LANDSCAPING A PRIVATE SPACE, CUBLEȘUL SOMEȘAN VILLAGE, CLUJ COUNTY, FOR SUSTAINABLE DEVELOPMENT OF RURAL AREAS

Salagean T., M. Dirja, Adela Hoble, Jutka Deak, N. Pop, Rodica Badescu, Paunita Boanca

University of Agricultural Sciences and Veterinary Medicine, Faculty of Horticulture
3-5 Manastur St., 400372, Cluj-Napoca, Romania; salagean_tudor@hotmail.com

Abstract. The multiple functions they perform in all urban and suburban structures, green spaces, help improve microclimate, recovery and highlighting the natural environment and to correct its deficiencies, remedy or annihilates the negative impact of harmful and participate directly in addition to groups of buildings. Instrumental in achieving ecological balance of human ambience, you have harmonization mutual relations between built and open spaces and planted between spaces Manmade site and surrounding territory. Human intervention puts the seal today more or less to the farthest corners of nature. This intervention makes it desirable and how functional and aesthetic quality of nature and appropriate balance between it and built spaces, makes it desirable to respect for landscape architecture.

Keywords: soil erosion, soil runoffs, water runoffs, simulated rainfalls, hydrometer

INTRODUCTION

Lack of good relations with nature during the last decades explains why landscape architectural compositions lost their "meta-spatiality" reducing "a simply aggregate function - stripped of any single area than the commercial value and aesthetics", abandoning the connection with the surrounding nature, the purpose of resettlement on a scale perennial value of humanity (Simonds, 1967).

Feng Shui landscape includes a number of important principles relating to the characteristics of the surrounding land and house. In practice, assessing the topography and provide advice on how they can be improved naturally favorable traits and how they can be mitigated potentially dangerous. Feng Shui landscape is infinitely more important than the interior, because the only way to obtain a correct ambient environment, specific individuals using the space.

Since the second half of the nineteenth century the garden becomes a necessary good, without the privilege of propertied classes only (Florincescu, 1999).

Its area from a few square meters to several hectares, is aesthetic, functional, always adapted to change the time. Regardless the approach of private garden setting taking into account a number of characteristics that lead ultimately to achieve aesthetic, functional and enjoyable space.

MATERIAL AND METHOD

In interpreting climate region were used climate data collected by meteorological station Cluj-Napoca. Study site is located at an average altitude of 400 m and facing south. Specific climate zone falls in the moderate climates, characteristic of the western and north western parts of the country.
Rainfall in the area is characterized by average annual rainfall of 782 mm. The richest rainfall recorded in May-June and lowest in August-September.

Interpretations of soil attributes in the study area were used data from the Pedology Office, Cluj-Napoca. The soil from the studied area is part of the territorial unit of soil (U.S.) Nr. 23 with the following:

- Name: brown, luvic, moderate pseudo-gleic soil;
- Profile and surveys: 68, 131, 311;
- County: Cluj;
- Location: Cubleșul Somesan;
- Distribution: Somes Plateau;
- Natural conditions occurs: inter-peak;
- Land surface appearance: normal;
- The main soils that are associated (pairing mode and proportion) luvic, brown soil.

Soil characteristics taken from the territorial unit of soil (U.S.) Nr. 23

**Morphological**
- **Atel** 0-5 cm - silty, brown, grainy, gradual transition
- **Ao** 6-20cm - silty, brown, polyhedral sub-angular, coprolite, common roots, gradual transition
- **Elw** 31-46 cm - clayey-sandy, yellow, angular polyhedra, Fe and Mn concretions, powdering silica,
- **Bt** 56-76 cm - clay loam, yellowish-rusty, polyhedral sub-angular, Fe and Mn concretions.

**Physical:** - weak plastic, adhesive, compact, total porosity medium.

**Chemical:** - soil reaction is strongly acid, low humus content, supply nitrogen (N), phosphorus (P) and potassium (K).
- Other features (anthropogenic processes, pedogenesis current global drainage etc.): - Powdering with silica, overall good drainage.

The property has a total area of 10 800 m² private garden features a two buildings with an area of 169.06 m², resulting green space with an area of 10 630.94 m², land is divided into orchard with a surface area 700 m², courtyard and construction area 500 m² and 9600 m² lawn.

**RESULTS AND DISCUSSION**

By overlaying the Pa Kua octagon on the private garden sketch plan stated the following zoning: Garden of Fame / Reputation, Career Garden, Children's Garden, Garden of Health / Family, Love Garden, Garden of bystanders, Garden of Knowledge and Prosperity Gardens, which are visible from any point of the house.

The environment consists of groups of houses and household type semirural, achieving a framework and environment for outdoor recreation (Fig.2.2.), Allowing development of a pleasure garden, where to find all the creations nature - mountains, rivers, plants and animals - constituting a place of joy.

Private garden with an area of 10 630.94 m² is arranged according to the principles of Feng Shui landscape through a simple approach involving theory Pa Kua octagon elements in garden design because green space fortunate to have the energy to manifest
environmental the owners. The intersection of the diagonals of the octagon, ideologically represented by the balance between Yin and Yang, overlaps with the new building, which will become the center for conceptual over which reflect all energies.

After analyzing the current situation has opted to rejuvenate vegetation spatial reconfiguration of the site and remove all negative energy generating elements, all components and features a garden - plants, flowers, trees, bricks, tiles, stones and special structures - can be turn into a major Feng Shui mechanism, which is strategically located, will energize the space and increase the chi, to bring luck and to dispel negative energy.

Balance between Yin and Yang achieved by combining shaded areas (power Yin) with intrinsic power plant given by Yang, game night light, water use, bringer of yin energy in different forms and combined with rocks, the flat terrain was combined with uneven terrain, combining perimeters covered with grass with paved; settlement vegetation groupings of decorative plants with flowers with ornamental plants by foliage.

Feng Shui garden oriented south: Garden of Fame and Reputation: in terms of compass north is an exhibition, and is visible from the house, the living room and kitchen. For the reason that it is governed by the Fire Element grill location was chosen as a symbol of this element.

Garden facing southwest Feng Shui: Garden of Love: belongs to the earth element, which we chose to incorporate gravel with boulders to symbolize miniature mountains, stone lanterns are lit throughout the night to continue the cycle production started in South Feng Shui element of fire which will then give rise earth element (rocks, gravel, boulders).

Garden oriented to the West Feng Shui: Garden of Children: is associated with the Metal element, where to draw positive energies were used decorative bushes by fruit and from place to place were fixed metal bells, wind, seven rods empty inside, the productive cycle arose from the earth element, and that in turn will create water element. To balance Yin and Yang energies was made a game of shadows, composed of every shade and umbrellas homemade decorative vegetation that inhibit exhibition eastern lightning energy. Textures used to obtain specific topics such gardens were still in the Garden of Love, gravel and stone tiles with a smooth transition into slabs of stone gray. Symbolically, to amplify the power of this area was buried under a stone slab near the house, three coins tied with red string.
Garden oriented to the Northwest Feng Shui: Garden of bystanders: entrance area overlaps the perimeter of the garden, a continuation of the West Garden, which make the transition easily from the metal part production cycle from water. Textures used are the same as those mentioned in garden oriented in the West Feng Shui. Sub-areas that make up this garden are the main entrance in the courtyard, paved with stone slabs, two buildings and some of the main decorative.

Garden oriented to the North Feng Shui: Career Garden: in order to obtain the energy power to get this garden was chosen as decorative piece static water but is driven by fish. Lake has an irregular shape in order not to create poison arrows, and was decorated with plants, arranged both around and in water, in a small number to avoid attracting attention from the main element specific to this area, water. The transition from the previous is done gradually, without disturbing the productive cycle of elements.
Garden oriented to the Northeast Feng Shui: Garden of Knowledge and Learning: the second area is governed by the element of earth and arrangement thereof is based on combining different textures of gravel, pebbles and stone slabs. As decorative elements were used alpine elements and was chosen as a spatial playground, rectangular, which is allowed in the garden, to stimulate positive energies to move toward role has this area. Game accessories are a combination of wood and metal, the latter material being in a very small proportion.

Garden oriented to the East Feng Shui: Garden of Health and Family is governed by the energy power of the Dragon, which can be created by arranging flower plants (chrysanthemums and peonies are the most glorious plants) as the winding, twisting motion to simulate dragon. Dragon to simulate presence in this area was chosen for the creation of corrugated bumps. Functional element in this area is keeping the location of the old orchards, after being cleaned and refreshed with younger individuals.
Fig. 6. Garden decorative and functional elements oriented Northeast Feng Shui

Garden oriented to the Southeast Feng Shui: - Garden of Wealth and Prosperity: the most suitable area for planting shrubs vigorous, productive cycle governed marking element is wood. Functionally expanded orchard with fruit trees, keeping trees and shrubs at a height much lower level than in the south-facing garden Feng Shui, small bumps aesthetic wavy line following land to make their presence felt here Dragon.

**CONCLUSIONS**

**Strong points**
- Location of the property: is in an area that allows spatial green landscape style, using Feng Shui principles (imitation of nature) without going into contrast;
- Space dynamic: effects of this site are achieved through landscape design;
- Surface: design allows a relaxed space which covers all needs.

**Weak points**
- Shape of the land: difficult integration of land perfectly Pa Kua octagon.

**Opportunities**
- The favorable natural;
- Neighborhoods;
- Low groundwater depth.

**Threats**
- High costs for obtaining planting material - used especially its cultivars plant varieties - and space maintenance.

**REFERENCES**