serve as a tool for tracing epistemic and material consequences of technological displacement, where technoscientific infrastructures are often imposed without meaningful negotiation (Hongladarom & Bandasak 2023). By critically interrogating how technologies travel - both spatially and conceptually - this work contributes to ongoing debates on coloniality and technoscience, advocating for considering the conditions of more just and situated approaches to AI.



ID 248 - Race at the Margins: Tracing Colonial Legacies in African Microbiome Science

Marta Scaglioni, Università Ca' Foscari, Venezia

Keywords: microbiome science, race, Africa, post-colonial

This presentation examines how race is mobilized in human microbiome science through research conducted in two African contexts. Based on multi-sited ethnographic fieldwork in Tunisian and Ethiopian university laboratories (2023-2024) and in-depth interviews with Western scientists analyzing African microbiome data, I investigate how racial thinking shapes contemporary scientific practices in Africa. Recent computational advances have transformed microbiome research, enabling in situ study of microbial communities within human bodies and large-scale data analysis linking microbes to human health. Within this emerging field, African populations have become targets for Western researchers seeking high microbial diversity and "lost" bacterial species supposedly eliminated by modern medical practices. This scientific gaze often constructs African bodies as pre-modern and unchanging, revealing persistent post-colonial perspectives in contemporary research.

These scientific endeavors occur within deeply asymmetrical power relations. As South African researchers have demonstrated, most African microbiome studies emerge from unequal collaborations where Western scientists hold primary authorship positions, and funding flows predominantly from Western institutions like the NIH, Gates Foundation, and European Union (Allali et al. 2021). To understand these dynamics of scientific extraction, I propose a theoretical framework examining the articulation between post-colonial centers and peripheries.

My analysis first traces continuities between contemporary microbiome science and colonial microbiology, which served imperial agendas by implementing what anthropologist Didier Fassin (2001) terms biopolitics equating "clean" with "good" for non-Western bodies. Under the civilizing mission, these disciplines aimed to sanitize colonies while using them as laboratories where practices could be tested before implementation in European capitals (Lock and Nguyen 2010). Building on this historical foundation, I argue for an Africa-centered perspective that connects global systems of knowledge production with local contexts. Finally, I complicate traditional center-periphery dynamics by examining how African scientists strategically mobilize essentialized biological categories like "Tunisian" or "Ethiopian" microbiomes to secure funding and resources. This framework reveals race as both a technology of scientific extraction and a site of negotiation, demonstrating how margins can reshape center-periphery relationships in unexpected ways.

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ID 695 - Public sector digitalization as a transnational phenomenon: How international knowledge-sharing forums reproduce power relations as new digital frontiers

Tobias Pedersen, IT-Universitetet i København

Keywords: Transnational Digitalization, Expertise, Knowledge Sharing, Power Inequalities

Public sector digitalization is often understood as a national concept, but is increasingly becoming a collaborative and transnational undertaking through international events and fora meant to facilitate knowl-



edge-sharing between nations. However, digital governance conventions and practices often do not travel seamlessly between widely different cultural settings (Dawes and Gharawi 2018; Tsing 2005; Callon 1984). Instead, fundamental issues of power, culture and social transformations are at stake. The infrastructural practices of digital transformation have an unacknowledged "revolutionary, politically driven character" (Alston 2019), that have the potential to reconfigure and transform social worlds (Irani 2015). In this regard, a select few internationally acknowledged "front runners" of digital governance have the potential to effectively standardize how expertise, knowledge and practice of the digital state is acknowledged, valued and validated across contextual and cultural divides. Denmark, a Nordic welfare state, has widely been recognized as one of most digitalized country in the world (OECD 2024), and is increasingly engaged in maintaining its role as a digital front runner to an international audience through various international knowledge-sharing events and forums. One of these knowledge-sharing networks is a ministerial forum called 'Digital Nations'. Digital Nations comprises 10 nations from widely different cultural and geographical contexts around the world with the purpose of establishing a shared collaborative forefront for digital government and tackling contemporary technological and social issues (Digital Nations, n.d.)

From initial conversations at the Danish Ministry for Digitalization, it became apparent that although Denmark had an appetite for learning from other nations through mutual knowledge-sharing in Digital Nations, there was a strong sentiment that since Denmark was far ahead in terms of digitalization, there was simply nothing to learn from other member nations, especially lesser developed ones. This article argues that normative statements such as these become inherently exclusionary and reproduce existing power dynamics, as they set the stage for how knowledge and expertise are valued and legitimized by only a select few digital front runners in otherwise collaborative knowledge-sharing networks. Forums such as digital nations come to inhabit and reconstruct power inequalities between developed and lesser developed countries, where narratives of exceptionalism, contestation and renegotiation flourish and potentially standardize digital governance across large cultural divides.

Through a series of interviews and ethnographic encounters with digital experts in Denmark, this article will explore how the knowledge-sharing forum 'Digital Nations' perhaps inadvertently reproduce existing power relations, facilitating dominating exceptionalist narratives of what constitutes expertise and best practice of digital governance across cultural divides, effectively establishing a center of power and margins; a so-called new digital frontier. This article seeks to contribute to discussions around transnational digitalization as global power relations and how nations leverage public digitalization as forms of expertise to facilitate international governance through the entrenchment of soft-power dynamics (Nye 2008) in knowledge sharing encounters.

13 JUNE 2025 09.00 - 11.00

SESSION 2

ID 726 - Colonial Denialism and the Anthropologising of the Irish

Barra O'Donnabhain, University College Cork

Keywords: Race, physical anthropology, Ireland, prisons

In 18th and 19th century Europe, shifting topologies of power saw traditional modes of social control replaced by the new agencies of rationalism, science, and medicine within the framework of extractive capitalism. Anthropology, bridging the social, physical and medical, was an important element in the emergence of more subtle forms of power than overt domination and became a key instrument of Empire. Ireland presented late 19th century physical anthropology with a conundrum: a white (or were they?) population in Europe that did not fit with the self-image of Western European elites. This paper considers three episodes of physical anthropological research on the Irish: Beddoe's Index of Nigrescence (1870); Galton's Dublin Anthropological Laboratory (1891-1901); and The Harvard Anthropological Mission to Ireland (1932-1936). Each was an effort to answer the question posed in an 1882 publication: What Science Is Saying About Ireland. In all three cases, the results of studies that were dressed up as objective scientific research recapitulated 19th century colonialist concepts of Ireland and the Irish. Beddoe drew conclusions about the Africanoid nature of the Irish. The Dublin Anthropological Laboratory (DAL) drew conclusions



about the shrewdness of the natives (as distinct from intelligent) and their propensity to violence. The Harvard Mission drew conclusions that repeated earlier narratives about the racial primitivism of some of the population, while also promoting a racialised understanding of the sectarian divide in Ireland. The ways in which the Irish were imagined in physical anthropology speaks to the role of technoscience in colonial denialism. Supposedly objective approaches to the study of human variation were deeply imbricated with the operation of colonial power. The results of this flawed scientific research informed public policy in a manner that further enabled the colonial administration of the island. This was particularly the case with the development of the modern prison system once transportation to the colonies ceased in the 1850s. The resulting 'Irish System' of incarceration and forced labour was understood to be so effective that it was promoted internationally, particularly at the first international penitentiary congresses of the 1870s, and influenced the development of prison systems in two of the new polities of the 1870s: the Kingdom of Italy and the German Empire. These developments incorporated the racialised perspectives that were inherent in the 'Irish System' and that were confirmed by the 'science' of Beddoe, the DAL, and the Harvard Mission. The last of these was directed by Earnest Hooton and with his work on racial profiling of criminals, these diverse strands come together, with an ideology of whiteness and white supremacy hiding in plain sight. This paper argues that 19th and 20th century research questions about What Science Is Saying About Ireland played an important role in the development of nuanced understandings of whiteness and Otherness, the consequences of which remain with us today.

13 JUNE 2025 09.00 - 11.00

SESSION 2

ID 384 - Mapping Decolonizing: Wageningen University & Research

Esha Shah, Wageningen University & Research

Aletia Shaw, University of Sheffield

Keywords: decoloniality, history of University, history of student movement

This paper responds to the widespread demands made globally to decolonize Northern higher education institutions through a series of student-led campaigns – 'Rhodes Must Fall', 'Why is my curriculum so white?'; 'Why I don't have black professors', #LiberateMyDegree – which has now turned into a widespread call inviting metropolitan. Global North universities to develop the "vital task of historical self-understanding". It closely engages with the internal debates on decolonizing within Wageningen University in the Netherlands, which for a long time, after its was established in 1876, trained experts to work in the colonies.

The paper engages with the processes of decolonizing in the history of International Land and Water Management (ILWM) Study program since the 1970s in response to a series of actions, protests, events, demands and debates loosely understood as forming Wageningen Student Movement (WSM) that although emerged in the backdrop of the student movements of Europe of 1968, but peaked in the 1980s, and lasted for more than a decade. Usually understood as left-wing, anti-authoritarian, anti-imperialist, and feminist, these collection of self-organised student groups debated what could count as socially relevant, problem-based education and demanded curricula, pedagogical and institutional change. Eventually it contributed significantly to a new world view and vision for the ILWM program.

WSM demanded the inclusion of socio-political questions to formerly technical courses, thereby opening up new ways of engaging with Third World societies and challenging hierarchies of knowledge. Discourses of emancipation and liberation of the Third World, together with the 'socio-technical turn', informed and motivated students to demand reframing of the International Land and Water Management (ILMW) program towards a pedagogy for training 'ethical engineers'.

This paper examines Wageningen student movement by using "biography as history" methodology to show how "affective networks" enabled radical changes in the curricula and pedagogic practices and, at the same time, albeit unintentionally, created spaces of solidarity within which concepts of race, gender, and colonial histories remained low-key and even absent. By engaging with the "collective biographical narratives" of students who played a key role in the movement, we examine how this era-defining chapter



in the history of the ILWM study program is remembered. How were the affective networks of solidarity created and sustained? Who then were included or excluded from these networks? Which stories might be 'left out' of these narratives, and why? And how these affective networks precipitated in determining the contours of change that lasted a long time?

We argue that the demands made through these affective networks radically transformed the formerly technical courses by incorporating socio-technical epistemologies. However, histories of women's oppression and histories of colonialism neither significantly informed the affective networks forming the core of the movement nor the reworking of curricula. As a result, narratives of gender, race and colonialism were not centrally incorporated in the new study program. We argue that the White Man's Burden mentality is unintentionally but unreflexively sustained even in the reframed curricula in response to the Wageningen Student Movement being predominantly Dutch, White, and led by male members.

13 JUNE 2025 09.00 - 11.00

SESSION 2

ID 768 - "Undoing Empire" with troubling technoscientific matter in university archives

Órla O'donovan, University College Cork

Keywords: university reckoning, colonial technoscientific violence, postcolonial feminist science studies

Over the past decade many universities internationally (e.g. Harvard University, Trinity College Dublin) have been forced to begin reckoning with their historical complicity in colonial technoscientific violence. This violence involved multiple processes of margin-making including marginalising many people from full humanity, and producing expertise in care-as-violence (Sharp, 2018) deemed necessary for the civilisation and protection of (and from) these less-than-human others. Frequently archived in off-site university storage facilities, material traces of colonial violence are being repatriated or curated differently. However, as many decolonial movements and scholars have emphasised, the work of "undoing empire" (Rassool, 2015) requires much more than this. It must extend to troubling the myriad ways in which colonial logics and ways of being, feeling and doing endure in the contemporary university (Smith et al. 2020). For Angela Willey (2016, 992), the central project for postcolonial feminist science studies is "thinking creatively, capaciously, pluralistically, and thus irreverently with respect to the rules of science—about the boundaries and meanings of matter, "life," and "humanness".

In this paper, I consider three reckoning initiatives in University College Cork, where I work, in light these challenges. All involve technoscientific matter that is deeply troubling because of the exploitative and extractive ways in which it was acquired or crafted. I argue that the third (non-institutional) initiative has the greatest potential to be troubling in the sense of helping us respond to Willey's call to think creatively and irreverently with respect to the rules of science, and to parochialize them. Originally named Queens College Cork and an institution of settler colonialism, these initiatives are considered through an understanding of Ireland's multiple colonialisms (Rassool, 2015) and with reference to disputes in postcolonial theory over what should count as relevant colonialities (Harding, 2009).

The first initiative is the much publicised "Kinship" project, an international and multi-agency collaboration led by the celebrated Irish artist Dorothy Cross that involved the return of an "Egyptian mummy" (Cross, 2025). According to Cross, Kinship was a process of restitution rather than repatriation, a process of re-humanisation that involved the return of a human body, not an artifact, to its homeland (O'Sullivan Vallig, 2024). The second is the restoration and relocation of the university's 19th pathology collections. This was instigated in anticipation of the Human Tissue (Transplantation, Post-Mortem, Anatomical Examination and Public Display) Act 2024, but also against a background of public disquiet about the careless use of the bodies of the disenfranchised dead. The Act introduces new legal requirements regarding the storage, handling, transportation, disposal or return of "human tissue". The final initiative is research being undertaken by the Living Well with the Dead Research Collective, of which I am a member, with a 19th century collection of medical wax mouldages. I consider the potential of working with these ambiguous and unruly



entities to help university reckoning that disrupts hegemonic boundaries between human/non-human and life/non-life, and helps us think creatively beyond Western conceptions of the dead and what counts as human remains.

13 JUNE 2025 09.00 - 11.00

SESSION 2

ID 890 - Colonial Legacies and Carbon Lock-in: The (Post)Colonial History of Samcheok, Korea and Fossil Technoscience

Jihye Kim, 한국과학기술원 (KAIST)

Keywords: infrastructure, post-colonialism, climate change

In May 2024, Samcheok Blue Power Unit 1—a coal-fired thermal power plant in Samcheok, Gangwon Province, South Korea—entered commercial operation. With Unit 2, scheduled for completion by the end of 2025, the facility's total installed capacity will rise to 2,100 MW. This development is particularly striking given that fossil fuels are major drivers of climate change and South Korea has pledged to phase out coal by 2050. The situation is further complicated by Samcheok's reputation as a bastion of anti-nuclear resistance. How can such paradoxical energy policies coexist?

This study critically examines the interplay between colonial legacies, technoscientific development pathways, and carbon lock-in within the context of regional energy infrastructure. Samcheok, situated in the resource-rich, mountainous, and coastal northeast of South Korea, offers a compelling case study. Historically populated by slash-and-burn farmers, land-clearing cultivators, and fishermen, the region was only integrated into national developmental agendas after Japan's colonial rule. During that period, Japan constructed railway networks linking local mines and ports, thereby laying an early technoscientific foundation that continues to shape regional trajectories. In the postcolonial era, under shifting global influences, Samcheok evolved into a significant exporter of tungsten and later witnessed the development of anthracite coal mines in response to growing domestic energy needs.

The region's coal mining heritage has also nurtured a robust tradition of labor activism and resistance, which notably contributed to averting nuclear power development—a feat rarely replicated elsewhere in South Korea. Yet, with the decline of the coal industry and accompanying economic and demographic challenges, the emergence of thermal power infrastructure has been framed as a beacon of hope by local communities.

Utilizing an STS framework, this research investigates the "circuits" of capital, affect, and materiality embedded in fossil fuel infrastructures. Here, affect is not conceptualized as an amorphous force but rather as one circumscribed by specific infrastructural promises (Anand et al., 2018). By mapping these interlinked circuits, the study elucidates why practices that engender uninhabitable environmental and social conditions persist in East Asia. Moving beyond critique, the research aspires to contribute to broader STS debates by offering novel insights into the enduring influence of colonial legacies on contemporary technoscientific and environmental landscapes in the Anthropocene.

