

## Q&A for Lighting University - Zen and the Art of Lighting Design.

November 16th 2018.

Q: How Zen can be brought in full relations to Human Neuro Vision Imaging as that is key in Biophilia Lifestyle approach?

A> Zen is not biophilia. Biophilia and biomimicry are means of either being inspired by or copying nature to man made design. They are intentional design means that absolutely look designed when done. A big tenant of Zen is allowing for human emotive interpretation of the space. Even within human neuro imaging, there is no absolute to how people interpret the space emotionally. It concerns more of an aesthetic and functional value that, while there is valid merit, can fall short of the empathic response that people get.

Q: When the industry turn to Natural light and without looking into the light source, what will be then the perspective of human please explain?

A> Natural light is actually a perfect Zen tool as few sources of light lend themselves to emotional responses and interpretive experiences. Just as there are “morning people” and “night people”, so too does natural light allow those people to be who they are. I would consider how best to compliment (vs supplement) the natural light as well as offer the “photo negative” that I had discussed.

Q: How does a Human Sight Factor affects the Lighting Design? Our eye automatically moves towards the brighter area. Then how we can use darkness in lighting?

A> Ah ha! As I said, when I listened to that seminar on darkness, it took me a while to think about what that could mean and apply it. In that particular seminar, it was more about “taking a break” from light and bettering a design through less light. I began to think about its implications on Zen and emotive thinking and feeling. While the human eye is attracted to brightness, it is also drawn to contrast. This is where darkness and color of light can come into play. You may find that with establishing contrast in these ways, the amount of brightness can be reduced thus you have a more ENERGY EFFICIENT and interesting space.

Q: What are your thoughts on user controls to customize occupant experience?

A> Controls are part of the necessary tools of responsible and realistic lighting design. It also allows for the possibility of rendering spaces differently at various times allowing for new interpretations of the same space. We tend to think of controls simply as more or less light of the same “scenes”. Perhaps we could think of controls creating differing scenes within any space much like walking through the woods in the morning and late afternoon reveal different shadows and spatial appreciation.

Q: Do you also use Feng Shui to harmonize your design?

A> Not intentionally. Feng Shui still seems like a formula to me, and in my mind Zen design does away with formulas. I appreciate the emotive responses and energy that Feng Shui represents, but would challenge people to find other ways to recreate similar energies in the space as it wants to, not as we try to dictate.

Q: Could you please elaborate on the difference between koko and kanso?

A> I know this is a tough one. Koko is not putting in design elements at the onset except for what is absolutely minimally needed. It relies on the “purity of a base identity” to be its own beauty. Kanso is going back at a design and stripping things down to a more minimal essence, re-examining them, then determine what may be better used (if anything at all). Think of Koko as more at the onset/proactive, and Kanso as a self check/response.

Q: What are your thoughts on school classroom lighting?

A> This is one of those cases where we do have to apply realities of light levels as much as a Zen design approach. Remember when I said that people see the world in brightness/shadow, texture and uniformity? Well, perhaps we should think about establishing the “proper” recommended light levels on the horizontal plane (perhaps in a minimalist/koko type fashion), then look at enhancing the vertical plane that is often forgotten to create a better overall feel. This in turn may allow students to like being in the space and thus have a better attitude in the classrooms.

Q: How to determine the lighting in same space like railways modular cabins?

A> If you are referring to smaller spaces, natural light can be a huge factor in helping here. The light will naturally penetrate and change throughout the day allowing different interpretations and emotional feel. I think a very simple (think koko) approach whereby any supplemental light is taken for granted and a person is allowed to simply “be” in the space.

Q: How to calculate required lux level?

A> Your respective overseeing lighting bodies can help. We use the Illuminating Engineering Society (IES) recommendations as a baseline. Most places in the US use these light levels as their “rule” even though even the IES refers to them as recommendations. The physical calculations can be done via a host of software programs including Dialux, AGI32 among others.

Q: How do you get colleagues to get into this mind set when reviewing a design? I assume that you have some specific questions that can conjure this mind set?

A> We have a LOT of questions that we ask. It’s almost like interviewing clients and we try to make it fun. You have to explain the rationale for this approach and the value it brings to the project. Nothing convinces a client more than seeing value. If it means additional monetary value as well as personal well being, even better as far as they are concerned. Walk them through the project as much as possible and try to get them to open up about what they ant

people to experience and feel. They don't think about this until you point it out, but they will remember the exercise later on, trust me.

Q: As LEDs offer more opportunities with color, efficacy, luminaire design, Do you find that color (lower kelvins) contribute solutions to Zen issues? i.e. I thought the fire pit photo should have had less blue bollards?

A> That was an older photo before LED's. The bollards were a warm metal halide, but yes. It was not ideal. With today's newer light sources, we can play with color, color rendering, and light placement much more finitely than before. Be careful though! It is easy to fall into the trap of making the space look too designed and forced. We want to pay homage to nature and natural effects without becoming enslaved by them. The human mind does wonderful things of adapting and interpreting on its own. Apply strategies of Shizen and Yugen whereby you allow for some surprise and interpretation of a natural occurrence without dictating it. Keep in mind that moonlight is actually pretty cool in color when doing outdoors.

Q: Is it good to create multiple moods through in a single space? If yes how many max one should limit and not end up overdoing?

A> Without getting wishy washy, yes and no. It depends on your space. How big is it? Does it lend itself to multiple moods without appearing or feeling schizophrenic? You know you have too many when people cannot relax and fully appreciate any one for what it is on its own. Zen is being in the now, so if any one mood is dependent on the other, it is not Zen.

Q: Many esthetical conceptions are culture specific, how do you account for that?

A> In my mind, people are still people wherever. Emotions are the same. Sad is sad, happy is happy, content is content. HOW those emotions are allowed to come through can be culturally driven. In some cultures, a cooler light is perceived as more secure and natural whereas in others, much warmer color is considered better for contentment. Also, the use of uniformity in spaces differs culturally and that too has impact on the emotional responses on people. In some parts, higher drama and accents are considered natural and more pleasing. In others, this can be a source of anxiety and not calm at all. You do have to research and think about each culture's overall translation of design elements to convey your intent and allow their own interpretations to come through.

Q: Would you use no more than 300 CCT of color temperature difference in a given space between electric light sources?

A> Not necessariy. I actually can swing pretty far in some projects. I am working on one right now where we are using 2200K and 3500K on the same façade. Depending on what it looks like in our mock up, I may drop to 1800K on the warm. The world is full of varying perceived color temperatures if you look around. Yes, technically the sun offers one color temperature, but it's white light is broken via our atmosphere (I told you that I'm also a science nerd). Human emotional responses are predicated on their individual perceptions and interpretations. You have to allow for that in your design. If you have a warm wood feature in your space lighted to 3500K, it is not perceived a true to its nature.

Q: What are your Zen thoughts on area control in architectural spaces?

A> Controls are part of the necessary tools of responsible and realistic lighting design. It also allows for the possibility of rendering spaces differently at various times allowing for new interpretations of the same space. We tend to think of controls simply as more or less light of the same "scenes". Perhaps we could think of controls creating differing scenes within any space much like walking through the woods in the morning and late afternoon reveal different shadows and spatial appreciation. The theater person in me would love to see very slow transitions of a spaces lighting allow for differing appreciation of the space (and I am not referring to dynamic or color tuning white). Imagine if a particular vertical surface was lighted in the morning and over the course of the day, the light fell away and something else was allowed to be played up. This is the real world in action and the ability for Zen appreciation to occur.