



Figure 5.6 Ecological garden design.

quarter, or in Mollinson's terms, the village; the street block surrounding its own green space; the individual home with its own supporting garden; and the green wedge connecting the city centre to the surrounding countryside.

A technique used in permaculture and appropriate for urban design is systems analysis. A clear distinction exists between the 'closed system' of thermodynamics and the 'open system' of living organisms. Two quotes taken from Mollinson make this point graphically:¹⁴

All living organisms ... are 'open systems'; that is to say, they maintain their complex forms and functions through continuous exchanges of

energies and materials with their environment. Instead of 'running down' like a clock that dissipates its energy through friction, the living organism is constantly 'building up' more complex substances from the substance it feeds on, more complex forms of energies from the energies it absorbs, and more complex patterns of information ... perceptions, feelings, thoughts ... from the input of its receptor organs.

Most thermodynamic problems concern 'closed' systems, where the reactions take place in confinement, and can be reversed; an example is the expansion and compression of gas in a cylinder. But in an open system, energy is gained or lost irreversibly, and the system, its environment, or