The Arcology Concept



What is an Arcology?

Arcology is the fusion of architecture with ecology, a comprehensive urban perspective. Arcology recognizes the necessity of the radical reorganization of the sprawling urban landscape into dense, integrated, three-dimensional cities in order to support the diversified activities that sustain human culture and environmental balance.

Arcology suggests complete reformulation of how we exist within our environments – a new urban paradigm geared towards cultural evolution, frugal resiliency, and balance with nature.

Some Design Principles:

1

As cities grow, farmland is pushed far away from the urban center. As a result, citizens are detached from where and how their meals are sourced. In the urban form of Arcology, the citizens are connected with the production of food in a way that confirms the necessity of robust agriculture systems. Efficient use of water and energy through greenhouses and other innovative systems also contributes to overall efficiency of the city.

2

By utilizing available technologies, such as passive climate controlling architecture, innovative water & sewage treatment systems, and use of appropriately sourced building materials, Arcology strives for reduction of material and energy use and an increased quality of life.

3

In cities around the world, we empirically observe the benefits of combining functions and activities within urban space. Properties such as enhanced city safety, a vibrant sense of community, and utility efficiency all add up to a truly beneficial urban form. The crucial spaces within the city become shared, public spaces – accessible by all, respected in common, thriving with socialization, confrontation and growth. The city can become much more than the sum of its parts.

4

Urban growth limits are a common element of modern American city-planning, though they are often the result of efforts to protect remaining farmland and other rural or open spaces, rather than efforts to enhance the cities themselves. In Arcology, the ecological envelope idea is understood as a means of protecting the environment, of course, but it is also understood as a way to provide lively and robust urban activities. Rather than sprawling outward toward a prescribed limit (which may still exceed the resource capacity of the actual environment), Arcology seeks to grow upward and inward.

adapted from arcosanti.org, 2020