

## THE WATER ELEMENT AS AESTHETIC FACTOR IN LANDSCAPE DESIGN

*Angeliki KOSKINA, University of Kavala Institute of Technology, Dept. of Landscape Architecture, Greece*

*Nikolas D. HASANAGAS, University Forest Administration, Greece*

**Abstract:** *The aquatic element has been considered by researchers and used by landscape architects as a characteristic aesthetic factor. Its perception and signification in real (visual and non visual) landscapes as well as in virtual landscapes depend on the idiosyncrasy and the perception filter of the observer. Theoretical and empirical approaches have been proposed about the role of water, lentic or lotic, of large or small extent, sweet or seawater, troublous or calm. Generally, the aquatic element constitutes a bridge between landscape and literature or other arts as well as a means of breaking the monotony caused by solid materials used by architects or artists. Water is a basis of literary and artistic perception of landscape as well as a neutral architectural element which cannot be clearly categorised as “natural” or “built”. The universality of aquatic element as aesthetic factor and architectonic means becomes evident through the multiplicity of its use and perception as well as its diachronic and wide implementation and resonance.*

**Key words:** *aquatic (water) element, aesthetics, landscape, perception*

### 1. Introduction

Water is a multidimensional object of research which appears in various fields: environmentally it is a natural resource essential for living (drinkable water, river, lake etc.), socially it appears as a sensitive basis for developing human activities, financially it influences tourism, agriculture, fishery etc, culturally it is related to folklore, mythology, arts or religion, aesthetically it is represented as a beauty element of nature.

Aim of this research is to present certain reflections of the water as it is represented in the fields mentioned above, through a historical backsight. From the past until now, the water was connected with the idea of the discovery and the conquest due to its agility, expansion, and its ecological stability.

### 2. Historical review

#### 2.1 Images form antiquity

Thales considered the water as a basic source of genesis. When he traveled to Egypt, he saw how fertile the land was after the flood of Nile. According to Herodot, Persians were demanding “land and water” from the cities which were surrendered. This demand was meaning that the citizens abstained from any right on their land and its products.

In ancient Greece, where the fountains were considered to be sacred, they were converted from a hole excavated close to the water point into impressively decorated buildings. Public fountains were existing in ancient Rome. Usually, they were a rectangular

stone tank on a small pedestal and it had a sculptured human or animal head (e.g. lion) from which the water was flowing.

The name of each traditional fountain is determined by the position, the shape or local tradition. The manufacture types were two: a) the “open” (which was the most usual one) and b) the “closed” where the water was flowing from a sculpture.

## 2.2 The water in Byzantium

The water as symbol of life, health and civilization was playing an eminent role in the everyday life of byzantine time. The people were regarding the water as an indispensable element of Paradise, which they were imagining as a blooming garden with four rivers. Fountains and cisterns could be found at many rural houses, while sculptured fountains (shaped as birds or crawlers) were to be found at many high class houses. Fountains were existing even at rural or forest roads for the needs of travelers. Areas with hot water fountains such Aghilaos or Pithia were therapeutic places which were supposed to cure pain. These fountains were a natural infrastructure for developing luxurious bath towns. The baths were a sociable place appropriate for meetings, discussions and demonstration of femaleness. The water was supposed to have supernatural power and was considered to be an element of multiple beliefs and functions (forecast, exorcism). The water had a great real or symbolic importance.

## 2.3 The role of water in music

According to Yiannis Svolos the sweet water, in contrast to the sea water, is an absolutely necessary element for life existence. It is noticeable that in the chapter of Genesis in Old Testament the God differentiates the sea from the sweet water, while creating the human being of soil and water. In various mythologies the water (in form of rain, snow, lake etc) is a means of animism and is involved in human life. The presence of sweet water in western music plays a psychological, collective, drastic or idyllic role comparable with its historical importance for the life and progress of the culture (Gombrich 1950, Machlis and Forney 1996, Koskina 2008, Papadopoulou and Papadopoulou 1986, Papadopoulou and Papadopoulou 1991, Τόλικά 1999, Hasanagas 2010, Papanoutsos 1976, Terkenli 1996). It appears in the Baroque time through mythological metaphors such as in Beethoven, Wagner, Handel, the Greek componist, Kalomiris etc.

## 3. The role of water in the landscape aesthetics

### 3.1 Water-related landscape values

Values ascribed to the landscape which are derived from the existence of water elements can be the following ones (Spitalas 2000, Eleftheriadis 2006):

1. The sound of water or water birds
2. The movement of rivers, waterfalls, waves etc
3. The colors of water and coasts
4. The reflections on the water surface
5. The possibility of expanding biotopes of certain species
6. The opportunities of emphasizing structural materials and lighting
7. The opportunities of environmental education

### 3.2. The water as landscape design element

The important design characteristics of the water consist in its movement, sound, and reflection. It is argued that the water activates all senses and provides numerous opportunities of recreation such as swimming, angling, rowing etc. Moreover, it has been empirically found that visitors remain in beach zone about four hours daily (Eleftheriadis 2006).

### 3.3. Stimulation of senses through image and sound

The water stimulates the senses (Eleftheriadis 2006). In order to strengthen this stimulation, the landscape designer can intervene e.g. on the bottom of a lake. The water cause memorial and emotional impacts with its tranquil and sensitive properties (Gombrich 1950, Spitalas 2000, Eleftheriadis 2006). The movement of water presents a dynamic and charming character which may cause thunderous sound or predominate the sound of city. The lotic water implies instability or movement against the balance (Arnheim 2003).

### 3.4. Expert approach to the aesthetic function of water in the landscape

Litton et al. (1974) have made an extensive expert approach to the landscape perception. They emphasized aesthetic aspects of fresh water in the landscape. The contributions of water to the environments of recreation and everyday life are intensively explored by expert groups. Classification patterns have been proposed for native characteristics and these are considered together with man-made changes. These patterns are of visual character and consist of landscape units, setting units, and waterscape units. This scope includes comparative analyses and suggests settings through which water can contribute to environmental quality. Policy recommendations are usually made in expert approaches.

## **4. Selecting water feature materials**

When choosing and planning a water feature, make sure that it fits in with the composition of your garden, perhaps using materials that feature elsewhere in the design. The following examples are characteristic (Choosing water feature materials, 2-4-2012):

#### a) Fountain in the garden

The running water in the garden makes a dynamic impression which breaks any visual monotony which may caused by extensive green material (Picture 1).



Picture 1. DK - Garden Design, 2009 Dorling Kindersley Limited

b) Containing water

Waterproof masonry, such as concrete, will seal in the water in your feature, whether it is a raised or sunken pool (Picture 2). Any material with joints, such as bricks, will leak, so add a specialized render to the inside of your pond, which can then be coloured or glazed with tiles.



Picture 2. DK - Garden Design, 2009 Dorling Kindersley Limited

c) Edging and lining streams

Natural-looking water features, such as artificial streams or wildlife ponds, are usually irregularly shaped, and lined with flexible waterproof materials (Picture 3).



Picture 3. DK - Garden Design, 2009 Dorling Kindersley Limited

## 5. Conclusions

The water belongs to the most important aesthetic sources. Its existence (natural or artificial) improves drastically the aesthetic effect. The water has been connected with the life and beauty. The aquatic element is of crucial importance for the quality of life and the sustainability of ecosystems and also for the attractiveness of landscapes which include water elements.

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