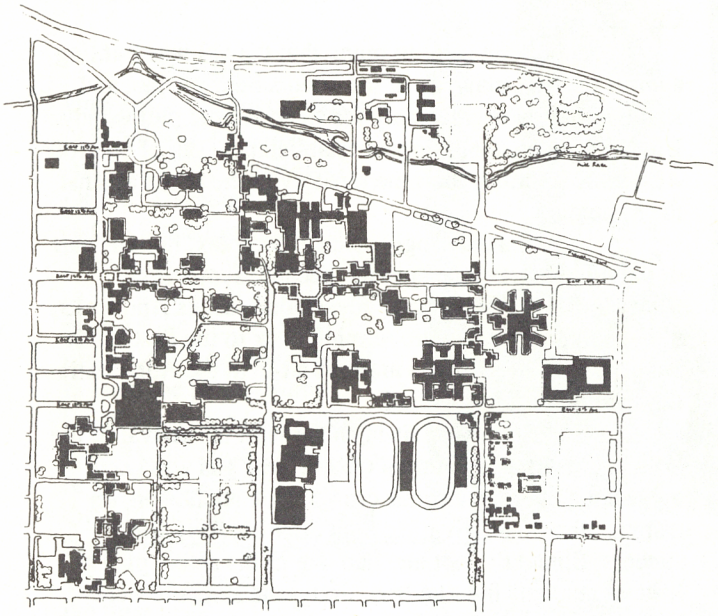
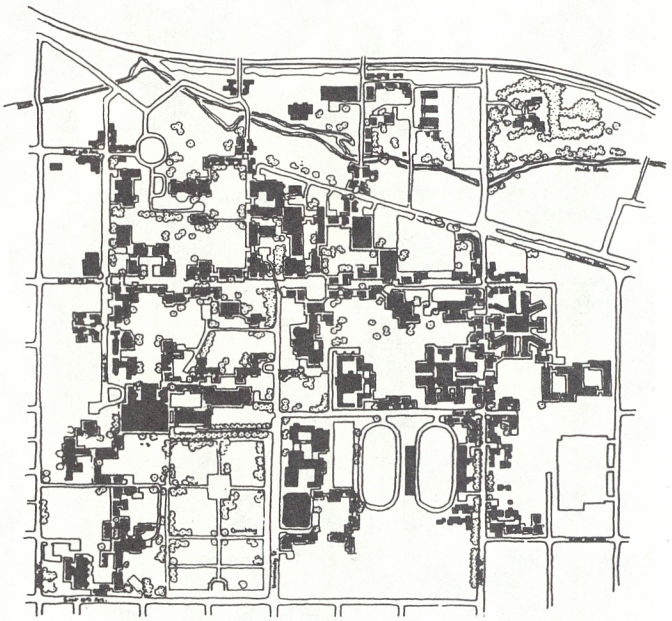
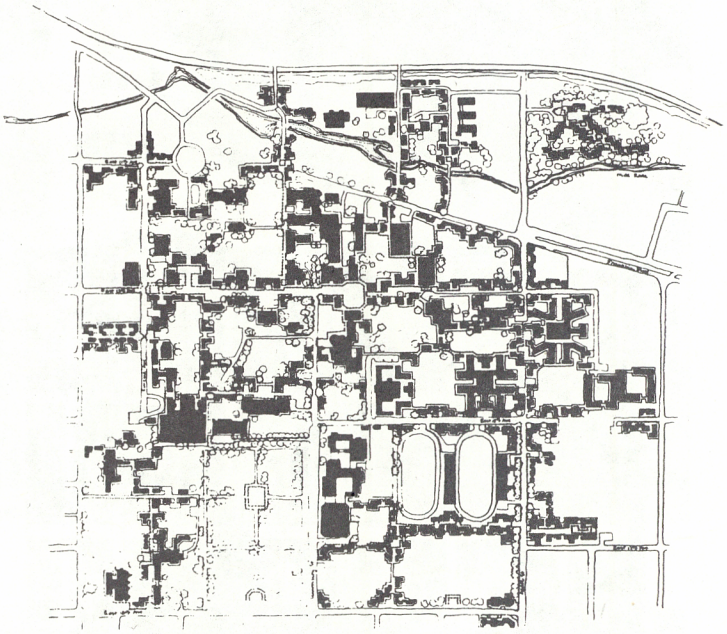
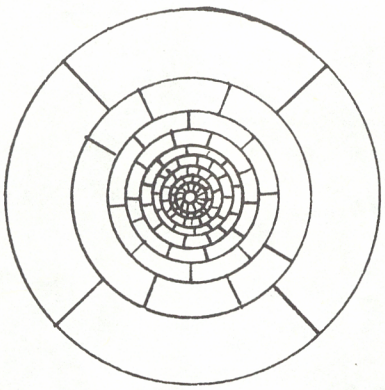
Decentralized Systems



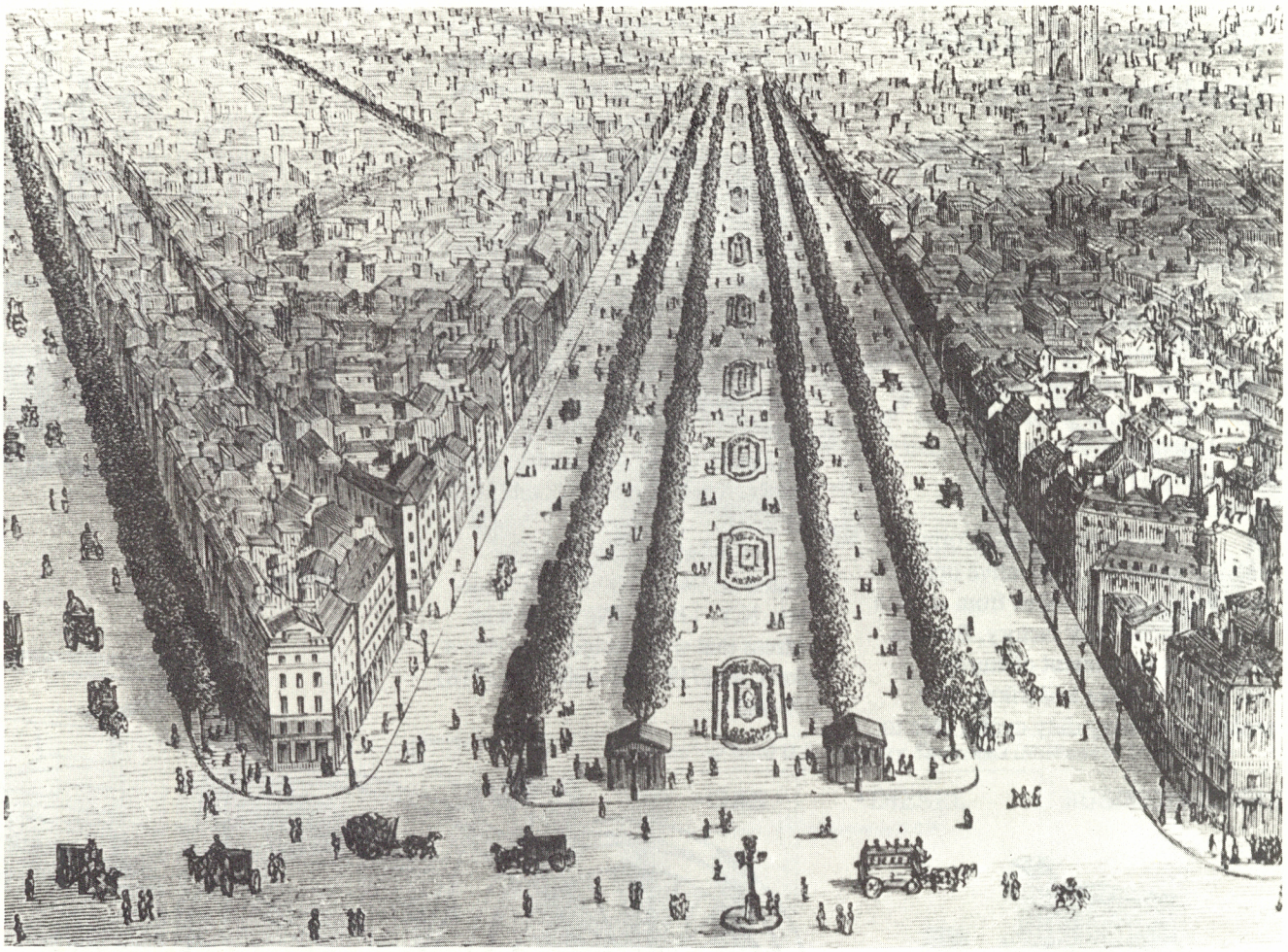




In order to create small-scale growth at the University of Oregon in Eugene, Christopher Alexander suggested a system of categories for projects. For example, in any given year there should be 1000 small projects, 100 medium-sized projects, and 10 large ones. The idea was to simulate the efficient, innovative piecemeal growth visible in places with few resources. In practice, the University now lumps many small projects together into large programs, or else funds the project from maintenance budget. Alexander was trying to fragment the allocation of funds — trying to create a fractal by building at different scales.

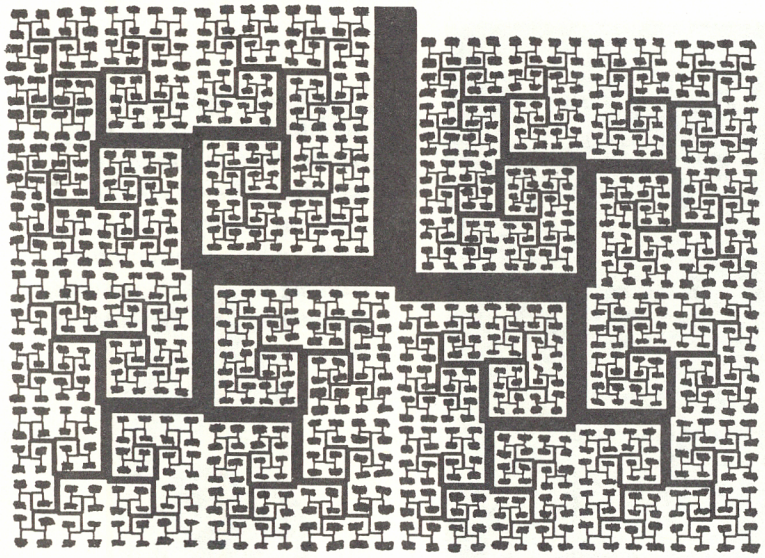


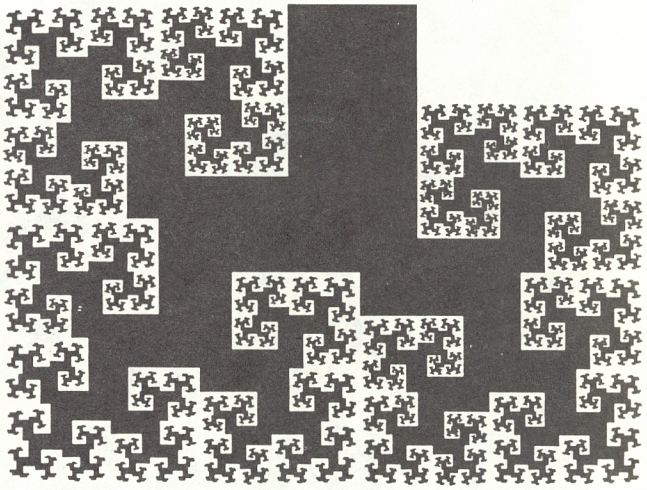
Natural fractals are not mysterious. Similarities at different scales indicate some diminishing influence, say an explosion, traveling throughout a homogeneous system, say ice. The same material will break in the same way, but to an extent depending on the force that reaches it. In nature, this effect disappears as we reach the limits of the force or the material. This is why mathematical fractals such as the Mandelbrot Set, in which the same patterns appear at any scale, are pure fantasy. They do not even exist in the colorful graphics simulations of computers: a real computer cannot enumerate an infinite set. Fractal fantasies are a distraction from the real world, where differences at different scales are most crucial.



Above: Another fractal down. In the 1850's, Paris prefect Eugène-Georges Haussmann carved these boulevards through dense working-class neighborhoods for the benefit of the upper middle class. The doomed communities had human-scale architecture and a robust culture, but were unprotected from large-scale finance.

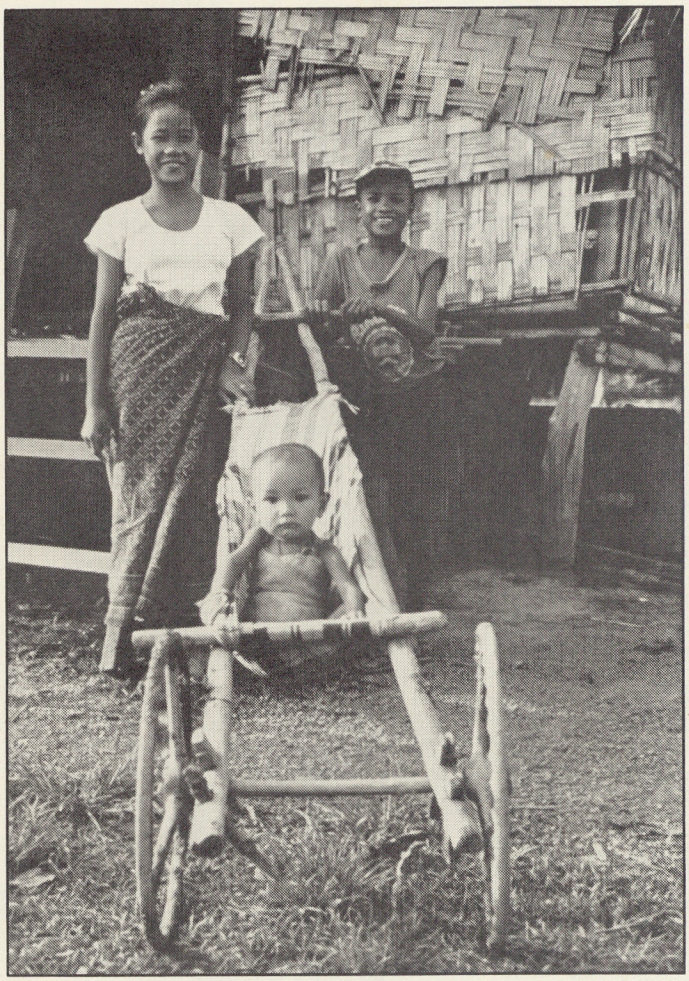
Human-level decentralization. Political and economic decentralization, as shown in the space-filling tree below left, must include mutual support among like-minded communities. Today, in contrast (below right), the world economy and its supporting institutions sap nearly all production and resources for the benefit of a few.





RAIN

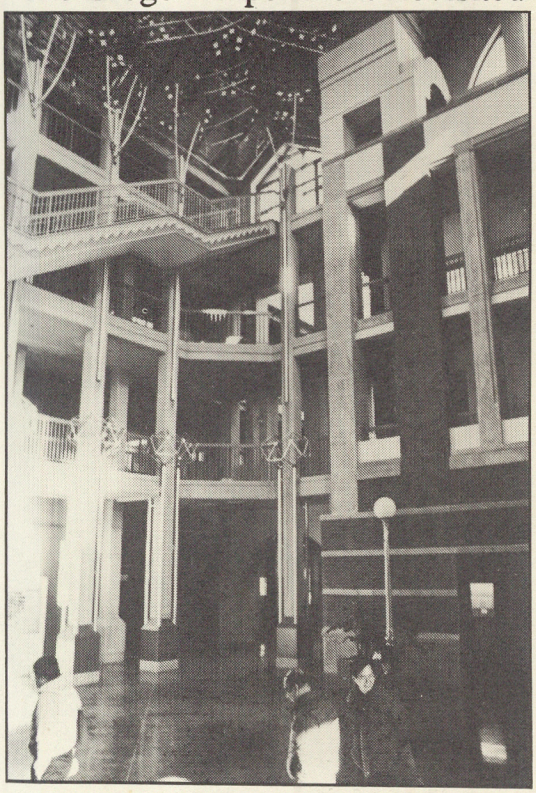
$5
Winter / Spring 1991
Volume XIV, Number 1



The Natural Economy of Laos

Swiss Origins

The Oregon Experiment Revisited



Decentralized Politics