◆ Good Read: Steps Towards an Ecology of Infrastucture
- Karen Baker, Palmer Station & Helena Karasti, Univ of Oulu Dept of Information Processing Science

Susan Leigh Star and Karen Ruhleder, 1994. Steps Towards an Ecology of Infrastructure: Complex problems in design and access for large-scale collective systems. In Transcending Boundaries: Proceedings of the conference on Computer Supported Cooperative Work (CSCWb 94), 22-26 October, Chapel Hill, NC. ACM Press, New York, p. 253-264.

> The LTER represents one model of a networked community organization. The Worm Community System (WCS), a distributed software environment with successes and challenges similar to and different from LTER, represents another collaboratory model. Star and Ruhleder (1994), using ethnographic methods to conduct research on the WCS, present an analytic framework using multiple levels of understandings to capture this community's not-so-well-structured structures and not-so-well-expressed tensions.

The traditional "wires and pipes" infrastructure metaphor is broadened to encompass relationships with system users and change within organizations. Such multidimensional views of infrastructure are important to collaboratory participants facing choices about how technology standards will be used to support site science, how technology decisions will influence data practices, and how design approaches influence information system development. This work describes explicitly how local practices interface with large-scale structure, demonstrating how local customization is in tension with the development of common standards. The complexity and interdependence of everyday work practices are found to be critical elements when considering both technical and sociotechnical challenges.