



Society of Light
and Lighting

The Society of Light and Lighting

Presidential Address 2020

BOB BOHANNON

I would like to start with some Thanks for all those who have helped get me here.

Jim, on the 1st April I attempted to spoof you that due to Coronavirus you would have to remain in office for another year. In a testament to of your character, your response was 'not a problem, I've still got much to do'.

I would like to thank my mentors, vastly more talented and intelligent than I could ever be...

I would like to thank my teachers, David Pritchard of the LIF and David Loe and the team at UCL.

Humour makes dry meeting's bearable, or maybe not, as anyone who has suffered my interjections in meetings may observe.

The work of my eye surgeons, has allowed me to continue to see, work and drive, but I still love bad puns, the Cornea the better.

To be honest after five or six eye operations, the biggest downside is that I can no longer see other people's point of view.

A President is only in their role for a year, a time frame too short to get much done, in a way we stand here and make a speech about what we would like to achieve. And then we get busy, with the day to day challenges and opportunities of the society. A year later we stand hear again, and maybe, just maybe we got some of it done. That is why four years ago I suggest the VP 2020 team, now the VP Group. In this way I can help achieve Jim's work and Ruth can take over from me, all with a common vision.

I was a child of the Thatcher years, in 1987 she notoriously said "there's not such thing as society".

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Coronavirus has given many of us a chance to re-evaluate what is important.

Clear skies or cheap air travel ?

Quiet streets, clean air and the sound of birdsong or the freedom to drive ?



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The Covid-19 lockdown has, temporarily, cut CO2 emissions, but have also triggered a huge economic contraction, some governments are calling to harness their economic recovery to plans to boost low carbon design and technology. They call this Build Back Better.

Back in 2008 my Volvo was using LiDAR, variously an acronym for Light Detection and Ranging or Laser Imaging, Detection and Ranging to keep me safe with its Autonomous Emergency Braking.

Now NASA, with it's ICE Sat 2 is using light in the form of LiDAR to measure climate change, specifically ice loss from the Arctic and Antarctic ice sheets. The results are terrifying, the Thwaites and Crosson ice shelves have lost 5m and 3m of ice, per year over the last 16 years. In total Greenland and Antarctica have lost over 300 Gigatons of ice, per year. Just one gigaton will fill 400,000 Olympic sized swimming pools.

We might have the data, but to put it simply we are losing the war against Climate Change.

So what is better, what is appropriate ?

Over the last 5 to 10 years much of our industry has embraced a laser focus on luminaire efficiency and the return on investment of replacing legacy light sources with LED. Lower prices improve ROI, this, and the design and build procurement method drove down prices.

The benefit, was that the lighting sector of building services has delivered huge reductions in emitted CO2. But there were costs.

Importing a lowest possible cost, 30,000 hour, 600x600 LED panel without any serviceable components, on a container ship from the other side of the world which burns high sulphur content bunker fuel spewing sulphur dioxide, nitrogen oxide and particulates is maybe not the most environmentally sound way of delivering light, **Even if it does score well in SBEM.**

The Grenfell Tower tragedy will affect our industry into the future, much of the current industry design and build structure is predicated on short-term saving of capital cost to deliver buildings that perform for about as long as the warranty or retention period lasts.

We all have our own horror stories on the lighting equivalent of Grenfell's cladding. Two weeks ago I was told of builders finding the product quality of cheap wholesaler LED downlights so poor that they were losing money on having to return to new installations to replace failed luminaires. Their problems were compounded by the difficulty of getting replacements from the same batch. Their solution, use Gu10 downlights, where they can easily replace the Gu10 LED lamps. Progress ? I think not.

Is it simply 'the amount of money that can be received for something' Is thus cheapest best ?



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Or is it 'the importance, worth, or usefulness of something'

Most importantly when did you last hear someone ask "what is the end user's lighting objectives? How does light better enable their organization, be it a school, office, hospital or shop to meet their objectives'. If they don't know this, or if we haven't explained it to them then why should we be surprised that they simply buy the cheapest.

So many of us have been working from home for the last weeks we have questioned to daily commute, the need for offices and for driving or flying to meetings.

How many of us, working in home studies, on kitchen tables, in bedrooms or garden sheds will now see the obsession with delivering 500 lux, wall-to-wall, corner to corner, so even the waste bin in the corner is bathed in light as simply ridiculous.

No matter how efficient the luminaire, such a scheme is surely now ludicrous?

To be flippant, I looked this up.

SLL CIBSE LG04, does state that Class II Indoor Netball requires 500 lux at 0.7 uniformity, I just didn't know it was so popular.

I'm going to suggest a societal value...

We have spent a lot of the Society's time on Human Centric Lighting, yet the one clear, irrefutable message that keeps coming through is the benefits of daylight. Eleanora Brembilla made a plea that access to daylight needs to rapidly move up the planners agenda.

Interestingly, the London Plan does address daylight.

To me it seems ironic that there lengthy discussion about human centric artificial lighting and much less about natural daylight? After all, Professor Russell Foster strongly suggested that simple improvement is a brisk walk outside to get a cup of coffee, even better without the coffee. This chimes well with our new lockdown habit of a daily walk or cycle to get exercise and daylight. After all my local Bike shop, which normally sells 20-30 bikes a week, is now selling 50 bikes a day. These are sales figures any HCL sales manager would love.

Safety, integrity, resilience. The Grenfell Tower wasn't attributable to the emergency lighting, but other could be. A few weeks ago an experienced SLL member surveyed 6 buildings selected to be the Nightingale Covid-19 resilience hospitals in a region, they were all large buildings, reasonably new, used for major public events. All their facilities managers stated that their emergency lighting was tested and fully functional. All, I repeat all the buildings failed an emergency lighting test either immediately or within a few minutes. **They were not resilient.**

I often joke that some controls manufacturers should get out more, we need products that work in real world settings. In our current socially distancing, homeworking world, our inability to reliably join an online meeting without one of us losing their mic or camera has become an oft shared joke. But if we can't use these systems, can we expect anybody from



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the caretaker to an over-busy deputy head to successfully operate and maintain a complex lighting control system in a school ?

The Government 'war gamed' a possible pandemic, but GCHQ has 'war gamed' cyber attacks between the US and UK. If your lights are driven by Alexa can you turn them on without the internet. As Westminster Council found out, when their controls supplier went into administration, they couldn't turn their lights off for months. Are we as designers adequately thinking these risks through ?

We need high quality teaching within our profession and our Society to promote competence.

We absolutely need to promote the value of light – how its considered use delivers key corporate objectives of the end client, be they a hospital, school, office, retailer or transport hub.

The more the wider public realise what light does, the more our clients are likely to engage with us and move away from the lowest common denominator, price driven discussion.

Our profession is not free of slightly ridiculous male orientated data. The only SI unit that has any ergonomic connection, i.e. to use by humankind is the root of all we do is the lumen, itself based on the spectral sensitivity of the human eye, well the eyes of just 54 young male Americans to be precise.

What about eye heights in our UGR calculations ? Females are often shorter than men.

CIBSE and the Society of Light & Lighting is now home to a remarkably talented, multi-cultural pool of young lighting talent, from countries across the world not just from the EU countries hard hit by the 2008 financial crisis such as Italy, Greece, and Spain, but also India, Mexico, Middle East, Hong Kong and Australasia.

Indeed CIBSE members in Hong Kong raised thousands of pounds to purchase much needed PPE for our NHS and despatched it to the UK – for that our heartfelt thanks.

Many of these young designers and engineers may now be facing harsh financial times again, we need to be relevant to them, to help them, to keep up their energy and their motivation.

I can't do this on my own and I can't do this in a year. I'm simply not smart enough, creative enough to do it. I don't have enough time in a year.

But you can. The Society of Light & Lighting is one of the worlds largest learned lighting societies. We have brilliant academics, daylighters, product designers, lighters, managers, engineers, sales people, students and teachers in our ranks. If I can do one small thing this year, it is to help you, the society Build Back Better.



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