



Authenticity

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Beauty and Performance of Post Production in Architectural Engineering

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Introduction

Today, the use of graphic art in architectural presentations has become an integral part of any architectural project. Applying special and professional techniques in rendering and post-production in architecture has become an attractive and artistic competition for designers, architects, graphic artists or CG artists (Naghipour, 2017). In this attractive competition, software such as Photoshop is an application for creating dreamy and extraordinary scenes (Naghipour, 2017). Among the artists of the graphic architecture movement, Pedro Fernandez is one of the most famous artists in the field of creating extraordinary architectural images in the world (Naghipour, 2017). Contrary to popular belief, architectural post-production is not just an assembly to present the final work, but it is a science in architecture and requires a lot of experience and study (Naghipour, 2017). In the fields of architectural engineering, photography, filmmaking and editing, post-production is used to present the final product (Naghipour, 2017). We say that post-production is a science because the purpose of post-production architecture is not only to beautify and deceive the viewer, but also to present the work in the best way and in the most correct way. For many people, presenting architecture is an art (Naghipour, 1396). People at home behind keyboards, pens and pencils are very proud of their work, because like all arts, this form of expression is for them to increase their understanding of the design of a place (URL-1).

In recent decades, architects have increasingly begun to use Photoshop as a program to obtain a variety of images or edited images with maximum aesthetic value (URL-2). Due to the wide range of image editing and enhancements that the program provides, it has become an essential tool for businesses (URL-2). Whether you want to present an image from the beginning, to reinforce it, or to pave the way for 3D modeling, Photoshop will never leave you empty-handed (URL-2).

In Photoshop, you can always use layers and adjustment masks for flexibility (URL-2). Limit the number of layers in the Layers palette to consider specific elements and experiment with them to see how they interact with each change (URL-2).

With the help of a mask you can easily cut parts of various layers (URL-2). You can also use settings for specific areas of the image (URL-2). It is always wise to group the layers (URL-2) to get rid of any confusion.

In this article, after introducing Photoshop and its features in the field of post-production architecture and its impact on architectural engineering and their sub-categories and samples of post-production works, this research analyzes them and then answers the questions. The research has been answered.

Research method

None of the previous research has shown detailed analysis and process of working with Photoshop and the difference between rendering and post-production. The necessary skills in Photoshop and rendering engines allow the details of the two to be examined more carefully. Of course, experience in graphic software can be of great help in advancing the research, so we have tried to reach the desired and desired end by examining all the necessary and practical cases of this research.

Expressing the problem

Why is Photoshop so valuable?

Some of the recurring concerns of raw 3D S Max images are as follows: 1- The lamps do not work, 2- Mirrors and glasses do not look alien and realistic, 3- The image does not have the necessary charm, 4- The dark ceiling is, 5- It looks like an artificial scene, 6- Unsaturated shadows (URL-2).

What can be done to improve images in a short time?

Background

Mr. Alex Hooger used a very basic sketch-up model with a few safety lights that illuminate the interior and highlight some of the exterior (Figure 1) (URL-3). For this particular project, he collected 50 images of Icelandic rocks and disassembled them together in Photoshop (URL-3). This is where the magic happens to Hooger (Figure 2) (URL-3). His workflow relies heavily on Photoshop to rely on textures, lighting, and experimenting with the atmosphere and tone of images (URL-3). Over the years, he has developed an efficient, non-destructive workflow that allows him to make rapid changes to atmospheric results without having to deal with heavy 3D scenes and long periods of time (URL-3).

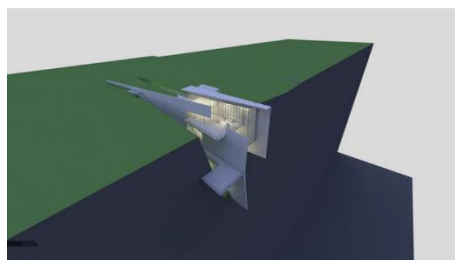


Figure 1. Render a raw image taken with sketching software. Source: (URL-3)



Figure 2. Post-production done with Photoshop software. Source: (URL-3)

A heavy workflow with Photoshop allows us to quickly complete large amounts of information (URL-3). It also allows us to make changes quickly, because in many cases, when Creating images, projects are in development, it will be almost impossible for us to try to keep track of these changes in 3D (URL-3). We will invest in more accurate models (URL-3).

Almost everything around you has a bluish-black color, because the biggest thing in the world is the sky, which has those colors. So it's natural that those colors are the most important part of the provider and make them look more realistic (URL-4). Try using these colors in the sky settings of your rendering software and some yellow in the sun, this will make the image 80% more realistic (URL-4).

Providing render to correct the different colors you want to do is a painstaking task to remove light and materials, and makes artists decide to do most of the work in 3D, and color correction (such as adding soil and texture) to the post. Production remains (URL-4). This is what a 3D image should look like in line with the corporate industry (URL-4). Basically, what you do is this: Render, do a little bit of color correction, and add a little shine (URL-4). Despite the fact that it is more of a standard, it should be a thing of the past (URL-4).

Destroying your post-production images by scratching, shooting, blurring the lens, and more will make your image look more like a photo taken by a camera (bad or old) using film and then rendering in 3D (URL-4).

The most important part is to try to integrate new elements such as felled trees, plants and other architectural companions with your original rendering by adjusting the saturation, color and brightness (URL-5).

Simply put, editing in Photoshop will save you time and effort rather than doing it in 3D S Max, because unlike 3D S Max, Photoshop is very versatile and scalable (URL-2). Using the facilities of the same process and steps, you can do the in-house production post of a house, restaurant and even an office (URL-2).

Additionally, raw files from 3DS Max or any other 3D software program are not displayed to customers. They need to be edited and improved with special effort to make them look attractive (URL-2).

The purpose of the research

In this study, after collecting the background and examining the problems that architects were dissatisfied with in presenting their images and works, we decided to examine the disadvantages and advantages of each by considering the arguments and using the skills of Photoshop 12 software and V-Ray software. Finally, we come to a comprehensive solution for the production of natural three-dimensional architectural images, and the questions that arise are:

Why is Photoshop so valuable? What can be done to improve 15 images in a short time? Can post-production cover rendering flaws?

Results and Discussion & Conclusion

Nowadays, specialization of science in the field of post-production architecture and Photoshop software has become essential in creating an architectural work. Specialization

in this field creates a huge change in the field of architectural engineering. According to the above, Photoshop software can be considered as a powerful graphic software and also one of the most important tools for growth and development in economic work and a tool to create architectural outputs.

Using the Adjustments command is one of the most important parts of a post-production project, because we can apply darkness or light or different color settings to the renderings, which at a more advanced level we can turn day into night or create different light spaces. At more advanced levels and for the convenience of choices within Photoshop, we can use rendering of V-Ray elements, which makes the job much faster.

All the tricks that a person can use in Photoshop are divided into three categories, which include the following: 1- Adjusting the white color, 2- Highlighting the image, 3- Adding shadows and contrast, 4- Separating light and visible shadows 5- Adding camera lens effects (improving depth of field, waterfalls, painting, distributing programs), 6- Adding light effects (sunshine, light from lamps, volumetric light, light from the sky and windows).

After editing the image, you can see the result well: for example 1- lamps work, 2- mirrors and glasses look realistic, 3- the image looks attractive, 4- the ceiling is bright, 5- the real scene And it seems natural, 6- The shadows feel saturated.

The use of snow crystals in post-production is also of special importance in creating special effects in the exterior of the building, which can have a double effect in attracting more attention of the project viewer. Therefore, in this article, for the first time in the world, this technique was tried to introduce the superiority of architectural projects and how to create it on the project. Snow crystals in post-production architecture come in a variety of shapes that can be generated much more easily, quickly and naturally in Photoshop. Similarly, in this article, in Photoshop, we were able to generate and create snowflakes much easier, faster, and more naturally on the post-production image rendering post (Figure 7).

The motto of this research is given in the book Post Architecture Production in Photoshop; "Enhance your design with a pencil so that you can design a bold post-production in Photoshop." For this purpose, comparisons and examples of snowflakes expressed in this study show that Photoshop software has extraordinary power in the field of post-production architecture because it can be used to render raw rendering to reality image rendering, light effects, night lighting, IES halogen light With the PNG format, the production and creation of snow and rain grains and fog, the transformation of the external scene of the day into night, and so on. This work is very important for an architect and from this point of view, it is important to know the post-production of architecture. Proper use of architectural post-production can also effectively speed up the workflow and take renderings to the next level. In fact, everything that is seen around and the whole universe needs post-production to show the created beauties. In this universe, without creating the post-production stage, there will not be this amount of beauty and effects that can be seen. You need to master all the skills carefully and patiently in order to convey a sense of beauty to the viewer, and this will make you better known than others in your target market.

Keyword: Architecture, Post Production, Image Rendering, Photoshop, Designers.

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