

# CRITICAL ANALYSIS OF SOME URBAN PLANTATIONS IN IAȘI CITY

## ANALIZA CRITICĂ A UNOR PLANTAȚII URBANE IEȘENE

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**Abstract.** *Urban plantation design constitutes an important chapter in landscape architecture. Beyond their sanitation effect, most often emphasized in the specialized literature, the aesthetic appearance of these plantations should help to combat the subtle urban pollution, namely visual pollution. The examples chosen and analyzed in this paper tries to highlight some negative aspects of plantations design that contributes to visual pollution in Iasi city, both by design and execution.*

**Key words:** critical analysis, urban plantations, vegetal composition.

**Rezumat.** *Design-ul plantațiilor urbane constituie un capitol important din arhitectura peisagistică. Dincolo de efectul lor sanogen, subliniat cel mai des în literatura de specialitate, aspectul estetic al acestor plantații ar trebui să contribuie la combaterea unei poluări urbane mai subtile, cea vizuală. Exemplele analizate în această lucrare încearcă să evidențieze aspectele negative ale design-ului unor plantații urbane, care contribuie la poluarea vizuală atât prin concepție, cât și prin execuție.*

**Cuvinte cheie:** analiză critică, plantații urbane, compoziție vegetală.

## INTRODUCTION

Urban plantation design constitutes an important chapter in landscape architecture.

Beyond their sanitation effect, most often emphasized in the specialized literature, the aesthetic appearance of these plantations should help to combat the subtle urban pollution, namely visual pollution.

## MATERIAL AND METHOD

Analysing the urban plantations, we distinguished two different manners of intervention: the routine-formal plantation and the landscape composition of the vegetation. The urban consequences of these two kinds of interventions show that the selection, the placement and the composition of trees require taking into consideration many factors.

Observing many examples of the nowadays urban landscape, we noticed that the plantations strategies balance between aesthetical and ecological purposes, between diversity and uniformity. Most of the results are very important from points of view of urban psychology and sustainable development of urban landscape, being related with different kind of pollution and human diseases.

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## RESULTS AND DISCUSSIONS

Among many morphological elements of landscape design, plantations constitute an important part, being the most visible (Dascalu, 2006).

The urban landscape design objectives should be clearly established, taking into account the different kind of sites. Each urban site needs a special vegetal composition because the urban functionality and many particularities impose different design decisions. In the urban space, the visual perception of trees plantations inside the landscape compositions has a very important influence on the human emotional-psychic level and on the human behaviour and personality level. (Dascalu, 2006).

The routine vegetal composition cannot respect the personality of each urban site, therefore the result is often negative (fig. 1.).



**Fig. 1** - Independentei Park of Iasi. Routine composition with large hedgerow hiding the low composition behind (photo D. Dascalu)

Unfortunately, the most frequent urban examples of plantations are either those eclectically composed, or that monotone/uniform composed, usually in squares and parks, but also all along the streets. (fig. 2.)



**Fig. 2-** Independentei Park of Iasi.  
Eclectic composition generating confusion (photo D. Dascalu)

Both kinds of plantations are the result of a routine-formal design, chronically accustomed to create species diversity or uniformity/regularity, as a consequence of the lack of understanding of vegetation design techniques (fig. 3).



**Fig. 3 -** City Hall of Iasi. Monotone-uniform composition with very high density (photo D. Dascalu)

In the street tree plantings, the uniformity and regularity of alignment plantations can lead to monotony. For long distances we should avoid monotony because of danger of eyes fatigue, means visual and finally psychic pollution. (Trowbridge and Bassuk, 2004)

We remind here that, in the landscape design, rhythm supposes many important composition elements like: frequency, repetition, succesison, gradation. In that context, we can avoid these consequences creating some games of rhythm along the axis, using tree combinations: for example alignments of groups of high trees combined with groups of shrubs or bushes, using dynamic rhythmical combinations: 3, 2, 2, 3, 2, 2, 3; or 3, 2, 3, 2, 3; or 3, 4, 3, 4, 3, etc. – where 3 represents the number of high trees, 2 and 4 are the number of shrubs.

Very important are here, also, some other elements: the trees line-up, sustaining the axis direction and the breather between the trees, materialized trough the distances between trees. These elements can create the substance of the composition, or can destroy it if are not judiciously used. Not respecting the

distances between trees lead to a high density and vegetal suffocation and destroy the personality of alignment.



**Fig. 4** - Judicious/armonious alignment composition - example of Exposition Park of Iasi (photo D. Dascalu)

Taking into consideration the need to accentuate the axis of the streets, we should mention also that there are positive effects of uniformity and regularity of alignment plantations on the level of the eyes. (fig. 4). On the psychic level this judicious uniformity and regularity can create a peaceful atmosphere, generating relaxation. Regularity of alignments generates relaxation and tranquillity - monotony does not exist, despite the trees' uniformity. Judicious distances between trees and walkers create a spatial harmony and majesty.



**Fig.5** - Images of Europa Hotel of Iasi. Eclectic plantation suffocated by its big density (photo D. Dascalu)



Trying to create diversity without unity or without a judicious composition, bring the danger of eclectic plantations, either suffocated by a big density, or dispersed on a large surface. The effects are known as visual confusion and stress. (fig. 5).

Another common mistake in the urban vegetation design composition is the the dilution of images by spreading singular shrubs on big surfaces. (fig. 6).



**Fig.6** - Images of Barboi Park of Iasi - singular shrubs on big surfaces, spread without any aesthetical composition (photo D. Dascalu)

This can generate visual monotony and lack of personality. The insipidity of images can create fatigue, psychic depression, lack of sociability and less desire of public meetings in such spaces. (fig. 7).



**Fig.7** - Images of Independentei Park of Iasi – Lack of aesthetical composition, generating visual confusion/visual pollution (photo D. Dascalu)

Trying to put attention to the problem of “diversity versus uniformity”, some researchers accentuate the existence of some preferences for visual

uniformity, or for species diversity - but they don't specify about whom's "preferences" or "needs" they talk.

It is very important to know and specify if we talk about designers or urban inhabitants preferences, or both preferences. Their preferences or needs will influence the design plantation in urban spaces, or in squares and parks, creating the nowadays urban green aesthetic compositions, or, on the contrary, some eclectic inaesthetic plantations.

In the cases where the landscape designers and horticulture engineers don't take into account the opinions of inhabitants, as a result, their landscape design is responsible in a part of many psychic troubles as the attention diseases, or visual and behavioral diseases.

The lack of the development of such urban studies, based on competent questionnaires among the inhabitants of different urban areas, has a visible negative influence over the nowadays urban landscape.

## CONCLUSIONS

Our proposal is to develop such landscape urban studies with judicious questionnaires, in order to extract from the inhabitant's opinions and preferences the physical, psychic and emotional consequences of the design plantations upon them. These questionnaires extracts will help the landscape designers to create judicious composition recommendations for all kind of urban sites and areas, preventing some forms of urban pollution. We don't mention here many other well known factors, which should be taken into consideration for good results, as visual/esthetical/species compatibility of trees, climate particularities, soil particularities, etc.

These analyses underline just a few elements which are involved to obtain some features in the case of urban plantation design, on small or large surfaces design. Unfortunately, usually these few design elements are considered as "simple routine task".

Therefore we want to draw a warning about the danger of this routine behaviour in the domain of urban plantations, which create many kinds of urban subtle pollution.

## REFERENCES

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