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Newsletter

The Society of Light and Lighting
Part of the Chartered Institution of Building Services Engineers





President's Report

Mid-term October 2007

Secretary

Marie Dignan
Tel: 020 8675 5211
Fax: 020 8673 3302
email:mdignan@cibse.org

Editor

Alan Tulla
email: slleditor@cibse.org

Newsletter Committee:

Alan Tulla (Editor)(chairman)
Ruth Kelly
Iain Carlile
Stephen Lisk
Liz Peck
Richard Forster
Kevin Theobald

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In the last issue of the Newsletter, our Society's Strategic Plan 2007-2011 was unveiled. However since the AGM I have been working on how the plan could be implemented.

The first step was to set up a sub-committee to discuss, formulate and agree a mechanism for the implementation of the plan. To aid this, discussion process I developed and introduced a conceptual framework based on 4 areas; Members, Management, Marketing and Money, and prepared a discussion document embracing the 4 Ms for comment by the subcommittee and subsequent presentation to the Executive. The committee includes our immediate Past President Stephen Cannon-Brookes, our President Elect Patrick Baldrey, Vice President Stephen Lisk and myself.

The 4 Ms are key drivers for our Society. They are complex and inter-related. Some of these drivers do not just affect our Society but constitute an integrated element of the operation of our institution (CIBSE) which provides resources to the Society to supplement the secretarial services we currently receive.

Executive agreed that the discussion paper should be presented to the council and this was undertaken on 2 October 2007.

Extensive discussions have taken place but the roll-out of the implementation will involve more in-depth discussion between officers of SLL and dialogue with the Institution's operational departments such as Finance, PR, Marketing, Membership Services, Publications and Events Management.

Concurrent with this the Society sees the need to engage more positively with the Institution Chief Executive Officer Stephen Matthews and its President John Armstrong.

In addition to engaging with Stephen and John, invitations to them to sit in at an early date on one of our Executive and Council meetings have been extended.

This is being done to make the work of Council and Executive more transparent, to create greater understanding, to interchange ideas and views and to allow us to receive the

advice of the CEO and the President in open forum.

Such engagement can only be institutionally beneficial. A stronger and more highly effective Society will mean a more effective Institution. Whilst 3 of the Ms, Management, Marketing and Money are the subject of ongoing discussion much of which is in its initial stages, the fourth M – Members is now in its concluding stages of discussion.

Whilst not finalised the following are some of the proposals agreed to increase membership:

- 1) An appeal to every member is being made to enrol a new member, possibly from their own organisation or from organisations they come in contact with. There will be an incentive awarded to the member introducing the new member and a national award to the member whom, at the end of the year, enrolled the most members.
- 2) Each Region would be involved in promoting membership locally and recognition would be given to the most successful region. To aid this regional initiative, it is proposed that the President Elect would aim to visit each region.
- 3) Students studying Building Services and related fields would be encouraged to join SLL and again some form of incentive would be introduced.

Details of these 3 proposals, the incentives and other proposals for growing membership will be posted on the web shortly and reported in the next Newsletter thereafter.

Turning to the membership of Council and Executive you will recall in my Presidential Address I expressed considerable concern at the lack of attendance at Council and Executive meetings. I can report that there has been some improvement but in general, attendance remains unsatisfactory. However, an analysis of attendance has been prepared which will allow the identification of those whom for whatever reason do not attend on a regular basis. It is proposed that Executive approach these individuals to identify measures that can be taken to improve the attendance at these meetings. Alternatively if the reasons for the poor attendance record

Front Cover: *Switched on London. Photo courtesy of Mondiale publishing*

are purely personal then it is proposed to invite their resignation from Council and Executive to give a chance to other members who are more in a position to commit themselves.

On a happier note I am pleased to say that the Society's ongoing relationship with the Institute of Lighting Engineers is going from strength to strength.

I was honoured to be the guest of ILE President, Paddy Craven at their conference dinner in Dublin, an event which not only was clearly a success, but exemplified a body where the members were highly committed.

Such commitment was again demonstrated at the joint meeting of ILE with SLL in London on the day of the

Tube strike where a turnout of over 80 people got their monies worth.

I am going to close this brief report by saying I was fully in earnest in asking your suggestions, advice, comment or constructive criticism in my Presidential Address. To date I have received only letters from two of our elder statesmen, Dr Arthur Tarrant and Prof Ernest Wotton, both of which were very informative and assisted my input to the Society.

To restate and rephrase the words of JFK, our Society is at the stage where it is "not what the Society can do for you, but what you can do for your Society".

Your input would be highly valued, appreciated and acknowledged.

Tony Ownsworth

Editorial



The last issue had a GLS lamp on the cover and asked if it had a future. If there were a symbol for illuminating engineering, one might pose the question in a similar way. Many professions

are based around manufacturing and as it moves overseas, so does the membership support. Basic research, the seed corn of better lighting techniques and hence, luminaires, withers because much is funded by manufacturing.

People in Britain work longer hours than anyone else in Europe. The SLL pretty much runs on volunteers contributing their spare time for the benefit of the profession. There are fewer people and they have less and less time. In my personal view (not necessarily that of the SLL), we need to face this fact. The profession is also fragmented and this

certainly doesn't help us withstand the onslaught of ill-thought legislation.

Dominic Meyrick has written a typically thought provoking article suggesting ways that the profession should advance. Readers who are not stimulated might want to check that their neurones are still firing.

On the positive side, SLL members are seriously interested in lighting and rarely move to other professions. Over the past ten years all, except three, Young Lighters have remained in lighting. Ask most people what they do and they say something along the lines of "I work for such & such plc/Ltd" or "to do with IT". Ask a lighter and you get a real answer about what aspect of lighting they do. Most lighters that I meet are enthusiastic about what they do.

Also, it is my personal view is that we are at the beginning of the third stage of the lighting profession. Firstly, we produced artificial light in a reliable and consistent manner. E.g the mass production of filament and fluorescent/HID lamps. We then moved to the basics of safety, glare and efficiency. This was so people could avoid being caught in

Contents

The Columns

President's
Page 2

Editorial
Page 3

The Features

PLDA Convention
Page 4

Report on Southern Region
activities by Laurie Socker
Page 5

London Sessional meeting by
Laurie Socker
Page 6

Preview of the The ARC Show
and Young Lighters
Page 7

Tribute to Jean Heap and
news of the Education and
Membership Committee
Page 8

The Future of Lighting Design by
Dominick Meyrick
Page 9

Book review "Towards
understanding Skyglow"
Page 10

LR&T Review
Page 11

In Brief
Page 11

Events
Page 12

machinery or work on fine detail without eyestrain. This second stage is when the Codes of Practice and Guides were written. Once these are in place (and there are still many workplaces where they aren't), we move to the third stage which is where lighting designers truly show their value.

With the safety and functional basics taken care of, illuminating engineering moves into the realm of lighting design. Here, again, we find some real enthusiasts. Speak to members of the PLDA and IALD and you discover a whole new crowd of like-minded people. Their professional background may be different from those of most SLL (and there are overlaps), but day to day, many of the work issues are the same.

My prediction for 2008 is that the lighting profession will have a serious look at its future. I hope that we concentrate on what we have in common rather than the differences.

Coming up early in the New Year is the ARC Show.

Apart from the luminaire exhibition, there is the SLL Young Lighters Award plus an IALD series of seminars on sustainability. The Switched on London floodlighting event will also run in parallel for a fortnight.

Skyglow has been increasing for a long time. It need not be just an unwanted, but unavoidable, by-product of increasing wealth and urbanisation. We can do something about it. The book, "Towards understanding skyglow" is a useful contribution to the topic and is reviewed in this issue.

Elsewhere, ILE readers should have a look at the latest research on mesopic vision, covered in the review of LR&T. This is a growing topic of interest and its importance is more and more relevant as pressure on reducing the energy consumption of streetlighting increases.

Finally, Newsletter Committee member, Liz Peck, has taken the plunge and started her own lighting design consultancy. She can be contacted at liz.peck@lpa-lighting.com or you can visit www.lpa-lighting.com

Professional Lighting Designers Association, PLDA, Convention

Report by Alan Tulla

I assume that members of the SLL are interested in the subject of lighting and not just as it affects workaday illuminating engineering business. So here is a report of a lighting event which is not directly related to either the SLL or ILE.

This event in London, described as the 1st Global Lighting Design Conference, was organised by PLDA and the publishers of Professional Lighting Design magazine, VIA. Special thanks are due to Joachim Ritter and Gad Giladi who were the main movers.

As you know, the PLDA used to be called the European Lighting Designers Association, ELDA. This then became ELDA+ as members joined from further afield like Australia, the North and South Americas as well as the Far East and India. Of course, some SLL members are also members of PLDA.

The scale of this event was staggering, 1100 delegates from 56 countries. Three full days of lectures at a venue in central London plus organised evening events. There were over 50 presentations. The topics ranged from the commonplace to the recherché. Prison lighting, hospitals, Solid State lighting, the Ethics and Philosophy of design and ways of tracking design costs were covered. The Newsletter recently reviewed a book by Richard Hobday and he spoke on the Architecture of Sunlight Therapy. I missed



the "Psycho-activation of colours with Light Modulation" so cannot offer an opinion. There was also a large number of shorter papers by younger lighting designers (Vox Juventa).

Of special note was an evening event at the RIBA to celebrate an exhibition of the works of Richard Kelly. The evening was sponsored by ERCO and a fine job they did, too (special thanks to Melissa Michael). The venue was limited to 450 people, but over 500 arrived and so some had to wait until others left. There were two introductory presentations; one by Paul Traynor, President of the PLDA and another by Chris Tiernan, MD of ERCO. The main



Paul Traynor, President of the PLDA



John Marsteller

presentation was given by John Marsteller who had worked with Kelly in the USA.

Kelly was one of the pioneers of lighting design, graduating in 1932. He practised as a theatre lighting designer and product designer, but is known mainly for his architectural work.

He identified three types of light: Focal glow, Ambient Luminescence and Play of Brilliants. SLL readers may not immediately recognise these phrases, but will certainly use the concepts. Focal glow draws attention; it is the “follow spot” on a stage or the highlight on an object to separate it from less important ones. Ambient luminescence is the background lighting, the uninterrupted light of a snowy morning in the countryside or fog at sea. Play of Brilliants (a brilliant description in itself) is a crystal chandelier, car headlamps at a busy road junction or sparkling glassware. Kelly believed that lighting design involved an interplay of all

three although one type would normally dominate. Planning the total visual experience, therefore, was essential to good design.

Engineers would have appreciated the fine hand drawings of luminaires and custom reflectors on show. Unfortunately, by the time you read this, the exhibition will have ended. However, I recommend readers to investigate his work. Kelly was a polymath, an architect, engineer, artist and philosopher.

There was a gala dinner and an awards ceremony with the Lifetime Award going to Dr Heinrich Kramer of Germany. Finally, there was a declaration at the end of the conference that said “Architectural Lighting design should be a Profession in its own right”. Do readers agree?

You can see more information about the event at www.pld-c.org

Report from the Southern Region

Membership matters

The region is extensive, extending from Dorset to Kent and parts of Wiltshire. To facilitate members being able to attend meetings technical sessions are split between three centres, namely Southampton (Blue Room at The University of Southampton), Chichester (South Downs Planetarium) and Brighton (Jarvis Preston Park Hotel). These meetings last about an hour with a paper being presented, followed by a question and answer session. Presentations start at 19.00 and are preceded by a light buffet at 18.30.

As part of my Regional duties, I am promoting SLL at my place of work and with lighting colleagues who are not Society members in an attempt to bring in new members. I am also training new technicians and graduates employed by the company and hope to encourage them to attend SLL events. Since the beginning of this year, we have at least one new member in our region.

Past events

The past year has involved a number of successful technical meetings. In particular, on the forthcoming wiring regulations,

we outgrew our usual meeting room and were forced into a larger room.

Other recent talks have included:-

- Energy Performance of Buildings Directive (September)
- 17th Edition Electrical Wiring Regulations Update (October)
- CO₂ Cooling systems (October)
- CIBSE Southern Region Golf Challenge at Chichester Golf Club (October)
- Historic Buildings (building services to historic buildings) on 8th November in Brighton
- Fuel Cells on 15th November in Southampton

Planned events

The region will be having two technical talks this session which will feature lighting or have a lighting element.

The first lighting talk will be on the 21 February in Chichester. The speaker will be Alan Tulla and the provisional title for the talk is “Are fibre optics and LED’s low-energy

solutions?" Alan will compare light output and energy consumption of the currently available fibre optic and LED equipment on the market, and also demonstrate some of the equipment.

The second lighting is at the region's AGM on the 17th April 2008 at the Chichester Planetarium. The topic will be Sustainable Buildings. The talk is by Richard Quincy, a director of Gifford who has built his own sustainable home which featured in the BSJ some months ago. The talk is planned to be an update to the article and provide information on the houses' actual performance in comparison to the design, which was undertaken some years ago. Richard will also be speaking on lessons learned. Lighting, energy use and light sources will feature in the talk.

Note that sometimes the date or venue has to be changed at short notice. Please check closer to the time.

Liaison matters

The Southern Region is obtaining a complete set of CIBSE Guides which will be kept at the Chichester Planetarium for use by regional members. Attempts will also be made to provide SLL Guides/Codes for these to be made available for regional lighting members. There will also be a display of SLL Notices of forthcoming events.

Report by Laurie Socker

Ed note: For further details of CIBSE Southern Region events, please look at the SLL website or contact Laurie on laurie.socker@gifford.uk.com

'Interest, expectations and the criteria of good lighting'

Report on Technical Meeting on Tuesday 16th October 2007

Unfortunately Nuanwan Tuaycharoen was unable to attend the technical meeting to present her paper due to difficulties in her country (Thailand) and Peter Tregenza stepped forward to present both the evenings papers.

The first paper built upon research by Ralph Hopkinson in supporting the conjecture that a link exists between the interest a scene has for the viewer to the amount of discomfort caused by the glare. Nuanwan found by comparing screen images and varied views from a 20 storey building that included close views of other buildings, extensive urban and natural scenes that discomfort from glare decreased as interest increased. The luminance range within a view also affected the experience of glare and a view with patches of high luminance and a large luminance range, is more glaring than a more uniform view with the same mean luminance.

The first point to mention is that all windows are a source of glare. The amount of glare is dependent on a number of factors including: -

- The direction of view
- The scene/outlook
- Sky brightness and distribution.

The experiments also concluded that:-

- Views that are preferred reduce the discomfort glare.
- Neutral views are less glaring than urban scenes.
- Urban scenes tend to show high glare
- Natural scenes tend towards lower glare.

- Where views are over large distances they tend to be less glaring.
- Photometric measurements alone are not sufficient to predict discomfort glare.
- Photometric measures are poor predictors of glare.

Visual performance requires meaningful information and can produce different results from photometric measures alone. The four factors common to most glare formulae – source luminance, source size, surround luminance and a position index are not enough in the assessment of glare.

Empirical links to the complex interpretation are not always possible due to the balance of daylight, which is an ever changing aspect. Daylight varies with direction and spectral composition and also changes within building, depending on the observation height, orientation. Thus views and daylight should not be considered as separate items.

In considering what is an acceptable amount of daylight for a building, discussion from those in the audience, (which included distinguished members of the daylight group) concluded that the amount of daylight was dependant on cultural expectations and in most places this is never enough. Reducing the amount of daylight in a building is often seen as a loss.

A full transcript of the paper is available in volume 39, No 2 of Lighting Research and Technology 2007.

Report by Laurie Socker

The ARC Show and Young Lighters

This is becoming the lighting event of the year especially bearing mind it is open to everyone. This year it is 11 – 13 February at the Business Design Centre in Islington. Apart from the exhibition of the latest lighting equipment, there is also the SLL Young Lighters Award and a series of IALD Enlighten Europe seminars. In conjunction with this event is Switched On London. Both the SLL and ILE will have a stand.

Young Lighters

As you know, this competition is sponsored by the SLL. This year's shortlist comprises six excellent papers: "Lighting in Bat sensitive areas" by Matt Emery, "Light and Modes of appearance" by Emrah Ulas, "Urban scene and luminance patterns" by Vasilika Malakasi, "The perception of depth through cast shadows under different pattern orientations" by Kuan-Ting Daniel Lin, "Using Daylight Index to assess solar shading" by Andrew McNeil, "The processes and challenges in transforming an old theatre into a modern, sustainable and energy efficient one" by Saijie Sim.

The ILE give an award for the best written paper based on its technical content. The Worshipful Company of Lightmongers gives an award for the best presented paper. This is made on the night.

IALD/RIBA seminars

This year the topic is sustainable lighting design. Presentations include: What is sustainability in lighting? by Martin Lupton; "Civic light: getting back to white" by Charles



G. Stone III; "Sustainable lighting design with the individual in mind" by Jeffrey Miller; "Strategic Lighting Design by Rogier van der Heide; "Lighting design in an energy conscious age" by Kevin Theobald.

There are also presentations by luminaire manufacturers who are exhibiting. These presentations include: Embracing LED technology by Mike Simpson of Philips Lighting; Health and light by Peter le Manquais of WILA; Lighting effects in architecture by Ian Streeter of Deltalight; Sustainability and sustainable manufacture by Mike Stoane of Mike Stoane Lighting; Lighting control protocols by Wayne Howell of Artistic Licence.

Switched On London

This runs from 7 – 14 February and is centred on the Pool of London. Structures to be lit include: the Tower of London, Tower Bridge, HMS Belfast and London Bridge. Some of the surrounding areas such as Tooley street and Bermondsey street will also be illuminated. The theme this year is to show that by using good lighting design, controls and modern technology; existing energy consumption can be greatly reduced without compromising the night-time scene. At the time of writing, there are 15 of Britain's top lighting practices involved. Almost all of their proposals use leds, so the installations are also a good opportunity to see how the equipment actually performs. The new scheme will be audited for energy use and compared with the existing one. In this way, it is hoped to show that you can achieve better lighting whilst using less energy.



Switched on London

Contacts

www.thearcshow.com

www.iald.org

www.switchedonlondon.com

Tribute to Jean Heap

Membership and Education Committee



Unfortunately, in the last Newsletter, there was only just space and time to announce the recent passing of Jean Heap.

Jean, who died at the age of 62, was a scientist and educator whose life-long passion for the science, application and art of lighting enriched the lives not only those she taught but also those who engaged with her professionally.

Born in the village of Netherfield in Derbyshire, she grew up in Coventry before reading Physics at Leeds University. Her first post was at the Building Research Station (now BRE) in the Environmental Physics division. Maybe as a spur to the workers, the EP building used to overheat in the summer. Not only was she the youngest person there, but her mentor, Peter Petherbridge, was older than her father. This is perhaps the reason that led her to join the amateur dramatic society as a way of meeting young people.

After about a year and half, following help from John Collins, then head of the Lighting Section, she moved to study at Nottingham University under Peter Tregenza. There she became interested in the harnessing of science to the needs of people which culminated in her MPhil thesis

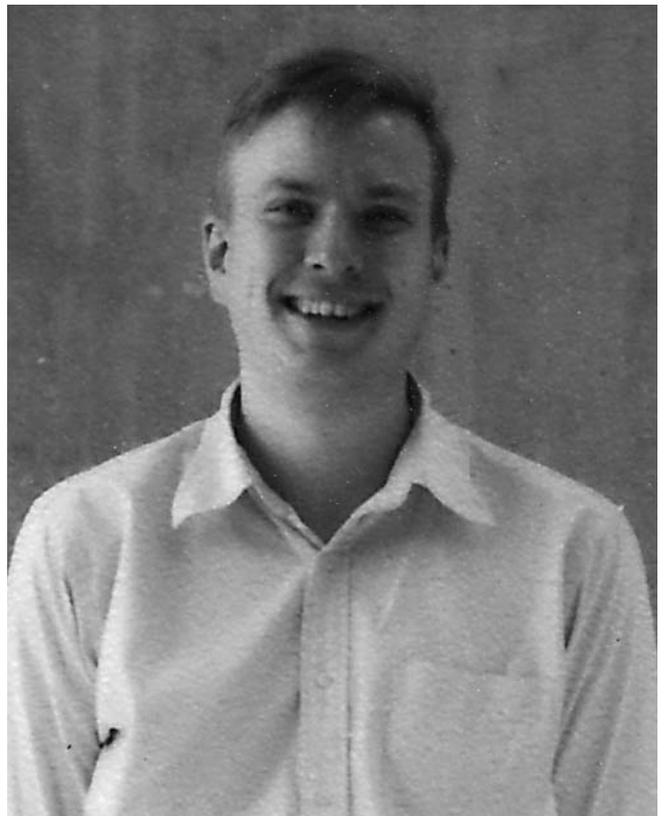
“Measurement and production of lighting situations in an experimental office”.

Following a short spell in telecommunications at Plessey as an industrial physicist, she moved to the Birmingham School of Architecture. It was during the 28 years here that she made her greatest impact in lighting. In 1978 she became a member of CIBSE and in 1996, a Fellow. She was President of SLL in 1995 and became a Fellow in 2000. In 2007, she was awarded the SLL's highest accolade, the Lighting Award.

She bravely endured a terminal illness, but died on 27 October 2007. She is survived by her husband Gordon. It is heartening to note that very many members of the SLL were able to attend her funeral.

Jean was Chairman of the Education & Membership Committee from 1996.

I am happy to report that the post has been ably filled by Jeff Shaw. He has been on the M&E Committee since 2004. He is also on the LET Diploma Accreditation Committee. His full time job is as a lighting designer at Arup Lighting and has been recently promoted to Associate Director. He also lectures architectural students at Bath and the Berlin Technical University. He recently appeared on tv in “Mary, Queen of Shops” (reviewed in Sept/Oct NL) and even finds time to write articles for the Newsletter.



The Future of the Lighting Profession

By Dominic Meyrick

Being a God Squader I know my Bible. One of many famous quotations is 'a kingdom divided against itself cannot stand.' Roundheads verses Cavaliers, Yankees v Dixies and any other internal conflict you might care to mention will stifle progress and cause damage & destruction. This is what I am reminded of when I see the current state of the 'bodies' which represent the lighting industry - disarray. At best these bodies are like European countries that refuse to accept each others citizens, and therefore do not trade effectively. At worst there is downright prejudice and derision - a kingdom divided.

I have been in lighting design now for over eighteen years and like most, I fell into it. This fractured state of lighting, who actually speaks for whom, was apparent back then and it hasn't, in my opinion, got any better since.

Here's the rub for me. I came into the industry via working as a lighting designer for a manufacturer. This is a very common route. I had come from a design background, having studied Industrial Design at Newcastle Polytechnic, and therefore had a BA (Hons). As a designer I did not feel comfortable within, what was then the Lighting Division of CIBSE (too engineering I thought) nor the ILE. The design led groups, on the other hand, didn't want me as they purported to only represent 'independent' lighting designers (their definition) and could not offer me a home. They seemed to imply that working for a manufacturer meant I was a little 'below par'. This, by the way, is total nonsense – you might as well say that independent product design consultancies should look down on the design team of Apple Mac!

So eighteen years on and nothing has changed apart from a few names and the people at the top. I could easily turn my back on the whole thing and get on with my business if it wasn't for two fundamental issues that mean we have to bury the hatchet (and not in each other!) in an attempt to speak with one voice.

The first is the lack of young people coming into the industry - a situation which faces many service industries and lighting is no exception. The second is the waste of the international respect that British design and services have always commanded. Did you know, for example, that 50% of the first world's buildings are designed by British architects? Is one of the reasons the fact that there is an instantly recognisable British architectural body? I am not saying that RIBA is perfect or that the architectural community has got it completely right. But from an international standpoint, there is a recognisable voice for the British architectural community which is distinct. In my opinion, the RIBA is a good enough model of a world class institute formed by a united, world class, profession to represent its interests.

And then there is public perception:
"What do you do?"

"I'm a lighting designer."

"Oh is that in the Theatre?"

"No I light buildings."

"Do you? What, and you get PAID to do that?"

Incredulous looks abound and the conversation moves on. I recently had to put together a brochure to spell out exactly what Hoare Lea Lighting does - its fee structures, duties and services, because I found so many architects, my main clients, still didn't understand exactly what I did!

So here's the overview. Artificial lighting grows up over 120 years or so. People come into the industry from different backgrounds with different life experiences and education backgrounds. 'Bodies' are formed to represent some of these individuals which get together, pat each other on the back and moan about the other 'bodies'. Lighting stays where it is until, suddenly, the penny drops and lighting design takes off within key client sectors. Lighting designers start being nice to one another, rather than stabbing each other in the back, as there is now plenty of work to go round. Unfortunately the general public are still in the dark (pardon the pun) about lighting so there are not enough younger people coming into the industry (can't call it a profession because people can't decide what is meant by profession), and there is little co-operation across the industry to tackle these issues.

If these issues are to be addressed and effectively sorted in the next few years there is only one way forward, in my view - ONE VOICE! One voice for education, one voice for lobbying, one voice for marketing the British lighting industry and the designers and professionals within it, to the rest of the world.

The solution seems to me to be quite simple. There are four main bodies: ILE, SLL, PLDA and IALD. If we pass over the last one, the first three need to get it together. SLL should break from CIBSE and take their fees with them. The ILE and SLL should merge.

The PLDA is in a slightly different position because it is already a pan-European organisation. However, it would be natural for it to have close links to each national organisation.

LIF should disband and become a sub committee within the new SLL/ILE body. And the name for this body? So original, 'The Institute of Lighting'.

All the lighting industry would be welcome within The Institute of Lighting, whatever their education, experience or background. The new Institute should be given the mandate, and the money, to promote, professionalise, educate and guide the industry into the glorious future.

Please let us all put our pride aside, get along, and speak as one voice. This has been but one person's opinion ...

Book Review: Towards Understanding Skyglow

By Dr Chris Baddiley and Tom Webster

SLL readers will be interested in this book as well as ILE members. Skyglow is not just an issue for streetlighters. If you design any kind of exterior lighting, you should read this book. Anyone who was ever interested in astronomy or physics will also find this a good read.

This 24 page book is subtitled "A contribution to the discussion". Dr Chris Baddiley has developed a computer model of skyglow linked to industry standard luminaire photometry and referenced it to measured skyglow. The model helps us understand the mechanics behind skyglow and thus gives us a rationale for tackling and reducing it.

The model works for moderate to good visibility in rural and semi-rural locations. I.e outside towns and cities. Within urban areas, there are multiple types of light source, multiple reflections from horizontal & vertical surfaces and direct upward light from various sources (not just luminaires).

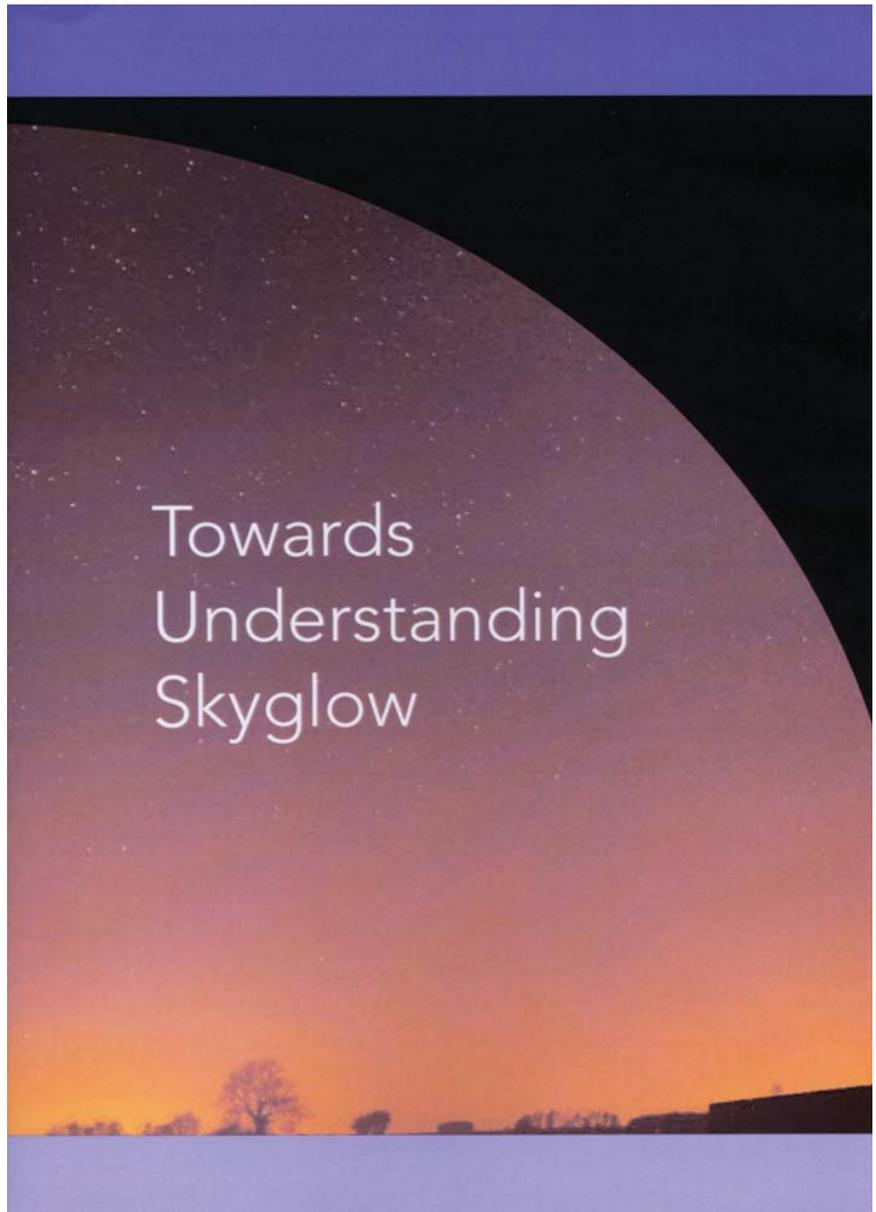
There are two causes of scattering, that from the air molecules themselves, Rayleigh scattering, and that from air-borne particles, aerosols, known as Mie scattering. Their contribution to the total skyglow depends on the viewing angle, incident angle from the source and partly on the spectrum of the lamp. The other issue is the source of light itself, be it the lamp/luminaire or reflected off the ground.

The degree of skyglow also depends on the viewing distance, in effect, the viewing angle above the horizontal.

The book compares SOX, SON and CDM lamps in streetlights with varying degrees of cut-off. The data could also be used to get an idea of the contribution from floodlights.

There is an interesting section on the contribution from light reflected from the ground. As might be expected, grass reflects more upward light from white light than SOX or SON. However, this is compensated for by the reduced illuminance that is used, so the overall effect is hardly any different. Again, Mie scattering (from particles) is unaffected by the wavelength.

An Executive Summary stating the six main conclusions is given early in the book. The least surprising is that old SCO SOX lanterns which emit a significant amount



of flux just above the horizontal are the worst offenders. Interestingly, reflected light does not make much of a contribution.

Ask yourself whether you think that skyglow will be increasingly important in considering future lighting projects. If the answer is yes, you need a copy of this book.

It can be purchased from the ILE.

Review by Alan Tulla

There are five papers in this edition, four of which are concerned with mesopic vision. The fifth is about linking scotopic and photopic photometry to a single unified system, thus it neatly relates to the previous papers. There is also a review of some sponsored research "Better lighting for improved human performance, health and well-being, and increased energy efficiency – a scoping study for CIE-UK" by Goodman, Tibbs and Cook. Finally, a book review on understanding colour.

Three of the mesopic papers are about visual tasks – can it be seen, how quickly and what is it? The last develops a model of mesopic photometry for night-time driving. The papers were funded by the European MOVE (Mesopic Optimisation of Visual Efficiency) consortium.

The relevance of this to non-specialists is that despite numerous previous attempts, there is no internationally accepted system of mesopic photometry. As readers know, mesopic vision is particularly important for night-time driving. The findings of the MOVE consortium closely match the X model proposed by Rea *et al* from the Lighting Research Centre.

Contents

Mesopic visual efficiency I: detection threshold measurements. A Freiding, M Eloholma, J Ketomaki, L Halonen, H Walkey, T Goodman, J Alferdinck, G Varady, and P Bodrogi.

Mesopic visual efficiency II: reaction time experiments. H Walkey, P Orrevetelainen, J Barbur, L Halonen, T Goodman, J Alferdinck, A Freiding, and A Szalmas.

Mesopic visual efficiency III: Discrimination threshold measurements. G Varady, A Freiding, M Eloholma, L Halonen, H Walkey, T Goodman and J Alferdinck

Mesopic visual efficiency IV: a model with relevance to night-time driving and other applications. T Goodman, A Forbes, H Walkey, M Eloholma, L Halonen, J Alferdinck, A Freiding, P Bodrogi, G Varady and A Szalmas.

Making the move to a unified system of photometry. MS Rea and JD Bullough.

Book review : "Understanding colour – an introduction for designers" by Linda Holtzschue

In Brief

Jan Feb

Energy laundering

You have heard of money laundering and now comes this from a colleague in Switzerland. Green minded Swiss are happy to pay a little more for "green" energy if it comes from a renewable source such as hydro electric. It seems that some devious minded Swiss power companies have been pumping water into high level reservoirs, using cheap French electricity produced from nuclear power, during the night. It is then resold as green hydro power during the day.

Someone's pinched my jargon

We have all encountered problems explaining the word luminaire when dealing with non-lighters and now an air freshener company has used it for their own purposes. Not exactly, but they sell one of those things with oil that you put in the 3-pin plug to "freshen" your house. This one has a light in it and puffs out fragrances. The tv ad calls it the Lumin'air. I am tempted to let them have the word and the SLL collect the royalties to boost its revenues.

An alternative to lamp recycling

Whilst working in the USA, our esteemed colleague Professor Peter Boyce was asked by the Hawaii authorities

about recycling discharge lamps. They have no recycling facilities and so all HID lamps get shipped halfway across the Pacific to the USA. His idea, off the record, was to tip the lamps in the nearest volcano. After all, that's where most of the mercury comes from so it really is returned to its source. A practical solution but not one that would be acceptable to the authorities unfortunately.

Cones of light

You know how in sci-fi films there is often a shot showing the characters in silhouette with a stark beam of light radiating from behind. The artist Anthony McCall bases a lot of his work around this effect and has been doing so since the early Seventies. The most famous work, created in 1973, is "Line describing a cone". An entire gallery is filled with nothing but a single spot of light that grows into a beam and eventually a vast hollow cone that swirls with fog. Visitors are confronted with huge phantasms that are revealed as being their own shadows.

There are lots more in a similar vein at the Serpentine Gallery in London until early February.

Events 2008

15 Jan	The New SLL Lighting Handbook Presented by Peter Raynham I Struct E	7-14 Feb	“Switched on London” London’s lighting festival www.switchedonlondon.com	12 Mar	Masterclass Southampton
22 Jan	“Making the most of Lighting” Professor Peter Boyce London EC3V Organised by HCNE Region Contact: Andrew.saville@armville.com	11-13 Feb	The ARC Show, SLL Young Lighters and IALD conference Business Design Centre London www.thearcshow.com	18 Mar	Trotter Paterson lecture Presented by Tommy Goven Venue tbc
31 Jan	PLDA Event Nayan Kulkarni work & projects Point hotel, Edinburgh Details: sharon@sharonstammers.wanadoo.co.uk	28 Feb	PLDA Event, London Three presentations from lighting charities Details: sharon@sharonstammers.wanadoo.co.uk	19 Mar	Ready Steady Light Rose Bruford College, Sidcup
31 Jan	Joined up Lighting “Urban Lighting Plans” BDP offices, London	28 Feb	Masterclass Leicester	15 Apr	London Sessional meeting I Struct E
31 Jan	Masterclass Newcastle	5 Mar	Newton Lecture The Colour Group www.colour.org.uk	17 Apr	Masterclass Edinburgh
		6 Mar	The Lighting Design Awards www.lightingawards.com	27 Apr	Middle East Lighting Design Awards Dubai www.meldaonline.com for details

Masterclasses are kindly sponsored by Philips Lighting, Thorn Lighting and Holophane. Topics covered this year: Using new technology to meet legislation; The O2 Arena case study; Sustainability; Wembley Stadium case study; Part L in Practice. For details, see the website (www.sll.org.uk).

Mid Career College runs various courses across the whole spectrum of lighting and at sites across the UK. For the full list, see www.mid-career-college.ac.uk for details.