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Various Applications of Earth Architecture

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Abstract

The conception of architecture as a relic table object in the landscape may have its origin at least in part in classical tradition. According to existing researches and information, earth is a major building material and platforms, mounds, shafts, and terraces are integral architectural elements of the environment. Earth Architecture suggests an ecologically sustainable relationship between human beings and their environments, a more enduring relationship rooted in place and in meaning through time. This paper is evaluated various application types of earth architecture.

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1. Mounds

Earth mounding has been identified as one of the earliest architectural systems, used to build termed enclosures and artificial hills. From the period between 3900 and 3300 BC, Native Americans had started to build conical earthworks as high as 4.5 meter alongside the Ouachita River shores in Louisiana. In the early 19th century, Lion Mound, a massive earthwork, was built in Waterloo in the memory of the

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Napoleon's army's defeat in the year 1815. From the 20th century, Poet's Garden in Zurich is perhaps one of the most beautiful and famous earthworks. This structure comprises four triangle-shaped earth pyramids along with a conical mound that is placed on a truncated base. It also features paved walkways around a rectangle-shaped pool and an ensemble, a grass-shaped structure that completes the structure. Other earth mound structures that are considered worthy of mention in Earth architecture are Olmec Pyramid and Plaza in Mexico; Adena Burial Mound, Hopewell Octagon and Circle in Ohio; Trelborg in Denmark; Lion Mound Memorial in Belgium and Avebury Circle in England, among others.

2. Shaped Hills

Many builders from earlier times have been shaping the Earth's surface to suit the growing needs of humankind. People of Honan province in east-central China make use of low walls that help to stabilize the mountain surfaces made by wind-borne loam. Such low-level walls not only define the agricultural plots but also establish human scale in the boundless landscape. Sometime after 4 B.C., some men from the Celtic tribe had shaped a hill fort in southwest of Dorchester, UK, which is called Maiden Castle (Figure 1) now. Many new features and elements were added to this fort over the centuries using immense chalk ramparts around the hillcrest. The most noteworthy features of this castle, however, are its strength, complexity and the beauty of its defensive earthworks. Many countries have made use of shaped hills to build magnificent structures such as Greek Hillside Theater in Greece (Figure 2), Villa d'Este Garden in Italy, Babeldaob in Caroline Islands, Corregidor Bataan Memorial in Philippines, Duke University Stadium in North Carolina and Concord Pavilion in California, among others.



Fig. 1. Maiden Castle



Fig. 2. Greek Hillside Theatre

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