

TREE FOLIAGE, AS MAIN SOURCE OF COLOR IN LANDSCAPE COMPOSITION

FRUNZIȘUL POMILOR, PRVIT CA PRINCIPALA SURSĂ DE CULOARE FOLOSITĂ ÎN COMPOZIȚIILE PEISAGERE

*NEGREA Roxana*¹, *ZLATI Cristina*¹

e-mail: roxana.acfrance@gmail.com

Abstract. Colour is a controversial topic. In fact there are not two people to perceive colours the same, and therefore the harmony of colours can be easily applied in landscape arrangements. To this end in this paper we conducted a study on how the leaves colours provides a decorative effect that lasts more in gardens than in other compositional elements. Colour, although it is fleeting and capricious, can generally be used as a good background for proper closure of a perspective, could be an important focal point, also well-placed decorative masses through the foliage, creates a pleasant garden, decorative, throughout all twelve months of the year.

Key words: colour, harmony, accents, foliage, design

Rezumat. Culoarea este un subiect controversat. Într-adevăr, nu sunt două persoane care să perceapă culorile la fel și, din această cauză, armonia culorilor nu poate fi foarte ușor aplicată în amenajările peisagistice. În acest scop, în lucrarea de față am efectuat un studiu cu privire la modul în care culorile funzelor oferă în grădini un efect decorativ mai îndelungat decât celelalte elemente compoziționale. Culoarea, deși este trecătoare și capricioasă, poate fi în general utilizată ca un fundal bun pentru închiderea adecvată a unei perspective, poate constitui un punct focal de importanță, de asemenea mase bine plasate decorative prin frunziș, crează o gradină care este plăcută, decorativă de-a lungul tuturor celor douăsprezece luni ale anului.

Cuvinte cheie: culoare, armonie, accente, frunziș, amenajare

INTRODUCTION

Colour is neither the beginning nor the end of a garden. It is only a means to create special compositions. Colour has to be taken into consideration along with the other principles used to create a successful artistic expression. Colour by itself cannot influence the landscape. Colour should be used to offer accents, create balance, order and rhythm, compositional frames and centres. These are more useful in the landscaping of a pleasant garden than all the subtle colour harmonies that have ever been tried.

The positioning and proportion of colour groups are also important. The colour, for any season, should not be focused on a single flower bed to lead to the elimination of others. The basic colour used for a layout has to be found in the entire garden, so as to create the illusion of abundance.

¹ University of Agricultural Sciences and Veterinary Medicine Iași, Romania

The simplicity of the effect is always important. Because we cannot control the effects of the sunlight and shadow, we must always consider the competition of green in the surrounding landscape and the blue of the sky, as colour in gardens cannot be used as in the other arts (Posedaru Elena-Alina, 2008).

MATERIAL AND METHOD

Colours can be placed in such a way so as to draw our attention away from that places where certain tree groups are approaching the end of the vegetation period, or have not started to vegetate yet.

The balance can be underlined through the appropriate assignment of colours. When we use species with a leafage of a stronger colour, these should be positioned near a group with a simple green, abundant foliage in order to draw attention to the basic colour. When larger groups of a lighter, brighter colour are used, you should add several smaller groups of a darker or stronger colour, in order to bring more harmony to the whole setup.

For a more proper decorative effect, we will avoid placing bright colours focused on a single location, and the dull ones separately, except for the cases when the bright colours are partially located in the shade.

When strong colours are placed near lighter ones, the strong ones lose part of their expressivity and appear to be more discrete, while the lighter ones take on part of the brightness of the others.

The dominating colour is green, in a variety of shades, as you can clearly see in figure 1, to which a series of other colours: red, yellow, blue-silver, in uniform or varied forms, are added, depending on the species or variety.



Fig. 1 - Example of landscaping setup where various shades of green from the foliage of various *Cornus* species dominate the landscape (www.flicker.fr)

During certain periods throughout vegetation, from spring to autumn, transitory colours should be considered. The apple tree *pumila*, namely "*Niedzwetzyana*" has red young leaves which then turn brown-bronze, while only the median nerve and petiole remain red (Băltărețu A., 1980).

In a landscaping setup, the correct association of colours is essential, so that, the following species have been taken into consideration in order to create a total balance of colours in a setup, depending on the colour of the leaves:

Corylus avellana 'Zellernus' with large leaves, purple in spring, get dark green at the beginning of summer.

Corylus annys has large, dark-red – cherry, red leaves.

Cornus mas with oval leaves, raw green in the middle with silver margins, become scarlet during autumn.

Cornus californica with leaves usually green, raw green during the year, which become pink with purple shades during autumn.

Cornus alba 'Spaethii' with golden-green young leaves and dark green mature leaves, gets a bright red and crimson colour during autumn.

Cornus stolonifera has prolonged opposed leaves, dark green on the upper side and blue-green on the lower side, in the winter they become red or scarlet.

Malus ionensis 'Plena' variety has leaves that are dark green on the upper side and yellow-green on the back side, and in autumn they become yellow or dark red. Such a rich colour variety allows the creation of some special painting-like effects.



a) *C. alba* 'Spaethii'

b) *C. californica*

c) *C. mas* 'Variegata'

d) *C. florida* 'Rubra'



e) *C. stolonifera*
(autumn)

f) *C. floribunda*
(autumn)

g) *C. florida*
(autumn)

h) *C. sericea*
(autumn)

Fig. 2 (a-h) - *Cornus* species variety (www.rizreyes.com)

Prunus avium has large leaves, green in autumn that turn red.

Pyrus communis has green shiny leaves in summer that turn brown-red in autumn.

Pyrus nivalis with oval, tomentose leaves, on both sides, in autumn they get dark red, beautifully illustrated in figure 3.

As a working method, observations have been made on decorative species, and people have studied the way the leafage of trees influence the aspect of a setup. Thus it has been established, that the most beautiful and subtle colour associations are found separately from complementary colours in the tretads and triads of tree groups (Posedaru Alina, 2000).



a) *Pyrus calleryana*
(autumn)



b) *Pyrus amygdaliformis*
(autumn)



c) *Pyrus nivalis* 'Catalia'
(summer)

Fig. 3 (a-c) - Leaves colour at pear ornamental varieties (www.wikimedia.org)

Each colour has a complementary one situated right on the other side of the chromatic circle that does not have the same pigment portions. They are thus opposed; they strengthen and mutually strengthen their effect.

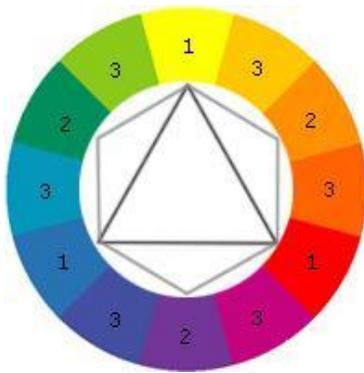


Fig. 4 – 1. Primary colors, 2. & 3. Secondary colors

It is interesting to know that each colour of the spectrum has its complement in other colours of the spectrum. To create a well balanced setup, the neighbouring colours also play an important part (Starmer Anna, 2009).

There are people for whom a single colour brings them pleasure, and there are others that seek the harmony of a multitude of colours. For the latter, the creation of harmonious contrasts between two or more colours is the ideal of happiness, the pleasure to enjoy watching.

Various harmonious combinations can be found on the chromatic circle, following the different position of some geometrical shapes such as: isosceles triangle, square, rectangle, and hexagon.

As shown, the harmony of colours is the successful combination of more colours. The aim is to make a colour stand out, as opposed to another.

To this purpose, the nature gives us an important lesson in art and good taste.

The sense of colour, especially that regarding the harmony of colours, can be gained after a certain education, and the one that creates a landscaping setup has to do its best to develop his or her sense of colour.

It is important to note that you can never get a harmonious setup unless the three primary colours can be found in the same landscaping setup, and that for obtaining a degrade of shades in a garden; you should select one primary colour, never two primary colours (fig. 4).

RESULTS AND DISCUSSIONS

The study will focus on the leaves of decorative tree species during the vegetation period, a special attention being offered to the changes that these go through in every season.

In connection to the surroundings, the colours that differ draw attention the most. Any colour seems stronger, the less it is present in the surrounding area of the visual field, as you can clearly see in figure 5. The stronger the difference between it and the surroundings, the higher the colour contrast.



Fig.5 - Image where the red of the *Cornus* leaves, contrast with the dark green of *Lonicera* and the yellow of the *Pyrus* (photo taken in arboretum Hemeius, original)

The way to perceive colours is influenced by the quantity of colour, the light, the surroundings etc.

If the light dims, the way we perceive colours changes as well. They lose brightness, but not to the same degree. This is why, at dawn, the purple leaves that had the strongest effect, seem almost black; the blue flowers begin to shine, and green seems lighter than yellow (Starmer Ana, 2009).

Rarely, in nature, the foliage of trees includes pure colours. Moreover, the bright colours on one side and the light colours on the other enlarge the range of colours.



Fig. 6 - The special chromatic effect created through the contract of ornamental trees' colours (original)

The quantity of colour plays an important part in landscaping. Yellow has the greatest brightness, violet the slightest. In such an association, the second colour would have to be in a higher quantity (fig. 7).

Goethe sees complementary colours as the perfect harmony (Goethe, 1995).

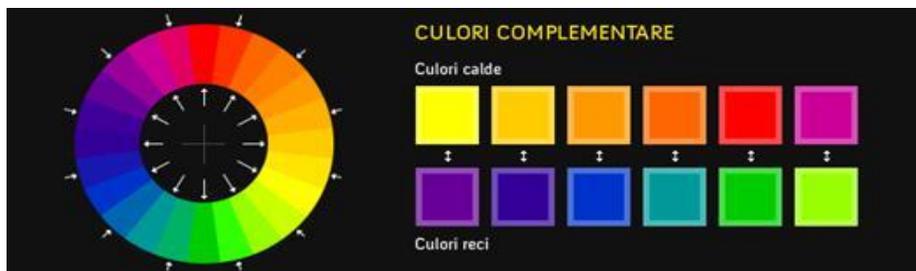


Fig.7 - Complementary colours

The highest colour effect is that of red, since it excites the eye to the highest extent and draws the most attention. In nature, red is rarer than blue and yellow.

When it comes to colour harmony, the colours are most harmonious when, if put one next to the other, they pleasantly impress the eye (Şelaru Elena, 2004).

CONCLUSIONS

1. The spatial volumetric compositions of tree groups have to also consider colour relations in which green, the dominant colour is enhanced by various chromatic accents with special effects, as you can clearly see in figure 6.

2. It has been noted, many times, that a one-colour setup should be preferred to one with a discordant contrast, with disharmonious combinations.

3. The harmony of colours in a landscaping setup can be largely influenced not only by the shade but also by the line and texture of the leaves.

4. The chromatic effect of darker leaves creates the impression of compactness, thickness and weight, and the light leaves create the impression of raveling.

REFERENCES

1. Băltăreţu A., 1980 - *Florile, parfum și culoare*. Editura Albatros, Bucureşti.
2. Goethe, 1995 - *Teoria culorilor*. Colectia Univers PSI, Editura Princeps.
3. Posedaru Alina, 2000 - *Cum asociem și dispunem speciile lemnoase ornamentale când creem un spațiu verde*. Hortiform nr. 4/92.
4. Posedaru Elena-Alina, 2008 - *Arhitectură peisageră Proiectarea și amenajarea unor spații verzi moderne, urbane și peiurbane*. versiunea electronică INVL Multimedia.
4. Starmer Anna, 2009 - *Ghidul culorilor*. Editura Litera, Bucuresti.
6. Şelaru Elena, 2004 - *Arta florală*. Editura Ceres, Bucureşti.
7. www.flicker.fr
8. www.rizreyes.com
9. www.wikimedia.org