## Henshaw, Jessie

## HDS systems design science

Jessie Lydia Henshaw is a research natural systems scientist in New York consulting on patterns of general emerging systems ecology; or more simply, cultures that "blow up" or "take off." Her work began with college physics labs asking why every run of experiments somewhat misbehaves, leading later to her general study of the individuality in emerging systems. At St Lawrence she concentrated on physics and math, Russian studies and arts then took math courses at Stoney Brook and Columbia before turning to architecture at the University of Pennsylvania. There she minored in landscape and presented theses on sustainable town design and microclimates, winning a class medal for structures. After school, she made a portable lab for studying the microclimates of homes, noticing as a general pattern the initial growth period of convection currents was when their systems for releasing energy developed. Work on theory and methods followed mostly at night over 25 years as a New York architect. Her public service work includes comment on hazardous waste storage site placement, restoring a 1890s Opera House as a rural arts center, leading a federal survey of shelters for government in the event of conflict. Her proposals include models for naturally responsive market systems as UN Sustainable Development Goals, suggesting a practical scientific method for giving all decision makers information on their share of the global the impacts of their decisions, a bit ahead of its time but still current. She served two years on a UNEP-FI/WRI technical advisory group, consulting on CO2 risk guidance for the financial industry. Her writings address: whole system accounting; why it is healthy cultures have healthy economies; the organizational limits of economies; the strong coupling of GDP, energy, and CO2; growing societal strains of growing disruptive change; and related subjects.