



Articles Referenced in Use of Systems Thinking Archetypes in Socio-Environmental Modeling Webinar

Publications mentioned in Sondoss Elsawah's tutorial "Use of Systems Thinking Archetypes in Socio-Environmental Systems Modeling"

(Sources listed in order of appearance in the video.)

Elsawah, S., Filatova, T., Jakeman, A.J. et al. (2020). Eight grand challenges in socio-environmental systems modeling. *Socio-Environmental Systems Modelling*, 2.
<https://doi.org/10.18174/sesmo.2020a16226>

Senge, P. (1990). *The Fifth Discipline: The Art & Practice of The Learning Organization*. Doubleday/Currency.

Kim, Daniel H., & Anderson, V. (1998). *Systems Archetype Basics: From Story to Structure*. Pegasus Communications Inc.

Goodman, M., & Kleiner, A. (1993). Using the archetype family tree as a diagnostic tool. *The Systems Thinker*, 4(10), 5-6. <https://thesystemsthinker.com/wp-content/uploads/pdfs/041002E.pdf>

Bahri, M. (2020). Analysis of the water, energy, food and land nexus using the system archetypes: A case study in the Jatiluhur reservoir, West Java, Indonesia. *Science of the Total Environment*, 716, 137025. <https://doi.org/10.1016/j.scitotenv.2020.137025>

Neudert, R., Salzer, A., Allahverdiyeva, N., Etzold, J., & Beckmann, V. (2019). Archetypes of common village pasture problems in the South Caucasus. *Ecology and Society*, 24(3).
<https://doi.org/10.5751/ES-10921-240305>

Moallemi, E.A., Hosseini, S.H., Eker, S., Gao, L., Bertone, E., Szetey, K., & Bryan, B.A. (2022). Eight Archetypes of Sustainable Development Goal (SDG) Synergies and Trade-Offs. *Earth's Future*, 10(9), e2022EF002873. <https://doi.org/10.1029/2022EF002873>

Zare, F., Elsawah, S., Bagheri, A., Nabavi, E., & Jakeman, A.J. (2019). Improved integrated water resource modelling by combining DPSIR and system dynamics conceptual modelling techniques. *Journal of Environmental Management* 246, 27-41.
<https://doi.org/10.1016/j.jenvman.2019.05.033>



Zare, F., Bagheri, A., & Elsawah, S. (2017). Using system archetypes for problem framing and a qualitative analysis: A case study in Iranian water resource management. In *22nd International Congress on Modeling and Simulation (MODSIM), 3-8*, (pp. 1433–1439).
https://www.researchgate.net/publication/321705455_Using_system_archetypes_for_problem_framing_and_a_qualitative_analysis_a_case_study_in_Iranian_water_resource_management

Publications mentioned in Renee Obringer's talk: Case Study: Leveraging Self-Organized Maps to Determine Archetypes for Water Conservation Attitudes

Obringer, R., & White, D.D. (2023). Leveraging unsupervised learning to develop a typology of residential water users' attitudes towards conservation. *Water Resources Management*, 37, 37–53. <https://doi.org/10.1007/s11269-022-03354-3>

Pre-print article available here: https://www.sesync.org/sites/default/files/2023-02/obringer_white_preprint.pdf

Publications mentioned in Juan Rocha's talk: Comparison: A Key to Archetype Discovery

Rocha, J., Malmberg, K., Gordon, L., Brauman, K., & DeClerck, F. (2020). Mapping social-ecological systems archetypes. *Environmental Research Letters*, 15(3), 034017.
<https://doi.org/10.1088/1748-9326/ab666e>

Rocha, J.C., Baraibar, M.M., Deutsch, L., de Bremond, A., Oestreicher, J.S., Rositano, F., & Gelabert, C.C. (2019). Toward understanding the dynamics of land change in Latin America. *Ecology and Society*, 24(1), 17. <https://doi.org/10.5751/ES-10349-240117>

Rocha, J., Lanyon, C., & Peterson, G. (2022). Upscaling the resilience assessment through comparative analysis. *Global Environmental Change*, 72, 102419.
<https://doi.org/10.1016/j.gloenvcha.2021.102419>

Lane, D.C. (1998). Can we have confidence in generic structures? *Journal of the Operational Research Society*, 49(9), 936–947. <https://doi.org/10.1057/palgrave.jors.2600605>

Wolstenholme, E.F. (2003). Towards the definition and use of a core set of archetypal structures in system dynamics. *System Dynamics Review*, 19(1), 7-26. <https://doi.org/10.1002/sdr.259>

Richardson, G.P. 1986. Problems with causal-loop diagrams. *System Dynamics Review*, 2(2), 158–70.
<https://doi.org/10.1057/palgrave.jors.2600605>



Biggs, R., Peterson, G.D., & Rocha, J.C. (2018). The Regime Shifts Database: a framework for analyzing regime shifts in social-ecological systems. *Ecology and Society*, 23(3), 9.
<https://doi.org/10.5751/ES-10264-230309>