

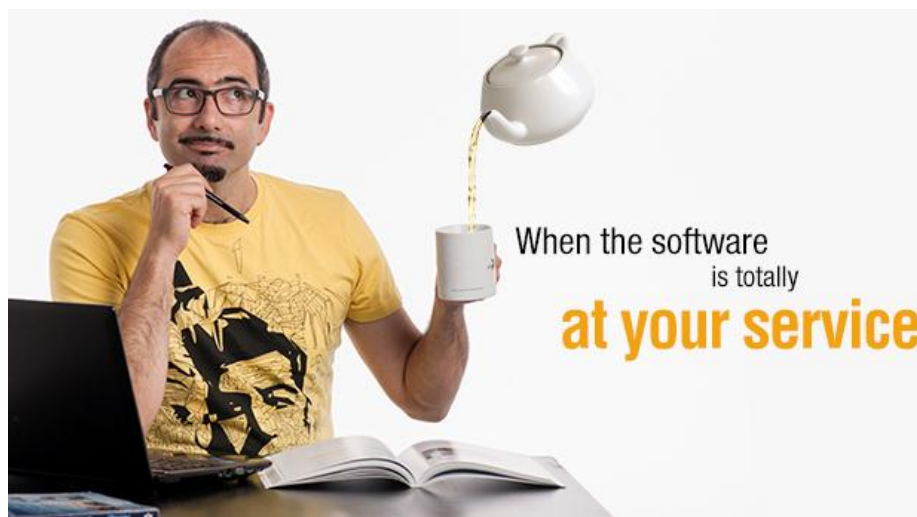
START WITH WHY

Here I collected some questions I asked to myself along these years
During the class I'll give my personal answers, with theory and practical examples

INTRO

Hello, my name is **Ciro Sannino** and I'm from Italy.

I am a designer, with two big passions: music and photography. In this last 10 years working as V-Ray Trainer I tried to mix all these experiences in one method - 5SRW – which is my method is 5 steps, to create photorealistic images for Archviz. **5SRW™** stands for **5-Step Render Workflow™** and the five steps are in order: **Framing, Light Balance, Materials, Final Render, Post Production**.



Of course this progression is nothing new in our world. I'm sure that a lot of artists, consciously or not, more or less follow this order so from my point of view it's not simply about the steps themselves.

When I started working on 5SRW, there weren't methods to learn, actually, until 4-5 years ago, the idea to study an academic method did not exist. Of course each artist had/have his own way to work, but this is totally different to having a structured method to learn and to use in production.

In my beginning I suffered a lot working with V-Ray randomly but thanks to my studies I was totally persuaded that creating a 'process' was possible and today this is reality, a lot of people are studying it, there are universities teaching 5SRW and – the most important thing – many users improved a lot their results, their position in companies and of course their earnings.



ABSTRACTION LAYER

Of course these 5 steps aren't new, they couldn't be! The uniqueness of 5SRW is that each step is faced exclusively using photographic concepts. **We master the complexity of a render engine using the photography as abstraction layer.**

So when you read in our gallery "Created with 5SRW Method" this doesn't mean that the user just followed the 5 steps. This is very superficial.

CREATED WITH 5SRW METHOD means that:

- * The user – step by step – have been working applying photographic concepts & techniques
- * The user doesn't work randomly, he's aware of the entire process
- * This implies that he will be able to reproduce the same results in different scenes
- * This implies that his experience will grow faster and structured, making him more effective

ALWAYS START WITH WHY

There's an author I really love – Simon Sinek (he's from UK) – that has a theory that I think represents perfectly our world as well. He says that everyone knows WHAT we are talking about. Someone known HOW TO do what we're talking about. Very few people know WHY we do what we do. He calls this theory **the golden circle**. His book's name is START WITH WHY, and his idea is always move from why to how to, and not the opposite which is the most common way, and many times the most common mistake.

That's why the "layer of abstraction" is so important for me because, especially it is exactly what we develop along the years. I'm sure that each one of us studied thousands of tutorials in his life, each one of us completed dozens or hundreds of projects but what really remain, what we really built in our mind after all this work is a **layer of abstraction**. Of course we also grow in experience, but the abstraction is much more powerful because it's the thing that allows us to take the concepts and apply them in different situations. We or our employees spend a lot of time in useless things to unconsciously build a good layer of abstraction.

So what if each user could build it directly? This is for me 5SRW: a set of rules and techniques taken from the photographic world to work with renders, in order to produce photorealistic results.

PREMISE ON HIERARCHY

Today I'm going to talk about lighting – **step no.2 in 5SRW**. Specifically I'll talk about **light hierarchy** as the most powerful tool to create perfect lightings. I said "tool" but don't think I'm referring to any parameter, script or software. It's a mind-tool! A set of rules to use as reference to build a good light hierarchy. The most complex hierarchy I'll show you today has 5 layers, for me it's like an universe, harmonic, balanced. The more harmonic is this construction the more interesting will be the photography.

Ok, great .. but... WHY? Because, even if we work with 3d and renders, the final product – the image – is a simply 2d. The 3-Dimensions we feel in renders - and of course in photography as well - are just an illusion

created by the light, created by the light and the shadows that work together to create shapes. To sculpt an image. Photography, renders are something magic and this is very exciting for me.



Sculpting with light in photography – Robert Mapplethorpe

QUALITY – TOOLS/RESULTS

Before to get into lighting I would like to introduce a couple of concepts: quality and relation tools-results. A very common topic is the “quality” and very common expression is “I created an high quality image” – OR – “my image is in low quality”. When use use the word “quality” to describe a property of our image what kind of quality are we really referring?

MAIN PARAMETERS FOR A LIGHT

The light is our hammer and chase to sculpt images in our monitor, so we need to focus on the main characteristics we need to control in order to create good shapes in our space. Someone could be more evident, other could be invisibles. Many times we work with tools that we control instinctively, so we need to bring out some points to the conscious level in order to control exactly the process and the tool.



We need to know exactly how light works to control the process

HIEARCHY AND MEDIUM GRAY

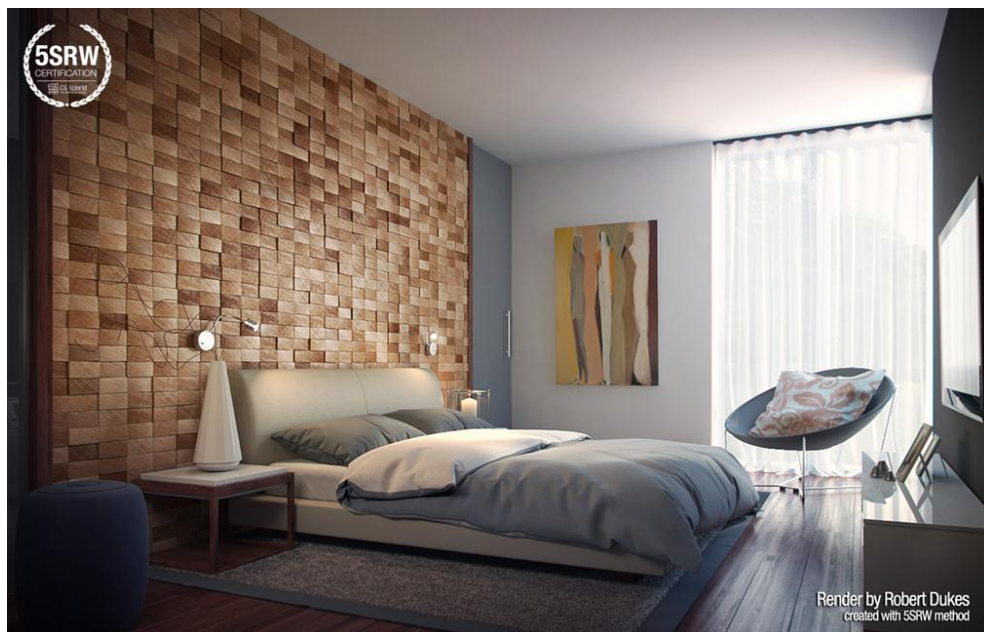
The hierarchy of light is the tool we use to structure the lights in the scene. Hiearchies could be simple with a couple of layers or very complex with 5 layers. Talking about more than 5 layers doesn't make sense in my opinion, because 5 layers have already everything we need to create structure and interest in an image. This does not mean that 2-layer or 3-layer hierarchies are basic and less interesting.

The second step is always arranged using the medium Gray. Medium gray stands for the medium value perceived by our eyes. This technique is already known and applied in photography with the 18% KODAK GRAY, useful to tune the medium exposure for a shot. That means in our case we wont use the mathematical gray 128,128,128 but the perceived medium gray which is the mathematical one corrected by the gamma curve. So the final value is 187, 187, 187

Actually in 3ds Max, using the Gamma correction in preferences, we read 128 as medium value. But never forget that this color is corrected to be compensated according to the Gamma curve. Anyway a part these technical information, why is it so important working with the medium gray?

HIEARCHY CONSTRUCTION

The most common photographic technique to build a light hierarchy is working light by light. Start with the first light then turn it off and add another one. In this moment you're working just with this other light, then turn this off, add one more and so on. Follow the process until the image is complete, but just working light by light is not enough to control the entire process. Each light has a name and each light combination can be arranged following a couple of rules: balancing and alignment. How to apply these rules while working light per light?



How lights are working together in this example?

CONCLUSION

Lights work together, in a space, in a relation with a Camera. I call this triad DNA for render. The DNA is the maximum abstraction possible for a lighting. It helps you to understand how to recreate the same lighting in different situations: day, night, interior with natural, artificial or mix light.

Finally the question is why some images results more realistic than others? Mainly because of the lighting, the more interesting and accurate is the lighting, the more attractive will be the image.

Yes ok, but.. **why?**

See you soon @AU!

Ciro Sannino



External links

(*) *Photography & Rendering with V-Ray* / Author: *Ciro Sannino* / Publisher: *GC Edizioni*

<http://www.gcedizioni.it/en/libri/english-books/en-photography-rendering-with-v-ray>

(*) *5SRW Online Course & Free contents* / *Blog area*

<http://www.learnvray.com/>