

ABSTRACTS 2025

Imagining green and futuristic Japan: Representations of “Society 5.0” in the Osaka-Kansai Expo 2025

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Past scholarship on mega-events has mainly focused on Western countries and the events themselves, while neglecting the mechanisms of socio-technical processes for nation-building. The Science and Technology Studies (STS) typically focus on specific technologies or national plans which have not examined the imaginaries behind mega-events. Under the theme “Designing Future Society for Our Lives,” this Osaka-Kansai Expo has 158 country and territory participants, along with seven international organisations, in the artificial Yumeshima Island from 13 April to 13 October 2025. This paper views the representations of sustainability and temporality imaginaries as forms of nation-building for hosting the Expo 2025 in Japan. The design of the Japan Pavilion symbolises the cycle of life and the circular economy, while the Future City Pavilion aims to answer “(W)hat kind of tomorrow awaits us?”. These sociotechnical imaginaries are positioning Japan in the future as a more technologically advanced, economically prosperous, environmentally friendly, and socially vibrant society. These imaginaries, infrastructures, and mega-events are co-produced to symbolise the pursuit of “Society 5.0” national plan. With onsite and online observation, this paper will further discuss how the “Society 5.0” and the Osaka-Kansai Expo 2025 is a state-led response to crises and globalisation. Based on findings in this mega-event, the paper critically reflects on the crucial role of technoscience and the representations through mega-events in the process of nation-building in the 21st Century.

Living with Machines: Reconfiguring Social Practices of Everyday Interaction in Japan

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As ageing societies worldwide face pressing challenges related to workforce shortages, digital inclusion, and technological adaptation, Japan has emerged as a pioneer in the integration of everyday automation technologies, such as self-cashier machines. Widely implemented across Japanese retail spaces, self-cashier machines represent a microcosm of broader societal and policy debates on the role of technology in an ageing society. While these technologies promise efficiency and convenience, they also raise concerns regarding accessibility, digital literacy, and social isolation, particularly for older adults. The transition from human cashiers to automated systems is thus not merely a technological shift but also a social one. This project examines how different generations in Japan engage with self-cashier machines, how manufacturers of these machines navigate technological implementation in light of demographic shifts, and how policymakers balance the needs of older versus younger generations when introducing new technologies. Based on a series of group interviews with users across different generations, as

well as expert interviews with industry representatives, and policymakers, this study explores the socio-material implications of automation in an ageing society. The research is grounded in Social Practice Theory and analyzes how technological adoption is embedded in everyday routines, social norms, and material infrastructures. The theory helps to illuminate how self-cashier machines are not only tools of convenience but also transformative elements shaping the social fabric of everyday life. With Japan having to balance intergenerational digital equity and economic pragmatism, this tension is also increasingly relevant to other ageing societies in Europe, which must similarly navigate the intersection of automatization, demographic change, and social needs.

Teaching About and With AI Technology in (Global) Japanese Studies

Susanne Brucksch, Teikyo University, Japan

Artificial Intelligence (AI) as an emerging technology evokes manifold expectations and concerns across various disciplines. Particularly, Science and Technology Studies usually take a critical stance when analysing the impact of a technology and its surrounding social settings. The perspective offered by this discipline can refine the contextualization of AI within teaching and research focused on Japan. Although STS research provides in-depth studies of the situatedness of technologies, the specific locale regarding a critical reflection of the socio-cultural context of an emerging technology remains somehow limited on that part (Brucksch, Wagner 2016).

Therefore, this presentation advocates that both STS research in Japan and Japanese Studies provide essential perspectives to critically engage with AI applications in teaching about research topic and as tools employed in education concerning Japan. This stance will be underlined with data from a student survey on prior experiences with AI tools and examples from teaching (Global) Japanese Studies.

Uncovering Hidden Japan: Using AI to Support Deep Intercultural Learning

Andrea Csendom, University of Osaka, Japan

This presentation explores how AI can be integrated into teaching to foster deep intercultural learning about Japan. Drawing on classroom practices from Japanese Culture through Stories, a course taught in English at the University of Osaka for both international and Japanese students, it examines how AI can be used to reinterpret Edo-period *kibyōshi* picture books and reveal cultural meanings beyond surface images. Combining the cultural iceberg model with creative AI-based visualizations, the talk discusses how technology can both reinforce and challenge stereotypical images of Japan. It argues that, when used critically, AI becomes a medium for cultural reflection, enabling learners to recognize and move beyond stereotypical representations while engaging with Japan's layered identities (historical, visual, and conceptual) through dialogue between the past and the present.

Embodied AI in Elder Care: Comparing Human–Avatar and Human–Robot Interaction across Settings and Cultures Eva Theresa Jahn and Moritz Hartung, Siegen University, Germany

This talk presents findings from the Nightwatch study, as part of the FUSION project on the University of Siegen, which deals with embodied AI in elderly care. Based on qualitative field research in a German nursing home, the first phase examined how nursing staff and residents—with and without dementia—can be supported by the avatar Ann-Sophie during the day and night. The results showed that the quality of interaction and acceptance depended heavily on the context and the cognitive and emotional state of the residents. The second phase, conducted at the senior citizens' fair in Kaiserslautern, focused on the embodiment of AI as Avatar *Ann-Sophie* versus the humanoid robot *Ameca*. After the interaction, both technical systems were evaluated and ethical issues associated with their use were discussed. The third phase aims to conduct a comparative study in Sendai, Japan, where the setup with *Ann-Sophie* as *Yumi* in Japanese was presented in a care facility in order to identify intercultural differences in the acceptance of such a system. This comparison allows us to discuss how different material forms and cultural expectations of “care” influence the trust, commitment, and perceived value of AI companions.