

DESIGNING A PRIVATE GARDEN WITH AN ORNAMENTAL AND UTILITARIAN CHARACTER

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Abstract

Currently, private gardens tend to have a highly functional character due to the fast-paced lifestyle of our days, the reduction of garden space, as well as the need for consuming healthier foods. The ornamental-utilitarian garden represents an intelligent and balanced way of using the green space around the house, providing both beauty and functionality. It is an concept that maximizes the garden's full potential to meet the needs and preferences of the owners. Although this approach is relevant in Europe, in Romania, there is a need for the development of this concept. Currently, utilitarian gardens are mostly positioned in the backyard, isolated, without exploring the multiple possibilities of incorporating utilitarian plants into ornamental garden designs. In this work, besides researching the ornamental-utilitarian garden concept, we aim to design a private garden, adhering to the principles underlying this approach to landscaping.

Key words: garden, ornamental, utilitarian, concept, design.

INTRODUCTION

The concept of ornamental-utilitarian gardens is currently relevant in the field of landscaping. Pettenati (2017) considers that between food and landscape there is a complex relationship; the landscape is, on the one hand, a context of physical and symbolic reference in which food-related choices and actions take place, both individually and collectively, on the other hand, a useful reference of values through which one can create links between urban food policies, consumer choices and urban and territorial planning.

These gardens offer multiple benefits to the environment, people, and ecosystems (Galluzzi et al., 2010; Bigirimana et al., 2012; Taylor and Lovell, 2014; Beumer and Martens, 2015; Galea et al., 2018). As green pockets that are either aesthetic or productive utilitarian gardens, urban domestic gardens represent a considerable portion of remaining green spaces in the city that interact with nature (Al-Kofahi et al., 2019). Used for aesthetic value as well as consumption, this form of urban agriculture promotes a healthy lifestyle and sustainable practices at multiple levels; participation in the edible landscape can provide physical activity, social cohesion, and the opportunity to develop a stronger emotional connection and relationship

to food (Çelik, 2017). This approach encourages landowners and gardeners to use available space for food purposes, promoting the creation of greener and more functional spaces in urban and rural environments.

The main purpose of foodscaping is to create beautiful and functional spaces that provide a source of fresh food, such as vegetables, herbs, fruits, and medicinal plants. The ornamental characteristics of these horticultural species are manifested through various elements: the plant itself, degree of branching, leaf color, flower color, and fruit color (Manda & Nicu, 2023; Nicu & Manda, 2024; Mihai, 2012). Although medicinal and aromatic plants are used in pharmaceutical preparations and folk remedies, they also possess aesthetic qualities in ornamental and landscaping contexts (Abdelnaby, 2020). By integrating utilitarian plants into existing or new landscaping designs, people can enjoy organically grown produce. Foodscaping emphasizes sustainable cultivation, the use of local resources, and waste reduction, contributing to the promotion of a healthier lifestyle and the protection of the environment.

The Château de Villandry Gardens in France, located in the Loire Valley, serves as a source of inspiration (Larkcom, 2017) and a classic example of ornamental-utility gardens,

representing a perfect synthesis between functionality and aesthetics. They are among the most renowned gardens globally due to their complex design and continue to inspire landscapers and gardening enthusiasts worldwide.

The history of late Renaissance gardens in Transylvania is primarily about economic sustainability (Fekete & Sárospataki, 2023). As Fekete & Sárospataki (2022) mention, these had a mixed character, merging the concepts of vegetable and ornamental gardens (vegetable-flower gardens and even orchards together).

Currently, utilitarian gardens can be incorporated into various landscaping styles, paving the way for concepts such as ornamental-utilitarian gardens, foodscape, edible landscaping, or edible gardens. Foodscaping can range from relatively small kitchen gardens in backyard spaces to larger urban or suburban landscapes that include extensive areas dedicated to food cultivation. Depending on the location and method of arrangement, these gardens can be cultivated in the ground, in containers, on rooftops or terraces, or as vertical gardens.

Although this approach is prevalent in Europe, there is a need for the development of this concept in Romania as well. Currently, vegetable gardens are often positioned separately in the backyard, isolated, without fully exploring the multiple possibilities of integrating utilitarian plants into ornamental garden designs. In this work, besides researching the ornamental-utilitarian garden concept, we aim to design a private garden, adhering to the principles underlying this approach to landscaping.

MATERIALS AND METHODS

In this paper, our aim was to extensively research the concept of ornamental-utility gardens and design a private garden while adhering to the principles underlying this approach to landscaping. The landscaping solution was developed for an individual garden of 261 square meters located in the city of Craiova. The building is oriented towards the northwest, facing the main street, and divides the yard into two different-sized gardens.

The total land area is 387 square meters, out of which 103 square meters are occupied by the house, 13 square meters by an annex used for storage, and the remaining 274 square meters are designated for the garden (including lawn, plants, and pathways) (Figure 1).

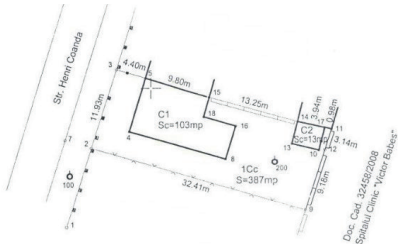


Figure 1. Land Cadastre

The initial state of the space to be landscaped is a typical garden, arranged with ornamental plants constituting over 80% of the area and 20% of the area dedicated to edible plants. Some vegetation elements are arranged linearly (such as grapevines and raspberries) or in a zigzag pattern (roses), while most ornamental plants are scattered freely. The garden's appearance is slightly unkempt due to the abundance of plants or their placement in certain areas.

The design process began with an on-site visit, during which measurements were taken, an initial sketch was created, and the project objectives and theme were defined. After obtaining the necessary field data and documentation, such as land cadastre or topographic surveys (RLV), the site plan was developed to scale. For the realization of this landscaping proposal, the Realtime Landscaping Architect 2016 software by Idea Spectrum was utilized, allowing both plan and perspective views of the layout (Figure 2).



Figure 2. Site Plan

The preparation of the site plan began with delineating the space, translating essential elements onto the plan, including the house with the placement of cardinal points and windows, other constructions, the entrance area to the yard, stairs, concrete or paved platforms, pathways and fountains. In the subsequent stage, the existing vegetation and other hardscape elements such as benches, conduits, or poles were depicted on the plan. With all the necessary spatial information, including details about climate, soil, client requirements, and preferences, the landscaping proposal was then developed.

RESULTS AND DISCUSSIONS

In order to create a design solution, alongside the preferences of the owners, the existing situation and the landscaping possibilities offered by the respective space are taken into account. The redesign concepts adopted are often based on the lines already defined by the existing vegetation or infrastructure, as is the case here. Built in 1956 during the communist regime, the architecture of the house is simple and neutral, spanning only one level. This simplicity necessitates that the only way to infuse an aesthetic personality into this property is through the landscaping of the garden area. For the landscaping solution, the choice was made for a garden with an ornamental-utility character. Geometric elements, such as the layout of pathways and green spaces delimited into several rectangles that are hard to modify, have been preserved. Regarding vegetation, a freer arrangement was opted for.

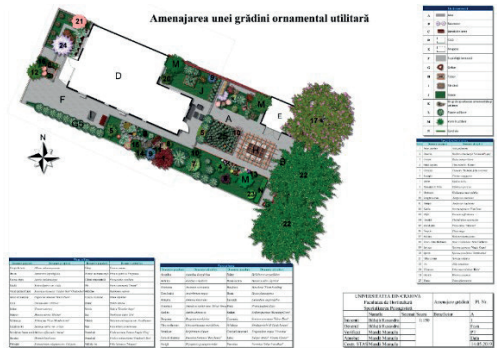


Figure 3. Landscaping Plan

Most of the ornamental plants already present in the garden (*Wisteria*, *Hydrangea*, *Chaenomeles japonica*) were retained in the project and complemented by other species with ornamental and food value arranged in borders, floral patches, mixed borders, container cultures, and for decorating pergolas.

Taking into account the owner's requirements, in the lateral area of the garden, a decision was made to create an atmosphere of an oriental garden by combining traditional species with decorative elements from Japanese culture, which complement the composition (Figure 3).

Presentation of the Landscaping Project

In the current garden landscaping, the basic layout has been preserved, including the pathways, delineation of green areas, and a significant portion of the existing plants.

The front garden has been enhanced in the shaded area between the L-shaped pathway and the house with a border of *Hosta* sp. with simple or variegated leaves in white or yellow, along with shade-tolerant grass. In this area, alongside an impressive *Wisteria sinensis* specimen, ferns and shrub species such as *Hydrangea macrophylla*, *Kerria japonica*, *Syringa vulgaris*, and roses have been retained.

The bench near the stairs has been removed, making space for plants, thus balancing the composition (Figure 4).



Figure 4. The front garden

The green area on the side of the house adopts an oriental influence through the addition of characteristic elements (a winding cobblestone pathway, a small bridge, a stone bench, a stone lantern, and typical plant elements). A pathway made of natural stone slabs and gravel has been proposed, following a winding route and bordered by various ornamental shrubs and

perennial herbaceous plants (*Cotinus alba*, *Spirea japonica*, *Picea abies nidiiformis*, *Astilbe*, *Hosta plantaginea*, *Dicentra*, *Delphinium*).

This pathway leads to a resting area designed with two types of decorative gravel. On the right side, there is a stone bench, a lantern typical of this culture, and in the center, an artesian fountain. Around this area, in the foreground, ornamental species such as *Phyladelphus coronarius*, *Hydrangea macrophylla*, *Juniperus virginiana* and *Bergenia crassifolia* have been arranged. In the background, the red leaves of a Japanese maple (*Acer palmatum* Atropurpureum), *Dicentra spectabilis*, and *Ribes alpinum* can be seen. When designing this area, the semi-shaded conditions of the terrain were taken into account, using species with modest light requirements.

The passage to the backyard is made through a Japanese-style bridge, with a gravel pathway at the base, creating the illusion of a bridge over water. On both the right and left sides, there are *Bergenia* and *Hosta* plants (Figure 5).



Figure 5. Backyard - Hardscape and Softscape Elements

The backyard, an extension of the lateral garden, begins with a column of *Hedera helix* that conceals a pole and a row of *Rubus idaeus* along the fence line, which will be complemented with utilitarian and decorative plants such as: *Echinacea*, *Sambucus nigra* 'Eva' (decorative with dark reddish leaves and white flowers), *Chaenomeles japonica*, and *Pyracantha coccinea* (decorative with white flowers and orange berries). In the front, there is an irregular grouping of ornamental and utilitarian herbaceous species: *Artemisia stelleriana*, *Lactuca sativa* (lettuce), *Hosta plantaginea* (green leaves in various shades), *Anemone coronaria*, *Antirrhinum majus*, *Viola*; *Dicentra*, *Verbena canadensis*, *Veronica* 'Giles van Hees' (pink flowers); *Tulipa* (white flowers) and *Achillea kelleri* (yellow flowers).

The back section features a solitary specimen of *Cotinus coggygia*, decorative with purple leaves and pink flowers, and *Vaccinium*

corymbosum (blueberry) with bluish-bloomed fruits. *Viburnum carlesii* is on the right, and *Paeonia suffruticosa* is on the left (Figure 6).



Figure 6. Backyard - Herbaceous Plant Group

The vegetable garden, located in the central rectangle behind the house, is almost entirely arranged with decorative edible plants such as *Lactuca sativa* var. *crispa*, *Ocimum basilicum*, *Brassica oleracea* var. *Osaka Red*, *B. oleracea* 'Chidori Red', *Raphanus sativus*, *Beta vulgaris* var. *cicla*, *Petroselinum crispus*, *Allium schoenoprasum*, arranged in serpentine rows separated by river stones. As ornamental plants, *Bergenia cordifolia* and *Tropaeolum majus* were added, and in the center, there is a specimen of *Yucca filamentosa* (Figure 7a).

Due to the area being very sunny, a portion of the grapevine was retained around the pergola and complemented with a *Clematis* 'Madame Julia Correvon'. The initial metal structure of the pergola was replaced with one made of wood in light oak tones (Figure 7b).



a.b.

Figure 7. a) Vegetable garden; b) Pergola

The old rose garden was partially replaced by lawn and floral species such as *Tulipa*, *Armeria maritima*, *Chrysanthemum*, *Pratia pedunculata*, *Sedum*, *Senecio cineraria*, *Hosta*, and utility species like *Daucus carota*, *Salvia*, *Viola cornuta*, *Melissa officinalis*. In the middle, there is *Aronia melanocarpa*, and in the corner, a variety of *Prunus persica* was planted. On the grassy area, an ornamental pot was placed containing annual flowering species like *Impatiens* and *Verbena*. The contrast created by the ornamental mulch and grass or plants adds a special charm to the arrangement (Figure 8 a).

The last part of the garden embraces the concept of cultivating vegetable plants and ornamental herbs in containers. The first rectangular container is 3 m long, 0.5 m wide, and 0.3 m high, containing vegetable species *Capsicum annum* 'Black Pearl' and *Armoracia lapathifolia*, which decorate with their leaves. The second container, square-shaped with a side length of 1.3 m, contains species/varieties with edible flowers: *Viola cornuta* 'Lemon Purple Wing', *Viola wittrockiana* 'Pandoras Box', and *Antirrhinum majus* 'Montego White'. From the initial vegetation, in this area, a vigorous rose and a *Hydrangea* were retained, and the rest of the garden was complemented on the side with specimens of *Spirea prunifera*, *Acanthus longifolius*, *Delphinium elatum*, *Solidago* 'Little Lemon'. Towards the wall, there is a black-purple leaved elderberry, *Sambucus nigra* 'Eva' (Figure 8b).



a.b.
Figure 8. a) Group of herbaceous plants;
b) Container vegetable garden

The use of various types of fruit, vegetables, aromatic, and medicinal plants, as well as the trained grapevine on the pergola, constituted an essential aspect in the landscaping proposal. Despite the limited area of the garden, a selection of fruits was integrated, and vegetable were used in greater numbers, being combined with ornamental plants.

Landscaping using edible plants can be a style of gardening that offers decoration, a space for relaxation, physical activity, learning, and also might contribute to changing attitude towards eating vegetables, especially among children (Istrate et al., 2023).

In theory, almost all vegetable plants can be used in an ornamental-utilitarian garden. However, certain species/cultivars have significant ornamental potential due to the appearance of their leaves, shape, texture, and sometimes due to their flowers or fruits. Moreover, recent trends show a continuous diversification of assortment, with the emergence

of new cultivars possessing superior decorative characteristics.

CONCLUSIONS

In the proposed landscaping solution, emphasis was placed on integrating various utilitarian plants alongside ornamental ones, resulting in a garden with aesthetic and functional role. This approach is not new but represents a different perspective on cultivating food plants.

Although this concept is trendy in Europe and beyond, in Romania, vegetable gardens are often situated separately, behind the house, without exploring the multiple possibilities of incorporating edible plants into ornamental gardens.

The assortment of plants used in such landscaping is extensive, as it can include, in addition to ornamental plants, vegetable, medicinal, aromatic plants, fruits and even grapevines.

This integrated approach, not only enriches the garden visually but also gives it a distinctive character, maximizes its use, offering a variety of fresh products in a limited space.

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