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PROFESSOR FOR REAL-WORLD LABORATORY DESIGN

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UNESCO-CHAIR HIGHER IN HIGHER EDUCATION FOR SUSTAINABLE DEVELOPMENT

(CHAIRHOLDER)

FACULTY OF SUSTAINABILITY

LEUPHANA UNIVERSITY LÜNEBURG • UNIVERSITÄTSALLEE 1 • 21335 LÜNEBURG, GERMANY

Expertise

- Transdisciplinary sustainability research including a particular focus on research in real world laboratories
- Methods of knowledge integration and complex problem solving
- Coordination of inter- and transdisciplinary projects and consortia at the interface of different disciplines and the science-society interface
- Teaching of project-based courses, seminars as well as lectures; development and implementation of study formats as well as programs (English and German)

Employment History and Affiliations

Karlsruhe Institute of Technology, Professor (W3)	2022-
Leuphana University of Lüneburg, Professor (W3)	2010-2022
Institute for Environmental Decisions, ETH Zurich, Researcher and Senior Researcher	2001-2009
School of Sustainability, Arizona State University, Adjunct faculty member	2015-2021
Graduate School of Business, Universiti Sains Malaysia, Visiting Professor/Honorary Professor	2019 /2020-2022
Center for Industrial Ecology, Yale University, New Haven, USA, 3 months research visit	2008

Education

Department of Environmental Natural Science, ETH Zurich, Dr. Sc. ETH	2001-2005
Department of Environmental Natural Science, ETH Zurich, MSc. (distinction)	1997-2001
University of Bayreuth, Pre-Diploma in Geo-Ecology	1995-1997

Activities in the academic system

Daniel has been recently elected as founding president of the **Society for Transdisciplinary and Participatory Research**. He is also a member of the **Expert Committee on Research of the German Commission for UNESCO** and a member of the **scientific advisory board** of the **Helsinki Institute of Sustainability Science (HELSUS)** at Helsinki University. Besides that he's on the **editorial board** of the journals **Sustainability Science** and **Urban Transformations**, has been continuously **reviewing** manuscripts for several well-established scientific journals and has also been involved as reviewer for various funding programs and research institutions. At Leuphana University of Lüneburg he co-designed the **double degree Master Program in Global Sustainability Science** in collaboration with Arizona State University and was academic co-director of this program for several years. Furthermore, he (co-)lead several inter- and transdisciplinary research projects often involving actors outside academia and scholars from various disciplines focusing on both realizing transdisciplinary research and doing conceptual as well as empirical research on a meta-level related to this research mode. Five exemplary projects are: (1) **Zukunftsstadt Lüneburg 2030+** (funded by the German Federal Ministry of Education and Research), in which a real-world laboratory revolving around the local implementation of the Sustainable Development Goals (SDGs) was established in a collaboration of civil society actors, university and city administration; (2) **tdAcademy – platform for transdisciplinary research and studies** (funded by the German Federal Ministry for Education and Research and the Robert Bosch Stiftung) focusing on investigating core aspects of transdisciplinary research, capacity building to enable transdisciplinary research and network building among scientists using transdisciplinary approaches; (3) **Leverage points for sustainability transformations** (funded by Volkswagen Stiftung and the Ministry of Science and Culture of the German State of Lower Saxony), in which knowledge production and use was investigated as one of three crucial realms of deep leverage points to foster sustainability transformations; (4) **Accompanying research of the BaWü-real-world labs** (funded by the Ministry of Science, Research and Arts of the German State of Baden-Württemberg) in which 14 projects of the first two pioneering funding programmes were scientifically accompanied; and (5) **Modes of sustainability-related research in comparison (MONA)** (funded by DFG), which was one of the first studies empirically investigating the relation between different (inter- and transdisciplinary) modes of sustainability-oriented research and their scientific as well as societal impact. At Leuphana University of Lüneburg, Daniel was Dean of the School of Sustainability from 2012 to 2016 and was also Special Advisor of the President for Sustainability from 2016-2021.

10 Relevant Publications

- * Barth, M., Jiménez-Aceituno, A., Lam, D. P., Bürgener, L., & Lang, D.J. (2023). Transdisciplinary learning as a key leverage for sustainability transformations. *Current Opinion in Environmental Sustainability*, 64, 101361.

- *Jahn, S., Newig, J., **Lang, D. J.**, Kahle, J., & Bergmann, M. (2022). Demarcating transdisciplinary research in sustainability science—Five clusters of research modes based on evidence from 59 research projects. *Sustainable Development*, 30(2), 343-357.
- ***Lang, D. J.**, & Wiek, A. (2022). Structuring and Advancing Solution-oriented Research for Sustainability. *Ambio*, 51(1), 31-35.
- *Bergmann, M., Schöpke, N., Marg, O., Stelzer, F., **Lang, D. J.**, Bossert, M., Gantert, M., Häußler, E., Marquardt, E., Piontek, F. M., & others. (2021). Transdisciplinary sustainability research in real-world labs: Success factors and methods for change. *Sustainability Science*, 16(2), 541-564.
- *Caniglia, G., Luederitz, C., von Wirth, T., Fazey, I., Martín-López, B., Hondrila, K., König, A., von Wehrden, H., Schöpke, N. A., Laubichler, M. D., & **Lang, D. J.** (2021). A pluralistic and integrated approach to action-oriented knowledge for sustainability. *Nature Sustainability*, 4(2), 93-100. <https://doi.org/10.1038/s41893-020-00616-z>
- *Lam, D. P., Martín-López, B., Wiek, A., Bennett, E. M., Frantzeskaki, N., Horcea-Milcu, A. I., & **Lang, D. J.** (2020). Scaling the impact of sustainability initiatives: a typology of amplification processes. *Urban Transformations*, 2, 1-24.
- *Caniglia, G., John, B., Bellina, L., **Lang, D. J.**, Wiek, A., Cohmer, S., & Laubichler, M. D. (2018). The glocal curriculum: A model for transnational collaboration in higher education for sustainable development. *Journal of Cleaner Production*, 171, 368–376. <https://doi.org/10.1016/j.jclepro.2017.09.207>
- *Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., von Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & **Lang, D. J.** (2017). Leverage points for sustainability transformation. *Ambio*, 46(1), 30–39. <https://doi.org/10.1007/s13280-016-0800-y>
- *Luederitz, C., Schöpke, N., Wiek, A., **Lang, D. J.**, Bergmann, M., Bos, J. J., Burch, S., Davies, A., Evans, J., König, A., Farrelly, M. A., Forrest, N., Frantzeskaki, N., Gibson, R. B., Kay, B., Loorbach, D., McCormick, K., Parodi, O., Rauschmayer, F., ... Westley, F. R. (2017). Learning through evaluation – A tentative evaluative scheme for sustainability transition experiments. *Journal of Cleaner Production*, 169, 61–76. <https://doi.org/10.1016/j.jclepro.2016.09.005>
- ***Lang, D. J.**, Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: Practice, principles, and challenges. *Sustainability Science*, 7(SUPPL. 1), 25–43. <https://doi.org/10.1007/s11625-011-0149-x>