

Methods 2023

Space Analysis and Visual Methods

by Sandra Guinand - Institute of Urban and Regional Research (ISR - Austrian Academy of Sciences)

<https://www.oeaw.ac.at/isr/team/ag-innovation-und-urbane-oekonomie/sandra-guinand>

Literature

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Gehl, J. (2011). Life between buildings. Using public space. Washington, DC: Island Press.

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Schoepfer, E. (2014). Capturing neighbourhood images through photography. Visual ethnography, 3, (1), 7-34.

White, W. H. (1980). The social life of Small urban spaces. Washington, DC: The Conservation Foundation

Public Participation GIS

by Anna Kajosaari - Institute of Urban and Regional Research (ISR - Austrian Academy of Sciences)

<https://www.oeaw.ac.at/en/isr/team/rg-innovation-and-urban-economy/anna-kajosaari>

Literature

Brown, G., & Kyttä, M. (2014). Key issues and research priorities for public participation GIS (PPGIS): A synthesis based on empirical research. *Applied Geography*. <https://doi.org/10.1016/j.apgeog.2013.11.004>

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Kytä, M., Broberg, A., Tzoulas, T., & Snabb, K. (2013). Towards contextually sensitive urban densification: Location-based softGIS knowledge revealing perceived residential environmental quality. *Landscape and Urban Planning*, 113, 30–46. <https://doi.org/10.1016/j.landurbplan.2013.01.008>

Visualizing Complex Adaptive Systems with Causal Loop Diagrams using Vensim

by James Vandenberg - University of Vienna, Department of Geography and Regional Research.

<https://geographie.univie.ac.at/arbeitsgruppen/urban-studies/team/vandenberg-james/>

Literature

Barbrook-Johnson, P., Penn, A. (2022). Systems Mapping: How to build and use causal models of systems. Palgrave MacMillan. Switzerland. Chapter 4: Causal Loop Diagrams. 47-57.

Burrell, Marcus. White, Ann., Frerich, Leah. (2021). Depicting "the system": How structural racism and disenfranchisement in the United States can cause dynamics in community violence among males in urban black communities. "Social Science and Medicine". 1-16.

Cristiano, Silvio., Gonella, Francesco. (2020). 'Kill Venice': A systems thinking conceptualisation of urban life, economy, and resilience in tourist cities. *Humanities and Social Sciences Communications*. 1-13.

Jagustovic, R., Zougmore, Robert., Kessler, A., Ritsema, Coen., Keesstra, S., Reynolds, M. Contribution of systems thinking and complex adaptive system attributes to sustainable food production: Example from a climate-smart village. *Agricultural Systems*. 65-75.

Kutty, A., Abdella, G., Kucukvar, M., Onat, N., Bulu, M. (2020). A system thinking approach for harmonizing smart and sustainable city initiatives with United Nation sustainable development goals. *Sustainable Development*. 1347-1366.

Extra Resources:

Abson et al. 2017. Leverage points for sustainability transformation. *Ambio*. 30-39.

Cozzolino, S. 2020. The (anti) adaptive neighbourhoods. Embracing complexity and distribution of design control in the ordinary built environment. *Urban Analytics and City Science*. 203-219.

Meadows, D. 1999. Leverage Points: Places to Intervene in a System. *The Sustainability Institute*. 1-21. --See all by Meadows: *Systems thinking: A primer*.

Nel, D., Plessis, C., Landman, K. 2018. Planning for Dynamic Cities: Introducing a framework to understand urban change from a complex adaptive systems approach. *International Planning Studies*. 250-263.

Zellner, M. Campbell, D. 2015. Planning for deep-rooted problems: What can we learn from aligning complex systems and wicked problems?. *Planning theory and Practice*. 457-478.

Systems Innovation Network website (has lots of interesting resources): <https://www.systemsinnovation.network/>

Food System map connecting it to poverty and gentrification: https://media2-production.mightynetworks.com/asset/41721603/Food_Poverty_in_Cambridgeshire__Peterborough_Report__Said_Map_the_System_Competition.pdf

Health as a Wicked Problem System Map: <https://kumu.io/101010maps/health-cities-hd-2019-system-map#health-wicked-problems-overview/ineffective-pain-management>

Food System Map - Reimagined futures: <https://reimagined-futures.kumu.io/the-food-system-and-the-circular-economy>

Iceberg method for addressing systemic change: https://www.systemsinnovation.network/posts/21711120?utm_source=manual

Digital Talk on “Neighbourhood Experiments & Superblocks”

by Melis Günay - DFG-Research training group Urban future-making at HafenCity University Hamburg (HCU)

Literature

Bertolini, L., (2020). From “streets for traffic” to “streets for people”: can street experiments transform urban mobility? *Transport Reviews* 40, 734–753. <https://doi.org/10.1080/01441647.2020.1761907>

Evans, J., (2016). Trials and Tribulations: Problematising the City through/as Urban Experimentation: Trials and Tribulations. *Geography Compass* 10, 429–443. <https://doi.org/10.1111/gec3.12280>