

Healthy Cities, Balance, Centralization and De-Centralization

The urban environment is the centralization of human habitation.
The rural environment is the decentralization of human habitation.
The urban and the rural are interdependent. They require mutual planning.

The reason for concentration of human habitation
is to combine human efforts - to meet collective human need.
There is a kind and a degree of effectiveness and efficiency in concentration.
Concentration diminishes the transport of some things.

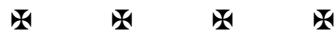
Human life, however, is dependent upon other life forms.
There is no habitable room for human life
without habitable room for other life forms.

Plants alone provide the oxygen we need to breath.
The oxygen serves the purpose of making possible
an elevated body temperature.

The elevated body temperature increases the rate of metabolism,
the building up and breaking down of substances and forms.

Elevated body temperature increases the responsiveness
and adaptability of a living form to its environment.

Elevated body temperature increases the biochemical reaction rate
and the rates of communication within
and between cells, tissues and organs.



Ecology is physiology extended to the environment.
The external respiration system is vascular.
The external respiration system supports cellular respiration.
Cellular respiration implements the elevated body temperature.
Human habitations support elevated body temperature.
Human habitation should also support the availability of oxygen
within human habitation.
The primary source is plant life. People need to live with plant-life.

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Concentrated, centralized human habitation becomes alienated
from human dependence upon other life forms.

Through the medium of the atmosphere we restore
and balance the diminished oxygen supply
and the build up of carbon dioxide.

There is a circuit which supports the oxygen and carbon cycle.

In conserving energy, we obstruct the flow and movement
of oxygen and carbon dioxide.

Planners, architects, engineers, designers are unaware
of the dependency of human life upon other life forms.

Elevated body temperature is necessary. Oxygen makes it possible.

Oxygen comes from processes in plants.

In the concentration and centralization of human habitation
we have forgotten our dependence upon other life forms
and the bioevents they provide.

Two of the most fundamental needs of human life is oxygen and water.

Both of these life essentials are supplied by cycles and circuits
involving plant life.

On a clear day, ordinary plants will release five to six times
their leaf weight in water per day.

Plants and soil microbes uptake carbon dioxide.

We burn the rainforests and plow the soil,
disrupting, destroying and displacing effective and efficient processes
with less effective and less efficient processed called agriculture.

Justus von Liebig, in 1840, told us three things about agriculture:

- 1) that humus did not supply plant food
- 2) that mineral deficiencies should be corrected
- 3) minerals are more available if acids are there to release them.

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Justus von Liebig subsequently regretted
that he had imposed upon so complex a system as life,
his superficial knowledge.

But industry didn't notice.

Now we have government departments of agriculture
and schools of agriculture still responsive
to von Liebig's earliest observation and ignorant of his later regret.

The mineral elements in the soil are used by microorganisms
in making enzymes.

Without the mineral elements, there are no enzymes,
without microorganisms, there are no enzymes.

Yet our departments of agriculture still supplement the soil
with substances that disturb, disbalance,
and destroy the microorganisms.

Our departments of agriculture still till the soil
to eliminate species they call weeds
which they claim compete with crops.

They leave bare soil surfaces which evaporate water
and forfeit the benefits of the root penetration
from those species that are thought to compete.

The planning, the architecture, the designing
and the engineering associated with human habitation
must acknowledge human dependence upon other life forms.

We have not yet considered the energy fixing
or food producing functions of plant life.

We have not yet mentioned the processing of human ablatives
and excrements by other life forms.

Planners, architects, designers and engineers
concerned with human habitation need to be tutored
in ecosystemic relationships:
the dependence of human life upon other life forms.

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We need public and political awareness
of the interdependence of urban and rural life.

Concentrated, centralized human habitations are effective
and efficient in combining human effort.

Concentration and centralization not only makes it possible
to combine human effort with other human effort,
but to combine human effort with a stream of energy,
with tools and equipment, amplifying human effort,
increasing productivity.

Concentration and centralization of human habitation has a function,
but so does the diffused habitation or rural life
and land-based production.

Concentrated and diffused,
centralization and de-centralized human habitation
needs to be planned not only heeding economic values,
but the intrinsic values of dependence of human life
upon other life forms.

This is the fundamental principle of balance
between environment and development.