Presentation methods of landscape projects using classical and modern techniques

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Abstract  This work has the purpose to assess the currently available solutions for presenting a landscape project. For a better analysis of the currently used techniques, the techniques used in the past will be analyzed, without neglecting the influence art and architecture have always had on this field.

In order to identify the most important elements in our final discussion with the beneficiary, the landscape project structure will be presented, with the analysis of the substantial parts for the final presentation.

The beneficiary’s need to better understand the project and to perceive the arrangement before its execution must be accepted. The landscaper supplies a service to his/her customer in change for a cost; everything begins with planning the landscape design and ends with the arrangement. The designer may be involved in the arrangement and it is not preferable, but it does not always happen as such. Thus, the design must be as explicit as possible in his project, both technically speaking, in order to make sure that the people executing the design can do it correctly and exactly, but also for persons not understanding the technical language. But everybody may read a plan or understand a section. The customer is very rarely a specialist, thus we have to address him as explicit and comprehensive as possible.

Key words  presentation, landscape, graphics, rendering, sketch

The project presentation must answer the following question, always asked by the customers: how is the arrangement going to look? The customer’s patience is tested starting with the discussion step till the project step. A long period can pass till the final product, when safety can get involved: what if I haven’t made the right decision, what if the final product will not satisfy me, did I understand the project. This is why the graphical representation of a project can make a customer trust it. The final presentation form, independent from the chosen technique, must be a product accessible to the public, a commercial product, even if it involves knowledge and a very technical process.

Material and Method

We have listed below elements amongst classical techniques used for presenting the projects:

- drawing on a paper or calking paper using a pencil or coal, ink, colored pencils, aquarelle;
- model;
- photo processing;
- collage for drafting the presentation sheets;
- presenting the vegetal material to be entered in the arrangement through herbariums or botanical pictures.

The large design companies usually employ drawers for creating perspectives. An ugly or naïve drawing may seem for the customer a lack of professionalism. Even if it is no longer a need as the computer helps the less talented, the skill to make a hand sketch is always welcome. Each project must begin with a hand sketch, even if the work is made on computer. Sketches help for profiling an idea.

Obtained results

We have listed below elements amongst classical techniques used for presenting the projects:

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recommended. It depends on the used technique, but the pencil can erase in time and become blurry. Keeping, transporting these sheets may involve difficulties; this is why the ink draft is preferred.

Ink sketches allow the performance of clear lines, the drawing looks cleaner. It is true that ink sheets are also sensitive in a wet environment, but in time, they are better preserved. The representation modality – the nib type, technique, ink color – is to be selected by each and every drawer.

The drawing technique with the ink nib is pretty difficult. The drawer encounters many difficulties in representing objects in a realistic manner using not more than points, lines and hachure, without color stains. In certain situation, a realist aspect is not desired; this is why this technique is chosen.

The impression of reality is obtained by using shadows made through different densities of points and lines. A better density corresponds to the darker (shadowed) areas. The technique of using different hachure types is considered more difficult. In order to ink represent the objects, edges are important to be rendered, which may be contrasted or lost. The thickness of nibs is the choice of the drawer. Ink sheets are sensitive in a wet environment, is true, but they are better preserved in time.

Colored pencils are chip and handy or everybody. However, they are better used for making colored design plans than for perspectives, as they do not allow the mixture of colors, thus we only have to work with the nuances we dispose of, we cannot create new ones.

In rendering the vegetation, we need many green nuances, each of them specific for each and every specie. The colored pencils set limits us, thus the drawing cannot render too well the used species.

In case of plans, these aspect is not an issue, as the legend only introduces for many times some green nuances, each of them signifying a certain category of plants (dark green, chrome green: broad-leaved trees, light green: grass plot). Entering too many nuances may lead to confusions. In order to make realistic perspectives by using colored pencils, we need a certain technique (in order to keep a balanced hachure,
hachure inclination, intensity) and exercise, otherwise the result can be naïve.

The design plans made in aquarelle are not very precise, but they can be used strictly as presentation sheets accompanied by technical sheets.

Used for making perspectives for landscape design, the aquarelle allows the performance of details allowing the recognition of species.

![Fig.5 Realistic model](image1.jpg)

The model is a miniature of an object, building, neighborhood or landscape arrangement marking out the situation in the area, the placement of each element and of the used materials. The models of site are usually made in reduced scales 1:100, 1:200 or 1:500, thus not too many details are shown. The model is made in order to present the design to the customers, before its execution. They are expensive and assume a lot of work and this is why they are made in case a generous budget is granted for the design of an arrangement and in case the beneficiary desires to see a model to a certain scale.

Fig.5 Realistic model

A classical technique for presenting the species to be introduced in the arrangement assumes the usage of herbariums or botanical pictures. The herbariums are pretty difficult to make and keep, they need to be periodically replaced, they only present parts of the plant and not its habitus. Botanical pictures were also used for identifying the species and led to real art. There are collectors today of such pictures, considered art works. They were also valued in the baroque period, being an inspiration for the flower motifs of tapestry.

The modern techniques for presenting the projects are grounded on using the computers, either starting from a vector model generated by a specialized program, or only for image processing. Amongst the most used techniques in landscape practice, we list:

- image processing;
- animation with two-dimensional images;
- three-dimensional modeling and rendering of three-dimensional models;
- three-dimensional animation;
- models made by means of computer.

Image processing assumes most of the times digitalizing an image of the row to be arranged. Digitalizing assumes scanning the images and importing them in specialized programs. The images can be nowadays directly digital, by using the digital cams, which offers a larger depth of the images and processing it at a pixel level, so that the interventions on the images are not macroscopically noticed.

Digital photo is about to replace the classical photo in all fields, specially due to its advantages related to resolution (clarity, number of pixels on a surface), facile stocking and processing in various formats. A digital image is a instrument which can be altered on the computer, result of scanned classical photos, of scanned documents or directly obtained by means of the digital camera.
Although backed up by a mathematical apparatus, digital processing of the image gets closer and closer to the public through the agency of specialized software products. The most known image processing program is Adobe Photoshop. This is software used for editing digital images on the computer, program manufactured and distributed by the American company Adobe Systems and especially referring to professionals of the field. Adobe Photoshop is the top of software products range.

CorelDRAW is a complex application of vector graphics helping to create professional drawings, from simple logos to complex technical drawings. CorelDRAW is a component of CorelDRAW application set, out of which: CorelDRAW vector graphics program, Corel PhotoPaint bitmap graphics program, Corel Rave vector animation program, Corel Texture Program of bitmap graphics, specialized on textures, Corel Capture screen image capture program (the application offers various options next to Print Screen/Windows, like establishing the resolution, the image type etc.), Corel Trace bitmap image transformation in vector images (this program is grounded on approximating the shape and color, although not very precise).

There have appeared lately various programs referring to landscape designers, but which can only be used for image processing.

Maybe the most famous, and also the most used program for presenting the images is Microsoft Power Point.

The 3D graphics software packages are programs or collections of programs used for creating 3D graphics by means of the computer. the work flow usually consists of various steps when the studios use various programs in order to create 3D objects for movies and games. 3D animation can be quite difficult, time consuming and non-intuitive.

Out of the programs building three-dimensional models, we list: ArchiCAD, Google SketchUp (free intuitive program, it cannot make very precise models, but useful for presenting the volume), Maya, Nemetschek, Revit, 3D Studio Max.

Rendering assumes making an image on the grounds of a three-dimensional model created by means of the computer, using specialty programs as ARTlantis, RenderMan. The rendering can also be made directly within three-dimensional modeling programs, like ArchiCAD, Revit, but the rendering specialized programs consume less resources, are faster and do not present difficulties for importing the three-dimensional model from the related program. All the objects to be rendered must be built first of all in a modeling program. Rendering has the purpose to create the illusion of reality, using textures, shadows, lights, atmosphere, optic effects.
3D animation can be very difficult, time consuming and non-intuitive. Most of the three-dimensional modeling programs have the possibility to make animations. ArchiCAD allows putting video cameras in various points of the created object, and thus, we can have a walk inside the made model.

3D animation is used a lot for making games and movies; it needs good, expensive computers and knowledge in the field. For those not possible to make animations, we recommend to address to companies specialized in rendering and animations. One of the programs preferred by the programmers for making animations is Maya.

Scale models can be made by means of predefined objects, but when we deal with large projects and the object become smaller and smaller, impossible to be made. Inspired from the apparatus generating scale models for parts, invented by mechanical engineers, there are apparatuses which can cut with laser from a material cube the desired model. They are extremely precise and only need to vector and three-dimension model of the object to be represented. The procedure was used at the beginning for computer assisted industrial design, but there are today a multitude of companies offering their services in performing laser cut models.

**Conclusions**

The computer is a contemporary instrument and evolved from something innovator to a standard. It is also a standard nowadays in artistic environments.

It is an instrument accessible to the common guy, it assumes no substantial money effort, and is accessible, through its programs for different hierarchies of users, to those without a specialized training in the field.

Most part of the computer users, may easily use, by means of the interface programs like Windows, the final product of the landscape project, either a power point presentation, 3D modeling or a short movie. Thus, by using these modern presentation modalities of a project we address to a larger and larger public. The gratuitousness and easiness of many programs make the computer the instrument of this era. The computer graphics is a modern field with multiple practical applications in various activity fields (medicine, art), which can be made due to the development of mathematical subjects specialized in this direction. Using the computer becomes more and more popular as the information processed through its agency is very mobile and easily transmissible. It can be transported and archived on different types of support, most of the times of small dimensions.

The essence for presenting a project consists of the capacity to transmit the sensation of space, the modality this sensation is transmitted depends on the preferences and abilities of the designer, who can use a hand perspective, virtual images, increase simulations, sun draw or seasons passing, even dynamic rendering and cinematic presentations (space passing of the project).

Although the computer assisted design is largely used, there are designers combining the hand techniques with the digital or vector techniques, using till 8 different programs and the hand drawing in order to finalize a project. It marks out the need to know the computer assisted design programs, but also the landscape designer’s knowledge regarding the hand drawing.

**References**

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