Summer School / Module xxxx

Archetype Analysis in Sustainability Research

October 8-12, 2018

Resource Economics Group, Humboldt-Universität zu Berlin

Teachers: **Klaus Eisenack** (Resource Economics Group, Humboldt-Universität zu Berlin), **Markus Hanisch** (Economics of Agricultural Cooperatives, Humboldt-Universität zu Berlin), **Zuzana Harmáčková** (Stockholm Resilience Center), **Christoph Oberlack** (Centre for Development and Environment, University of Bern), **Matteo Roggero** (Resource Economics Group, Humboldt-Universität zu Berlin), **Diana Sietz** (Potsdam-Institute for Climate Impact Research), **Tomáš Václavík** (Ecology & Environmental Sciences, Palacký University Olomouc), **Sergio Villamayor-Tomas** (Institute of Environmental Science and Technology, Autonomous University of Barcelona).

Description of the course

Interdisciplinary sustainability research, e.g., on land-use or adaptation to climate change, is increasingly confronted with the difficulties of embracing complexity while building and testing theories that synthesize such complexity into actionable theories. Comparative case studies are frequently employed for this task. However, rigorous comparative approaches are yet frequently hampered by (i) a high heterogeneity of cases that limit generalization, and (ii) multiple epistemic perspectives (e.g. from institutional economics, geography or modelling) that are not easily integrated. In recent years, archetype analysis has been evolving as an approach to deal with this twofold challenge.

The summer school provides a cutting-edge introduction to archetype analysis by internationally leading experts. The approach will be trained by hands-on applications, accompanied by an introduction to and training of suitable analytical methods (Qualitative Comparative Analysis or Cluster Analysis), and further developed.

Outline

1. Fundamentals of archetype analysis
2. Study protocols for archetype analysis
3. Introduction to an example topic and data
4. In two parallel streams: introduction to & training of qualitative comparative analysis (QCA) or Cluster Analysis
5. Practicing archetype analysis in working groups
6. Presentation of results
7. Reflection on further advancing the approach
8. Individual report with research design for an archetype analysis.

Teaching Methods: Individual training and collaborative project: 15% lectures, 30% trainings, 25% group work, 30% seminars; grading (if required, 3 CP, category E): group presentation (50%), individual report (50%).

Deadline: Please apply according to the form below **until June 29th**. We offer up to 20 places. If there are too many qualified applicants, a selection will be made.

Requirements: The summer school is primarily offered to scientists on a PhD and postdoc level. In addition, senior level researchers interested in broadening their skills in archetype analysis are welcome. In exceptional cases, also master students can participate. Teaching language is English.

The summer school is not limited to any specific research background; however, the following is expected: (i) Experience in at least one scientific method (qualitative or quantitative). (ii) Basic knowledge of analytical software, e.g. R. (iii) Motivation to read literature for preparation. (iv) Interest in topics of sustainability, the environment and natural resources.

Venue: Resource Economics Group, Humboldt-Universität zu Berlin, Hannover'sche Straße 27, 10115 Berlin

Application: Your application shall contain the following information:

1. Name, Affiliation, Status
2. Supervisor(s) (if applicable)
3. Motivation (max 300 words)
4. Methodological skills so far (keywords)
5. Preference for method training: QCA or Cluster Analysis

Contact: Please send your application and inquiries to resource-economics@hu-berlin.de. Further information will be posted on www.resource-economics.hu-berlin.de.

References

(A collection of articles and resources will be provided will be provided before the summer school.)

Eisenack, K. (2012). Archetypes of adaptation to climate change. In M. Glaser, G. Krause, B. Ratter, & M. Welp (Eds.), Human/Nature Interactions in the Anthropocene: Potentials of Social-Ecological Systems Analysis, 107-122. New York, NJ: Routledge.

Eisenack, K., M. Lüdeke, J. Kropp (2006) Construction of Archetypes as a Formal Method to Analyze Social-Ecological Systems, Proceedings of the Institutional Dimensions of Global Environmental Change Synthesis Conference, Bali.

Kok, M., Lüdeke, M., Lucas, P., Sterzel, T., Walther, C., Janssen, P., Sietz, D. & de Soysa, I. (2016). A new method for analysing socio-ecological patterns of vulnerability. Regional Environmental Change, 16(1), 229-243.

Levers, C., D. Müller, K. Erb, H. Haberl, M. R. Jepsen, M. J. Metzger, P. Meyfroid, T. Plieninger, C. Plutzar, J. Stürck, P. H. Verburg, P. J. Verkerk, T. Kuemmerle (2018) Archetypical patterns and trajectories of land systems in Europe, Regional Environmental Change 18:715–732

Oberlack, C. & Eisenack, K. (2017). Archetypical barriers to adapting water governance in river basins to climate change. Journal of Institutional Economics, doi:/10.1017/S1744137417000509.

Oberlack, C., L. Tejada, P. Messerli, S. Rist, M. Giger (2016) Sustainable livelihoods in the global land rush? Archetypes of livelihood vulnerability and sustainability potentials, Global Environmental Change 41, 153-171.

UNEP (2007). Global Environmental Outlook 4. Nairobi: United Nations Environment Programme.

Václavík, T., F. Langerwisch, M. Cotter, J. Fick, I. Häuser, S. Hotes, J. Kamp, J. Settele, J. H. Spangenberg, R. Seppelt (2016) Investigating potential transferability of place-based research in land system science, Environmental Research Letters 11, 095002.