

## Publications

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#### Monographs and edited volumes

- *Die Institutionalisierung der Mathematik als Wissenschaft im Japan der Meiji- und Taishō-Zeit* (The institutionalization of mathematics as a science in Meiji and Taishō-era Japan). Acta Historica Leopoldina, 77 (2022). Halle (Saale): Nationale Akademie der Wissenschaften Leopoldina.

- (ed. with Franz Waldenberger) *The Digital Transformation: Implications for the Social Sciences and the Humanities*, Deutsches Institut für Japanstudien, Miscellanea 21 (2020).

#### Papers and book chapters (peer reviewed)

- (with Franz Waldenberger) "Responses to the pandemic and their impact in Japan and Germany – a knowledge infrastructure perspective"; in: Nishitani, Yuko; Lein, Eva (eds.) *Protection and recovery for vulnerable groups, post-pandemic: European and Asian approaches* (to appear). Cheltenham, UK: Edward Elgar Publishing.

- "Bridging Göttingen and Tokyo: Oral Culture and the Dynamics of Mathematical Knowledge Transfer"; in: Ciesielska, Danuta; Heller, Henning; Tobies, Renate; Zwierzyńska, Joanna (eds.) *Felix Klein's Foreign Students - Opening Up the Way for Transnational Mathematics* (to appear). Cham: Birkhäuser.

- "Mathematics in modern Japan as observed through journals: results and prospects"; in: Gispert, Hélène; Nabonnand, Philippe; Peiffer, Jeanne (eds.) *Circulations des mathématiques dans et par les journaux: histoire, territoires et publics* (to appear). London: ITSE.

- (with Franz Waldenberger) "Japan's 'consensual' variety of digital capitalism and its global relevance"; in: *Asia Pacific Business Review*, Vol. 30, No. 3 (2024), pp. 596-612. [Also appeared as: "Japan's 'consensual' variety of digital capitalism and its global relevance"; in: Whittaker, D. Hugh; Nakata, Yoshifumi (eds.) *Reforming Capitalism, Going Digital and Green* (2025)]

- "Tannaka Tadao's 1938 paper on the duality of compact topological groups and its historical

**Essays and articles (not peer-reviewed)**

- background"; in: Krömer, Ralf; Haffner, Emmylou (eds.) *Duality in 19th and 20th century mathematical thinking* (2024). Cham: Birkhäuser, pp. 355-434.
- Kümmerle, Harald (2023). "More Than a Certification Scheme: Information Banks in Japan Under Changing Norms of Data Usage". In: Khare, Anshuman; Baber, William W. (eds.), *Adopting and Adapting Innovation in Japan's Digital Transformation*. Singapore: Springer Nature, pp. 193-211.
  - "Japanese data strategies, global surveillance capitalism, and the 'LINE problem'"; in: *Matter: Journal of New Materialist Research*, Vol. 3, No. 1 (2022), pp. 134-159.
  - "Hakushi ronbun 'Meiji Taishō jidai no Nihon ni okeru sūgaku no kagaku to shite no seidoka': sono seika to arata na mondai teiki" (Doctoral thesis on "The institutionalization of mathematics as a science in Meiji and Taishō-era Japan"; in: *RIMS Kōkyūroku Bessatsu*, B85 (2021). Kyoto: Research Institute for the Mathematical Sciences, Kyoto University, pp. 143-153.
  - "Hayashi Tsuruichi and the success of the Tōhoku Mathematical Journal as a publication", in: Morimoto, Mitsuo; Ogawa, Tsukane (eds.) *Mathematics of Takebe Katahiro and History of Mathematics in East Asia*, Advanced Studies in Pure Mathematics 79 (2018). Tokyo: Mathematical Society of Japan, pp. 347-358.
  - "Calibrating Social Theories of Digital Technology based on Japan's COVID-19 Response: Surveillance Capitalism and Cyber Civilization"; in: *KGRI Working Papers*, No. 3 (2024), pp. 1-29.
  - "Hayashi Tsuruichi to 'Tōhoku sūgaku zasshi'" (Hayashi Tsuruichi and the 'Tōhoku Mathematical Journal'); in: *Kyūri*, No. 26 (2024), pp. 42-52.
  - "#readme.txt: Die Institutionalisierung der Mathematik als Wissenschaft im Japan der Meiji- und Taishō-Zeit" (#readme.txt: The institutionalization of mathematics as a science in Meiji and Taishō-era Japan); in: *[gab\_log] Geisteswissenschaften als Beruf* (2024).
  - "On the relation between Japan's COVID-19 response and the National Data Strategy"; in: *The SSI 2023 Annual Conference Proceedings* (2023). Tokyo: The Society of Socio-Informatics, pp. 60-64.

- "Tayōsei no fusoku koso ga kanō ni suru hōhōronteki kōken" (Methodological contributions that are made possible especially through a lack of diversity); in: *Dai 26 kai kokusai kagakushi gijutsushi igakushi taikai hōkoku shū* (Collection of reports on the 26th International Congress for the History of Science and Technology) (2023). Tokyo: Commission for History in the Science Council of Japan, pp. 44-45.
- "Ein japanischer Sonderweg" (Japan's special path); in: *Weltweit vor Ort*, Vol. 23, No. 1 (2023), pp. 42-47. [Also appeared as: "Japan's special path"; in: *Global Insights* (2024), pp. 20-25]
- "Japans digitale Transformation: Vorreiter, Nachzügler und Partner" (Japan's digital transformation: pioneer, straggler and partner); in: *Max Weber Stiftung Themenportal* (2022).
- "Catchword LINE Mondai"; in: *DIJ Newsletter*, No. 68 (2022).
- "Kindai Nihon no sūgaku no hatten to tōji no daigaku no seido - kyōju shoku shūnin ni tsunagaru 'chishiki seisan'" (The development of mathematics in modern Japan and the institutions of the contemporary university - The "knowledge production" connected to assuming a professorship -); in: *Nihongo to nihongo kyōiku* (Japanese language and Japanese language education), No. 50 (2022), pp. 23-44.
- "Digital transformation in Japan: discourse analysis based on the concept of data"; in: *DIJ Newsletter*, No. 61 (2020).
- "Postscript: Comparative and historical perspectives on the digital transformation"; in: Harald Kümmerle, Franz Waldenberger (eds.) *The Digital Transformation: Implications for the Social Sciences and the Humanities*, Deutsches Institut für Japanstudien, Miscellanea 21 (2020), pp. 81-84.
- "Nihon no sūgakushi to no en o ete – ōbei kenkyūsha kara no teian" (Connecting to the history of mathematics of Japan – a proposal by a European-American researcher); in: *Sūgakushi kenkyū* (Research in the history of mathematics), No. 234 (2020), pp. 10-16.
- (with Franz Waldenberger) "Big Data and the Future of Knowledge Production"; in *DIJ Newsletter*, No. 60 (2019).
- "Fujisawa Rikitarō to kenkyū gimū" (Fujisawa

Rikitarō and the research imperative); in: *Arīna* (Arena),  
Vol. 21 (2018), pp. 97-105.

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