

Dr. Ing. Christoph Kinkeldey giving a lecture about IKON

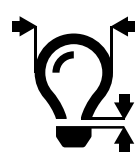
© Antje Dittmann, Museum für Naturkunde Berlin



Modelling Knowledge

Eine wunderbare Heiterkeit hat meine ganze Seele eingenommen, gleich den süßen Frühlingsmorgen, die ich mit ganzem Herzen.

[Learn more](#)



Qualitative Insights

Weit hinten, hinter den Wortbergen, fern der Länder Vokalien und Konsonantien leben die Blindtexte. Abgeschlossen wohnen sie.

[Learn more](#)



Interpretable by Design

Überall dieselbe alte Leier. Das Layout ist fertig, der Text lässt auf sich warten. Damit das Layout nun nicht nackt.

[Learn more](#)

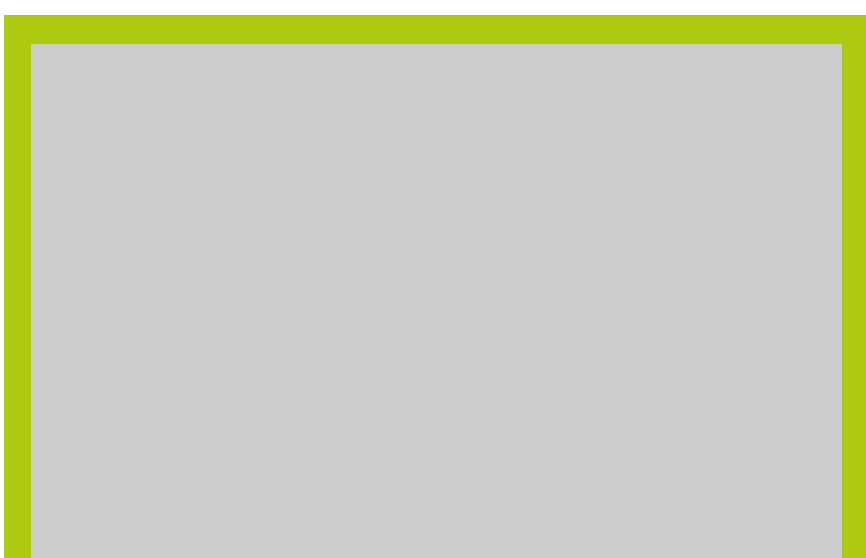
About IKON

The Natural History Museum in Berlin (Museum für Naturkunde - Leibniz Institute for Evolution and Biodiversity Science) is among the top 10 world-wide and the largest of its kind in Germany. The museum is home to over 30 Mio. collection objects, more than 250 researchers and more than 400 research assistants as well as PhD students, from disciplines such as biology, paleontology, mineralogy and information science.

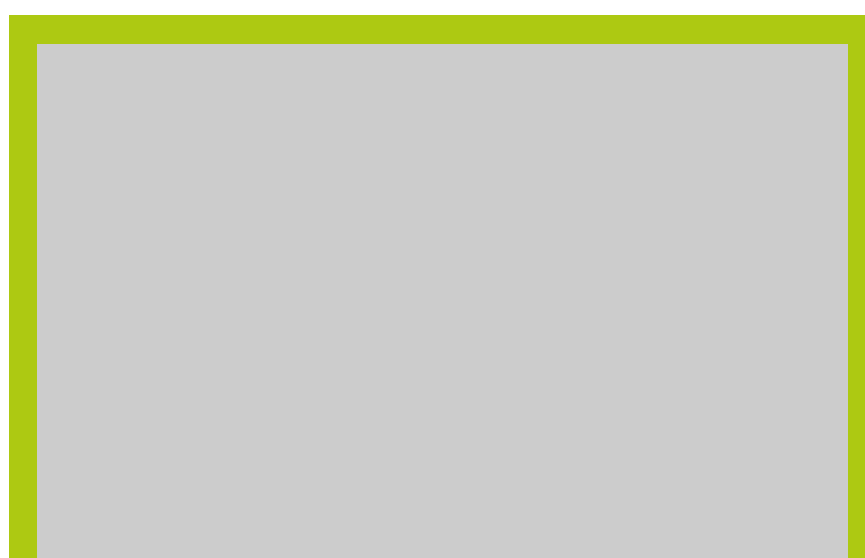
Behind the publicly accessible spaces, these researchers work on manifold projects in a multidisciplinary research setting. To bolster the Natural History Museum's efforts at ensuring knowledge transfer throughout its organisation, the HCC collaborates with the museum in this BMBF-funded project to unveil the currently tacit knowledge, competencies, methods and research project information to the employees of the museum. A formal ontology is developed to support this endeavor.

We aim to provide the researchers at museum with (1) an ontology for documenting and linking knowledge transfer activities, (2) insights about potentials for knowledge transfer powered by machine learning and (3) interactive visualisations of these networked sources of knowledge. Focussing on the seamless integration of these provisions, the HCC aims to set up an actionable and holistic system that visualises research project data and their potential for knowledge transfer in research museums like the Natural History Museum.

Software



IKON Visualization Software
<https://github.com/FUB-HCC/IKON>



IKON Ontology
<https://github.com/FUB-HCC/IKON-ontology>

Publications

J. J. Benjamin, C. Müller-Birn and C. Kinkeldey, "Understanding Knowledge Transfer Activities at a Research Institution through Semi-Structured Interviews", Freie Universität Berlin: Berlin, Rep. TR-B-19-02, 2019.

J. J. Benjamin, "One and the Same: Ethical Attribution and Distributed Reasoning in ML-driven Systems", in ACM DIS 2019 CoDesigning AI Futures Workshop, New York, NY: ACM.

J. J. Benjamin, C. Müller-Birn, "Materializing Interpretability: Probing Meaning in Algorithmic Systems", in Proceedings of the 2019 ACM Conference Companion Publication on Designing Interactive Systems. DIS '19 Companion, New York, NY: ACM.

Oppenlaender, J. J. Benjamin and C. Müller-Birn, "Towards Sociotechnical Management of Intra-Organisational Knowledge Transfer", in Multikonferenz Wirtschaftsinformatik 2018: Data driven X — Turning Data into Value, P. Drews et al., Eds., Lüneburg: Leuphana Universität, pp. 307–313.

M. Hong, J. J. Benjamin and C. Müller-Birn, "Coordinating Agents: Promoting Shared Situational Awareness in Collaborative Sensemaking", in Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing, New York, NY: ACM, pp. 217–220.

J. J. Benjamin, C. Müller-Birn and R. Ginosar, "Transparency and the Mediation of Meaning in Algorithmic Systems", in Workshop 'Participation + Algorithms', 2018.

J. J. Benjamin, C. Müller-Birn and S. Razniewski, "Designing for Algorithm Awareness in Peer Production Systems", 2018.

J. J. Benjamin, "Complex Intentions: A Methodology for Contemporary Design Practice", in Proceedings of the 2018 ACM Conference Companion Publication on Designing Interactive Systems, New York, NY: ACM, pp. 347–350.

J. J. Benjamin, "Intentional Collapse: Human Relations to Intelligent Artifacts & Environments", in DIS 2018 Workshop 'From Artifacts to Architecture'.

J. Oppenländer, J. J. Benjamin and C. Müller-Birn, "Socio-technical Revelation of Knowledge Transfer Potential", in Proceedings of the HCOMP 2017 Works in Progress and Demonstration Papers, A. Bozzon, M. Venzani, Eds., AAAI.

Acknowledgement

This work is supported by the German Federal Ministry of Education and Research, grant 03101633

GEFÖRDERT VOM

