

Landmarks: Mapping the evolving human-ecosystem relationship
Fraser Dow
20077668

A remnant from the past weaves itself into the emerging fabric of humanity. Whether the age primitive, ancient or modern, a remnant has the capacity to capture beginnings, prominent events and endings; to comprise magnificent achievements, the delicate balance, and unanticipated failings; to scribe culture, politics, economics and the natural environmental. The complex relationship between remnant and its role in the evolution of humanity is a formwork for identity. This identification provides the ability to mass communicate; and this term, when conceived in physical form, is a landmark. Architecturally, through origin of its materials, embodied energy in its craft and its site, a landmark is intrinsically linked to the earth. However, a landmark not only lends itself to navigation, the journey home, but also speaks to metaphorical navigation, the journey of humans.

A brief synopsis of three ages, based on the mainstream evolution of human relationship to the ecosystem, initiates an investigation into the communicative role of landmarks. In the earliest age, the environment supported hunter-gatherer societies. It was hundreds of thousands of years before a necessary transition to the next age, which was based on renewable, agricultural activity. From the agricultural age, it was tens of thousands of years before the move to an industrial based society. The duration of each age, however, has compressed drastically; within just a few hundred years, people have exhausted the nonrenewable resource base of the industrial environment.¹ Alteration of natural to built environment is near exponential state, accelerated by use of non-renewable resources. As the character of the earth transformed – from natural ecosystem in equilibrium to an increasingly manmade environment – so did the character of its respective landmarks. Imbedded in the language of a landmark, is a particular significance and relation to the ecosystem. Deriving connotation from landmarks, in each of the three ages, maps the *knowledge, respect, realization and reformation* vital to the current, fragile human-ecosystem relationship. Landmarks are a narration of the human-ecosystem relationship, allowing us to reflect on the past and beacon to the future.

Knowledge of the hunter-gather age is valuable to modern life. The landmarks communicating the basis of human interaction and survival however, are faintly heard. This communicative barrier renders information imperceptible to the layperson of society.

Knowledge of early evolutionary behaviour is significant in assessing and anticipating modern dilemma. Long ago, humans practiced sustainable forms of shelter and diet; energy and resources humbled them into a way of life that was cyclical and in equilibrium with the ecosystem. The transformation from this sustainable, cyclical way of life becomes a landmark in the human-ecosystem relationship,

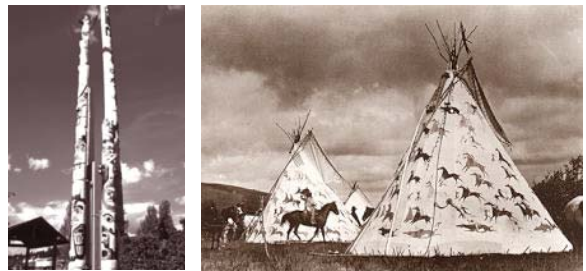
‘All of the evidence suggests that the hunter-gathers took up farming out of necessity. The game and edible plant life became increasingly scarce, new territories became exhausted, and further geographic expansion became impossible. The crisis of survival dictated experimentation ... gradually, step by step, farming took over’.¹

Farming lead to more sophisticated economics and eventually, evolved to the industrial, modern civilization. The knowledge and comprehension of evolutionary necessity is not widespread, mainly because of its lack of presence in modern society. The landmarks of this era, buried in the passage of time, have been unearthed by archaeology and serve as a communicative tool. The imagery from this era, however, is weak as influential media - museum exhibits, encyclopedias and documentaries – because it lacks the power of modern mass communication – mainstream television, billboards and innovation - needed to register with society as a whole. The knowledge, in its similarity to the dawning resource crisis, has the capacity to deliver warning. At particular moments, life must adapt; this knowledge is rudimentary for receptive mindsets in reorganizing the human role in the ecosystem.

Although the true hunter-gather societies may have vanished, the last forms of their sustainable practices still survive today, barely.

While the main course of civilization embraced the progress and economics ignited by farming, other cultures struggled to maintain a cyclical way of life.

The small native tribes still enduring are diversely



scattered amongst the earth continents. Truly existent within the ecosystem, the tribes illustrate an exemplary way of life with no desire harness or control nature, only live within its boundaries. The lightness of their shelter, the restraint of their diet, the recognition of population capacity, serves only to align with the delicacy of the ecosystem. The landmarks of these cultures are bound to earth: the architecture, divine reverence and symbolic imagery. All aspects of their landmarks communicate this dependency for survival on natural resources; and yet they remain unappreciated, go unnoticed. The natives should be heralded for true practice of a sustainable society, rather than shun for ‘primitiveness’. Again, the question is raised, why does the

communicative nature of these cultures not reach to the majority? Overwhelmed by the worldwide demands of economic progress, the last remnants of the culture offer precious knowledge for the unfolding resource crisis. Recognition of human adaptability, driven by necessity and knowledge of practiced sustainable life, represented by landmarks, provoke the beginnings of a maturing vision for the human-ecosystem relationship.

Respect for the eco-system matures from knowledge; it strengthens appreciation of, and desire to, re-route human dependency. Landmarks from two past civilizations, both existing within modern urban fabric, communicate a long lost reverence for nature. Both agriculturally based civilizations, the Greeks and the ancient pre-Christian Romans, held nature in the highest regard. The landmarks of each civilization offer an interpretative journey back to a lost relationship with nature; but furthermore, act as communicative learning devices for modern society.

The Parthenon is illustrative of the human-ecosystem relationship in ancient Greece. The unmistakable landmark, a temple to the pagan Gods, stands perched atop the acropolis, a reflection of the ancient civilization. For the Greeks, the pagan Gods represented all the natural



forces. The Gods controlled nature; therefore, civilization respected nature. The city, however, had the capacity to offer refuge, to overcome nature, the unknown. The landmark emanates a profound message: nature marks the unknown, and the unknown leads to disaster. To present day society, however, the 'unknown' becomes the yield of the ecosystem, the pivotal point when earth is unable to

handle the energy demand of human activity. If the unknown imminently leads to disaster, then the unknown demands respect. The natural ecosystem is a fascinating, fragile balance of life. In the past, respect for nature existed at the scale of entire civilizations; the reemergence of this is key to the future.

Today, as the energy resources of earth begin to disappear, humanity will enter into crisis. The ramifications are difficult to predict, but the estimates are staggering, 'In 1995, 1.75 million people were without clean water. In 2025, it is estimated that, of 8.5 billion people, 2.8 billion could be without clean water.'² The strain of supplying continuous natural resources is increasingly visible in present day society. The enormous task of maintaining an infrastructure

supply of services, however, has been a controlling variable in the growth of cities and population in the past ancestors. The aqueduct, a landmark of the Roman Empire, represents a relationship of human dependency on the eco-system. The icon clearly communicates the genius of the ancient Romans and their reverence for water.

Their respect for nature was rooted in the founding of the empire. They aspired to a government equal to the size and complexity of nature; they sought infrastructure to establish order and resolve unequal conditions. The construction of the extraordinary



infrastructure, to supply water to the ancient metropolis and its respective provincial cities, is still recognizable. The reverence for the nature and ambition to match natural systems dissipated at the onset of Christianity. The worship of pagan Gods, responsible for nature, was shifted to the ascending power of the Church. Consequently, during the Middle Ages, with the unity of the empire gone, the aqueducts were sacked and tarnished. As resources to city were cut off, the quality of life shifted to poverty and the population reduced drastically. The aqueduct ruins, an identifiable landmark, communicate the fragility of human reliance on support systems; but more importantly, question the readiness of society when resources thin. Globally, many cultures deeply respect resources, particularly those in distress; but realization must embrace all of humanity.

Pipelines and power lines join the imagery of the aqueduct as modern landmarks of resource consumption. The energy resources have changed, from renewable to nonrenewable energy base, but the situation is alarmingly similar. What will be the fate of our empire? The



inherent need to instill realization is at critical juncture in the continuation of humanity.

The landmarks of the industrial and modern age depict a radical transformation from the sustainable societies of the hunter-gatherer. Soaked in a wealth of natural resources, North American urban design has promoted non-sustainable practices. City centers are competitive grounds for the skyscraper, an energy-consuming giant; the use of the private automobile has eliminated the social quality from the majority of public spaces.³ The focus is on expansion of the built environment,

a necessity to fuel the economy, rather than on sustainable survival of the economy and the population. The majority of landmarks in each city today reflect this. The message landmarks – bridges, skyscrapers, and stadiums – communicate to our culture is an opportunity of great magnitude. An opportunity for citizens to associate themselves with a landmark rooted in an era of reborn thought.

In this light, appropriate landmarks should engage the realization of harmonic relationship between the built and natural environment. Intrinsic to ancient civilizations, the significance of environment dependent sustainability remained hidden from society during the age of non-renewable resources. The consequences, the knowledge and the respect, once known, beckon to be re-established:



‘Historical studies of settlement show that even the ancient civilizations recognized regional climatic addition as an essential principle in the creation of architecture.’³ A sustainable relationship between our urban environment and nature is necessary for society to reform its practices. Landmarks have the capacity to bring realization to society. Embed sustainable ideology into architectural nuances and landmarks, as the loci of urban communities; bring the ecosystem into plain sight. Strive for an all-encompassing message that creatively reaches all corners of society, through constructed buildings and forms, imagery and virtual space. The boiling point of the eco-system remains unknown, but more disconcerting, is the change of state accompanying it. Accordingly, humanity needs realization to motivate reformation.

A core reformation of our current practices, through realization of a sustainable ideology, is becoming a necessity. For humans as part of the ecosystem, it marks a new age yet to be chartered by humanity: an age of immersion back into the timelessness of the earth. An interweaving of the past into a sustainable future – the ages of the hunter-gather, the agriculturally based and the non-renewable –all bound into an age yet to be defined.

The answers lay before us, a vast network of tangible landmarks retelling history; communicating what to do, and what not to do. This experienced media, a complex meshing of human-ecosystem relations, informs potential, strategy, and investigation into a creative realm. A realm apart from the linearity of one plus one, decisively immersed in the cyclical nature of

ecosystem, aimed at achieving hybridity. Manifold thought embodying the identity of what was, what is, and what will be.

What landmarks can surface to guide this reformation? What forms of innovative communication will alter perception in society? What ideas will speak to society, without losing the individual? These are the questions architecture must employ as it weaves the emerging fabric.

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