

Dark Sky.

DIALOGUES

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Considering the dark.

The theory and practice of lighting design for the external realm is evolving rapidly as concerns about the impact of Anthropogenic Light At Night (ALAN) have come to the forefront. Designers must now contend with a growing list of constraining factors including energy codes; LZ Lighting Zone prescription; sustainable guidelines such as LEED and WELL; and regulatory guidance such as the Dark Skies Model Lighting ordinance, ordinances pertaining to fisheries, coral, sea turtle protection, and more. Concurrently, new research revealing the deleterious effects of ALAN on human health, flora, and fauna reifies the importance of evidence based lighting design, particularly apropos spectral content, illumination levels, and exposure duration.

Dark skies, circadian rhythms, lighting justice, and the circular economy are the hot lighting topics of our times. Notwithstanding the allure of the science, lighting designers must resist the forceful conflation of the plethora of technical parameters that have come from this research on these topics. Some may think that these diverse parameters can be melted down and cast into one set of rules. Such an exercise seems too clinical and rather distant from the passionate and dramatic work that we seek to do. Let's remember that we set out to be lighting designers: to inform and enhance the human experience with this wondrous plastic magic called light. Now we may find ourselves stuck in the muck of complex guidelines, rules, and regulations. How then, shall we approach our work? Perhaps we need to turn all the rules and regulations upside down and remember that a piece of art starts with a blank canvas - in our case, the dark.

I believe that we can live in a luminous world that is both green and beautiful. In my experience, inspired lighting design comes from the heart, not just the head. We must be both artists and scientists. We must open our eyes and see the poetry, mystery, and beauty in the darkness. We must see and feel the darkness; and, use it in our designs. We must make it a habit to consider the dark throughout our design process. Start with a dark canvas and add light only where it is needed. This simple axiom aligns very well with all of the technical parameters discussed above. By considering the dark first, perhaps we can avoid being so mired in the technical. Such consideration will challenge our creativity and make us better lighting designers, better stewards of the night sky, and champions of a healthier world. Let's consider the dark.

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The advent of artificial lighting has profoundly transformed human lifestyles. Once bound by the rhythms of natural light, with its daily and seasonal variations, individuals now find their routines completely detached from these natural dynamics. While this revolution has certainly improved our quality of life, it has also brought forth concerns about various issues, extending beyond human health to include environmental sustainability and the disruption of natural ecosystems.

Excessive light exposure and energy consumption have prompted a critical reevaluation of our approach to outdoor illumination. This reevaluation delves not only into the implications for human health but also into the intricate interplay with the natural world. Light pollution not only obscures our view of the stars but also disrupts the behaviour and biological rhythms of various species, profoundly impacting ecosystems and biodiversity.

Despite the impracticality of returning to a lifestyle devoid of artificial light or maintaining perpetually dark cities. Our focus should be on embracing artificial light responsibly while mitigating its negative effects. The indiscriminate use of artificial light not only contributes to light pollution but also exacerbates energy consumption, straining already burdened resources and escalating environmental degradation. Consequently, there is a growing awareness of the need for a more conscious approach to lighting design. Through the use of fixtures with controlled emissions and the implementation of sophisticated management systems, we can optimize lighting usage, reduce light pollution, and minimize energy consumption.

Towards a More Sustainable and Ecologically Responsible Approach to Outdoor Lighting.

Furthermore, this shift towards sustainable lighting practices transcends mere technological advancements; it represents a cultural shift as well. It necessitates re-educating individuals about the balance between necessity and excess in lighting. We must challenge the notion that constant illumination is indispensable for modern living. Instead, we should prioritize essential lighting while minimizing unnecessary illumination, particularly in areas with minimal human presence.

Moreover, manufacturers are increasingly prioritizing the development of lighting solutions that enhance optical performance, minimize light dispersion, and consider the impact of light radiation on natural biorhythms. This collective effort marks a significant step towards a more sustainable and ecologically responsible approach to outdoor lighting.

Looking forward, the integration of advanced management systems presents promising opportunities to further optimize lighting usage in real-time. By dynamically adjusting illumination levels based on human presence, we can significantly reduce light emission in the environment and energy consumption without compromising safety or functionality.

In conclusion, the aim should be to strike a delicate balance between human needs, environmental sustainability, and technological innovation. Through the adoption of conscious design principles and the utilization of advanced technologies, we can create illuminated environments that harmonize with both human needs and ecological imperatives.

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