kevan shaw
lighting design

Light and Emotions Research Interview
William Landall-Mills of Synovate talks to Kevan Shaw 26-03-2008

Introduction

WLM Lets start with where you come from

KS Obviously I work in Scotland, so I guess I am representing Scotland in a way. I think there is an important point actually about this in so far as Scotland is increasingly, I feel, is more a Scandinavian country than a North European country. If you look at the lines of latitude and longitude where we sit, we have a lot more in common with the South of Sweden.

WLM And what does that mean in terms of design and design ethic and your job?

KS Well I think one thing that is very important to us in general, is being aware of daylight, sunlight, natural light; how that all works and how we as humans relate to that. Because that informs a lot of the design, it's a lot to do with emotion and feeling, so we have particularly gloomy days in winter and particularly long days in summer. I mean it's much more oppressive in Scotland, even in Scottish cities than it is necessarily in London.

WLM What would be a kind of practical implication or application of that kind of thinking? What does it mean for buildings and lighting?

KS What it means is, you have to be much more aware of work places after about 3 or 4 o' clock in the winter because they are going to be pretty much 100% artificially lit, no matter how much glass you've got. Then in the summer you've got to think of the same space with a large window that might need virtually no artificial lighting if it's not too deep planned. So thinking about that, I think the topography of Scottish cities has an impact. There are a lot of hills and buildings have a lot of variation in level compared to London. I mean all the issues that occur in Scandinavia occur in Scotland.

WLM Do you get a very different emotionality out of natural light than artificial light?

KS Oh yeah, but I mean again thinking particularly of Edinburgh, I started talking about the winter gloom aspect, so what happens in Edinburgh in particular which is quite a rigid city I mean a large amount of it is gridded and the bits that aren't gridded are on a protogrid. Almost all the buildings in the historic centre are sandstone and were until very recently were rather dark and *dure* from pollution. Now the acid rain is now washing them all off so they are becoming more colourful, but what has the most impact visually and emotionally to me is in the winter when you suddenly get sun, because whatever time of day it is it comes crashing across at quite a low level and all these sort of flat organised Georgian frontages suddenly become – bang - three dimensional things with lots of texture and lots of character brought into them. Now that change in the character really makes a huge difference, certainly to my mood and a lot of other people I know. If you go into the office on a day when it's *dure* and it's been like that for a while. We have a number of Scottish words for this, *dure and dreich* are both this sort of oppressive grey, dreich is even when it might be foggy or raining, *dure* is just dark and dull.

WLM Melancholy can be interesting.

KS Right, basically people get very depressed in the desert or in America when they've got nothing but blue skies and sunshine all the time. I mean the thing that makes me interested and excited about the light in Scotland is the nature of change and change in quality, change in brightness, change in the character of everything. That is an aspect which is important to think about in relation to artificial lighting as well, we're always thinking about this kind of change.

WLM So you may have the undulations of nature but within an artificial context?

KS Yeah.

WLM That's really interesting. So you might have lights, this might be a really crass kind of example but lights that kind of get lighter and then darker through the day or move during the day or light up buildings different, would that happen?

KS Not so much externally, internally we have played those tricks. Yeah we can look at projects where I've done things like that.

WLM Yeah that will be fascinating. We have a rough structure here. It says here how do you describe the work you do? What's your role within your agency? What does that entail, how would you describe your agency? How long you've worked there and how are you enjoying it? (both laugh).

KS Right one at a time.

WLM So your agency, lets talk about your agency?

KS Kevan Shaw Lighting Design has just passed its 19th birthday at the weekend. Established it in '89 having returned to my home city of Edinburgh, previously I'd been in London for 16 or 17 years or so working in various different things that all led up to setting up on my own. Particularly looking at architectural lighting as opposed to other areas of lighting.

WLM And your company now I mean how have you sort of, how would you describe it. What is your philosophy and approach?

KS Well, skills first. We're eight people at the moment, we tend to fluctuate between six and ten people, depending on workload. In lighting design you very much have to find people who have discovered light as such, they're training might not be directly in lighting design, but increasingly I employ people are, because there are more courses, so there are more people who have studied Light. So at the moment I've got one architect, one masters graduate in Lighting, one interior designer who started this week and another member of staff who has just gone back to KTH in Stockholm to finish her masters studies. So I'm going to have two actual Masters of Lighting Design in the office, which is interesting. Because when I started out 19 years ago there were virtually no courses and the only thing was the Bartlett Course and they weren't really putting out Lighting Designers they were putting out, what would I say, enhanced engineers rather than people with any real sensitivity to Light.

WLM Tell us about your philosophy

KS The core philosophy is that what we want is to do 'interesting projects'. We deliberately are open to any nature of project, in any area of Lighting. We're also open to a very broad scale of projects right from the smallest church project of which we've done a few, which we lose money on, right up to the mega structures in the Middle East.

WLM And why are you so kind of broad in your approach?

KS Well what it's about is that my core philosophy is that 'light is light is light' and once you understand it you should be able to apply your thinking in just about every arena. My background is particularly broad compared to a lot of people because I started off doing stage lighting for rock and roll bands, did theatre lighting, a bit of film, bit of videos, I've done trade shows. I've been involved in lighting product development so I've got a broad background even before I decided to focus into architecture. And I think it's important to maintain that because every time I've done something different I've learnt something new and at some point that's fed back into another project. Partly it's technology and partly it's the idea. I mean we talk about the emotion of light, but we were using emotional cues in rock and roll lighting back in the late 70's and early 80's. You also learn from theatre lighting and apply it in there. So it's that same sort of understanding applied in different contexts.

WLM It's an interesting place to come from, in the sense that because the performance is very explicit, the lighting has to follow an explicit narrative in the music, so I guess that's a good place to start, if you're to then think about how buildings have their own story to tell.

KS Well exactly. Creating a narrative, creating a storyline, especially if you're looking at outdoor lighting solutions is very important. Sometimes you get the brief along the lines of 'I think we want colour changing lighting' and that's it. So I have to take that and I have to write the story for the building or the stories for the building. Also you get the odd client who wants 3 solutions to choose from, which is very hard work when that happens. Another background element which is nothing to do with lighting but it's important to get an architectural solution that actually gives an add on, something more to the building.

WLM And when you say an architectural solution what do you mean?

KS As lighting designers we have to be very careful. We have the tools that can do all sorts of things to a building. A lot of the time what we have to do is to understand more clearly, sometimes more clearly than the architect himself, how he sees the building and what he wants from the building because there's nothing worse (and I know some lighting designers do it and they think they're great for it, to go in and create a totally different experience of a building from that, that the architect intended, but in fact what we should be is part of a design team who create a whole). So the whole project is one thing and we're part of it. Because we have the power of light it's very easy for people who are more power crazy to go mad with that and, you know, distort the building to an extent that the architect may not like.

WLM Have you got an example of that?

KS I wouldn't actually like to put the names but I mean some of the people who win an awful lot of awards. In fact yes, probably perhaps has won more awards than any other is probably more guilty of trampling on the original design idea.

WLM Really.

KS Yes and they like to call themselves lighting architects rather than just lighting designers and if you can't figure it out from that I can't give you anymore clues.

<u>Biography</u>

WLM What about your kind of background, you were once a little boy at school, you probably wanted to be an astronaut or a train driver. How come lighting. What about you drove you into lighting?

KS Oh goodness, big story. My family background for a start. My father was an artist who worked extensively in stained glass, tapestry and watercolour. Working in stained glass and tapestry work he kind of led or was part of a movement that started to look much more at the idea that the person who was making the glass was also a designer, because both stained glass and tapestry were embodiments of craft work.

WLM So a touch of William Morris going on.

KS Exactly, it's the development of that whole strand into the 1950's and 60's. So he was very interested in the reaction of glass colour and shape and form to light and unlike a lot of earlier stained glass artists, who just made pretty patterns, he was very much looking at the nature of light and how the light was going to come through the window. There's an analogy with architecture, where *Corbusier* used coloured glass in the architecture and related the windows and openings and directions and everything to the path of natural light to get certain feelings, in a way that medieval glass people may have done similar things looking at some of the medieval cathedrals because there you see different colourings and different areas of the churches. In those days churches and cathedrals were very much built on an axis, whereas when you get into the 19th and 20th centuries the axis has sort of squeezed around the fit the building plot rather than the *lliturgical* axis of the building of North, South, East and West.

So, anyway, that was one area that introduced me a bit to light and colour and glass and one of our family friends was a guy called John L. Patterson. Now he started off as an architect and he was a student of my father's at Edinburgh College of Art. He went on over years to practice in a lot of exhibition design rather than buildings and eventually he became the Head of the Design School at the Edinburgh College of Art. He was very interested in light in all sorts of ways and he did a number of things, number of exhibitions and one that sort of impacted me most at the time was 200 Summers, which is an exhibition about the New Town in Edinburgh which was in the 1960's '68-'69 sometime around then. For that exhibition he asked my father to prepare part of the entrance, where, what he had people doing, was walking through onto a stage and through a theatre set which represented the old and new towns. So he commissioned my father to actually build the set and in order to make that work he brought into the house a Pollock's toy theatre with lighting. I had a play with that and that really got me interested at that stage. From there I did a bit of stuff with the Lyceum Young Play Goers in Edinburgh which was very brief and not very satisfactory because they all wanted to do the acting stuff and I wanted to do the technical stuff so I didn't last very long. And I set myself on a career path, nothing to do with lighting, I was going to be a curator of Industrial Archaeology. So I set my degree sights on a course that was going to lead me to that, which was at Loughborough University, Economic and Technological History. From there I did Psychology as a side line second thing. A year before I went to Loughborough another guy at the art college, a guy called John Cook, created this dynamic painting system called Microcosm. Basically he used to be a painter and he would watch his glass pallet, with all the reactions that happened from the different colours and paints on the pallet as he was working. So what he invented was this giant pallet which was a big sheet of black glass with an edge on it with a very thin layer of water and he would do dynamic paintings with lighting. He would use the colour of light to actually paint. This was a dynamic painting it's a painting done on glass and literally it's a performance activity and he actually ended up doing it to music as well.

WLM Did he film it?

KS I honestly don't know if there's any film of it around but I remember enough of it to be able to reproduce it. I mean that really hooked me into how the lighting, colour and water was all changing as one thing.

WLM To help him with the lighting rig and all?

KS No to help him with washing up the bloody paint (all laugh). His son David Cook was the lighting guy on that. So that again sparked something off and when I went to university what I got involved with there was Loughborough Stage Admin and they were the people who organised all the lighting and activities for two disco's a week, a concert on Saturday night, a rock and roll band would turn up, so we did all that.

The two best things: One we were allowed to play with lighting and Two: we got paid for it. So that was a very strong influence and that's when I started to get practical, hands on, and see how things worked and started also at that stage to discover a bit of the glamour of rock and roll. The end up of this was that at the end of my course, the year after I started my course I left and started a specific degree course in *curating* and the year I finished my course was one of those years when, in those days, all museums were public and none of the local authority museums were recruiting because of the cutback and the next year they were all going to be recruiting these guys from Leicester so I was kind of out in the cold. So I didn't really know what to do at that stage, but what I did decide to do was to do a final end of year concert. And the band who played there offered me a gig as a roadie so for a brief period I went and did that until their van blew up and then they decided rather than having a second roadie they needed a new van (laughs). The next thing that happened was Max Fordham & Partners you may not know of, he's a brilliant, brilliant building services engineer and he's the only service engineer I've ever come across who has a real passion for building services rather than just a job function. He had a slightly left field practice in Camden Town, London and he was also fed up with these boring farts that come out of engineering school, he advertised in the university magazine for, non engineering graduates. So I thought 'hmm now this looks quite interesting', so I went and got the job and learned in a very short space of time an incredible amount of service engineering stuff. I mean doing everything from designing heating systems and my favourite actually at that time was the design of plant rooms.

WLM What's a plant room?

KS Not where you grow plants no it's where you put all the equipment, so you've got boilers, pumps, pipe work.

WLM The industrial archaeology bit.

KS Well I suppose yeah industrial design in a different way. And you plan it all out so you have a minimum number of pipe bends, shortest runs of pipes that connects everything up and made the thing look like a nice piece of machinery. That was quite fascinating. Anyway I didn't last terribly long there because what became obvious very quickly was that CIBSE was not going to have anything to do with any of us unless we went off and got engineering degrees, so the choice at about 8 or 9 months in was, right you either stick with this and stay with Max Fordham & Partners for life because that's the only way you're going to get any work, or you know, give up and try something else. And quite frankly at age 22 at that stage the idea of being tied to one company for the rest of my life didn't seem so appealing. So we mutually parted company and I spent the summer of 1976 the very hot summer of 1976 unemployed hanging about in London.
I did a few bits and pieces and come the winter I got taken on, first by a company called Electrosound who had, they were a sound company rather than lighting company, bought a company called Tom Field Associates in the States and were building massive sound systems. So I got a job with them for a few months building these sound systems and shipping them out to the States and when that ended I then got a job with a company called Show Lights. Now Show Lights was really interesting, a young company led by a guy called Eric Pearce, who I think is still in the lighting business somewhere in LA. What he was interested in was systemising lighting, because what we'd been doing up till then is using what came to hand. A lot of imported American technology using power 64, a lot of home made equipment, trusses made out of angle iron and god knows what. He had this vision of systemising it all so I became, well, I was taken on originally as a bench solderer to build dimmer racks and I very quickly ended up in the office because of the experience I had specifying stuff. Among the things I was involved in specifying were the *Socapex,* Thompson CSF's *Socapex* connector which is now one of the wiring standards, the cabling standards the roundconnector. The truss standards, we were the first people to work with Thomas when they were still building chicken cages and I then, from there, what I ended up doing was being the trouble shooter. I would be sent out with the rig to teach people how to use it.

<u>Discussion about several memorable KSLD projects</u>

WLM I just want to make sure this is actually recording. So I mean if we sort of go to today and the work kind of that's most prominent in your mind. I mean what would be the kind of projects that you've done that you'd like to say you were proudest of, does it work like that?

KS It doesn't work like that for me. I'm proud of every project that we've done because I know that each and every one has been achieved to the maximum that was possible within the constraints that were set by whatever it was. The thing is it's also in some ways some of the smaller jobs where we've actually taken control and got the vision achieved, albeit a very limited vision on a very low budget, are sometimes better than, you know they're more rewarding to me than some of the mega projects where the vision has been so diluted by arguments about cost, fist fights with contractors to actually install what you've designed and all the rest of it.

WLM If you were to kind of psychoanalyse yourself, would you say that there's a kind of motif in your work because I mean if you look at Van Gaugh ook at his work and you kind of go, OK well there's something going on, there's a kind of quality to it all. And you might even say there's an emotional quality to it or a Joy Division or Mozart or whatever there is a kind of spirit. I mean how would you, I know it's probably very difficult but if you were to describe in those terms how you would characterise your own, would you say there's a timbre to the whole thing?

KS I don't know. I find that a very difficult question. As I said earlier on a lot of what we do is actually responding to some other designers situation and having to satisfy another designers whims and wills and still trying to get the fundamental lighting across. So I don't think, I don't feel you could go and look at a number of projects and say, you know there's a mark of Kevan Shaw Lighting Design. But what I do like is when our projects don't necessarily win lighting awards but they win architectural awards or architectural recognition for the entire composition. So I think maybe there's a bit of the purist in me, I'm quite interested in getting ideas across but within the context of the building or the architecture or the architects requirements or the users requirements. I

suppose a lot of things I like are things that I've felt are very important for the user of the building where I've managed to get by the architecture process when they didn't understand and realise the importance of what I was doing, the importance of any certain element within the scheme.

WLM So if one was to characterise that approach you might say something along the lines of it's a kind of sensitivity to the building as a whole, the effect the building is trying to do?

KS It is but more importantly than that, it's actually considering the users of the building beyond the client. So there's times when I do a lot of things that are for the user of the building, people actually have to live with the thing not the people who want to take the architectural photographs and never see the building again.

WLM Your taste is bound to inform what you think is going to work well?

KS Alright, how can I express this. I don't think I've had to express this before. I have my taste but I also am very much interested in the architecture and the building itself and if you're working on older buildings what I always, always try and start to do is to find the lighting history and see how that building has been lit before.

WLM Really.

KS Yeah. That can substantially inform lots of things. At the most impactful it is totally, by me forcing that process that's totally changed a building project from being a relight and a repaint to actually a whole restoration of a previous decorative scheme, because people just weren't aware and that nobody had bothered to think or look for that information. There was a small church in Edinburgh was one I'm particularly thinking of. The only memory from the original scheme is actually positioning of pendant lights which were put into the positions that the original, original gas lighting system had been put in. Modern looking pendants and everything else was modern. The decorative scheme however was restored and there were discoveries made. There was a beautiful painted wall which had actually been covered up some time with nasty cloth panels. Nobody knew it was there until we found the old picture and they pulled the panels off and said, oh it's still there, wow.

WLM You made a reference to archaeology and a kind of fascination with the past, well there you go (laughs) you can see how that comes out here. Can we just look at some particular examples?
And so there are 4 projects here. So how would you like to do this?

KS Would you like to choose one?

WLM I mean this is just … on terms of because there are 4 of them, there's St Mungo's, there's this, there's the Tiger Lily and another. Shall we start with this?

KS OK this is the centre … at Raigmore hospital in Inverness. A Classic case of a very fraught project. It's a design build for healthcare. The design started off with Bennett's Associates who produced a very, very good building, as they do. The process of design build went, not unusually, a bit wrong and started challenging the design to the extent that Bennett's actually withdrew from the project and it was passed onto, oh what are they called.

WLM Somebody else.

KS No, no it's important. Oh good grief my memory is slipping. Well actually basically the sad thing about this practice is it's actually the inheritor of Charles Macintosh's practice but these days they're purely a commercial outfit. OK so the great success of this building was actually maintaining the design right through to the end. We lost very little in the massive budgetary butchery that happened. Right the building itself is kind of odd. It's partially a teaching facility because Raigmore hospital has doctors who train, I'll get this right, doctors who are doing their degree at Stirling train in Raigmore and nurses and other health stuff who train in Aberdeen go to Raigmore. So this building was supposed to be a teaching centre and you know organisational centre for these education processes. So you've got things like there's a bloody great library, you've got a nice gathering space. There are lecture theatres and billions of lecturers' offices. What I wanted to do was to have a building that read differently from your average medical facility. I wanted to work with Bennett's particularly, in going through an

integrated lighting strategy very much as part of the whole design process of the building. And some of that got pushed out but a lot of it stayed. We did a few very basic moves to change and to create challenge and to create sort of excitement.
One of the basic ones was this. This is a copper wall, admittedly it's a box that sits within the envelope of the building and appears outside. Instead of lighting it from the top we did it from the bottom. So we were wall washing it, standard technique but invert it so it becomes a bit more visually challenging, a bit more visually exciting.

WLM Is it overly rational to say why excitement, because I'm going to pick up on the emotional words that you use. It's a teaching place, is there a rationale or is it just, hey this is fun?

KS No basically the point of teaching is to start with people with open minds. So anything you do to open people's minds, to challenge them, to make them think, just to makes them react I think is important, it's part of the educational process. So if you've got somebody whose mind is reactive when they go into a teaching situation they're more likely to absorb.

WLM Emotional engagement.

KS Yeah absolutely.

WLM And so that I can understand it's a copper wall but it's oxidised is that why it's that colour?

KS It's a copper box that wraps round and comes out, yeah there it is again there it actually extends through the top and it appears at the top of the building as well.

WLM Was there a library within it?

KS No this is the top floor, there's a flat floor and a lecture theatre in there and then down the bottom there's some facilities stuff.

WLM So you go into this copper thing?

KS Yeah.

WLM These lights at the bottom here are kind of a non-conventional way of lighting a wall?

KS Well it's just basically sticking it on the floor instead of sticking it on the ceiling. Technically the thing is a wall washer, this happens to be a walk on wall washer. The idea is that the natural, I mean natural light I'll come back to this all the time. Natural light comes from above by and large, when it doesn't come from above that's an unusual circumstance and that brings a visual challenge. It's something you have to engage with to understand, the brain if you look at something that's up lit has to work harder to understand that surface and the modelling on that surface because it's not fitting the normal pattern. Making the coils work a bit faster.

WLM But that's not the actual effect when you actually go and see it.

KS No it looks very much like the copper wall, the glass wall is further along and that's not lit the idea of the glass was that you could see through. I mean lighting the glass wall is the library and the interesting thing about the library was normally you've got shelves for the books, normally you look at the spines. But what we did as an architectural move, was a glass wall and the shelves are right up against it so from the outside you actually look at all the fronts of the books. So you get mass of books and massive knowledge in front of you.

WLM Sorry I'm just trying to visualise it.

KS Basically you've got book shelves up against a glass wall so from the glass wall side instead of it being the spines of the book you're looking at the content of the book, the leaves, the white strips with the coloured edges all the way along to make a pattern. So basically you're looking at books like that.

WLM You're seeing part of that rather than the spine?

KS Yeah.

WLM Oh because when you're outside and when you go into the, oh I see. So to light that.

KS To light that we just needed to make sure there was an ambient light in the … here that was going to allow that to pass through the glass rather than direct to try and light it. Because generally you don't direct light glass because it normally creates nasty reflections. This is the idea. There's a lot of things in here architectural elements that have an associated lighting element that you know plays with the story.

WLM So in a sense all the time it's a response to the architectural feature and so in a sense you're kind of … you've got lots of cool tricks that kind of enhance each of these features but within the context of an overall marriage of the same, it's a teaching place, we need to make it interesting, it needs to be different, it needs to be challenging, it's not a nursing home.

KS Exactly. I mean this was a very good relationship with an architect who was open to this so they said oh we've got a copper box we think we ought to have it highlighted. Yeah I agree we should highlight but what can we do with it to make it that bit different. So what we'll do is we'll wash it from the bottom rather than the top. Oh that's an idea lets try that. Instead of I'm not having that.

WLM I don't know are you particularly interested in understanding how you would light up the books from outside I mean there's a kind of debate about how technical we would like?

KS Well the technical solution there is there isn't much light there but to make sure that there's sufficient light in that area for them to be visible.

WLM Through the glass, so on the book side of the glass?

KS No we couldn't do that so we're not lighting directly, what we're doing is applying light in the space and some of that light in the space is going to land on the books and makes them visible. This is another thing about what the lighting designer should be doing, or a good lighting designer does do, it is light is not all spotlights. A lot of light designing is awareness that light bounces around, you can control how it bounces and moves to an extent by the choice of fittings onto the choice of surfaces. But being aware of where the light is ultimately going to land, that kind of pre-visualisation process that a designer has to go through, so, you know if you put a light there there's going to be some light on that wall, then if you put a light there it depends on how high up the wall that light goes. So it's that kind of thinking, I mean for example I definitely did it there, I can't remember what the lighting was. We did have direct down lighting but we could have just enhanced the floor strip and bounced the light all off that soffit but we didn't do it in that sense.

WLM Is that where the books are?

KS Yeah they're in that, I mean these were taken before the building was occupied so you can't see, they're behind there, there is a light strip along there that is actually what would be lighting and if it were there to be lit.

WLM Indirect lighting why did you choose that in this case?

KS Next question (all laugh). Why am I using indirect lighting? It depends.

WLM In this case?

KS In this case what we have here is a big glass wall, outside there's a big sky, in here big flat surface. What I want to do is articulate that the same way as the sky does so you kind of feel that wall becomes somewhat disolved, you feel that there's a continuity. You can't get the same light level as the sky but by lighting it, it doesn't become a dark depressive surface.

WLM It doesn't become a dark corridor effectively.

KS Well yeah. The idea was to open up the ceiling in that case. A lot of the time I'm wanting to get light into a space to articulate a space in it's own form, so usually use indirect lighting, again you're not crashing light across things, you're not making any jarring statements but you are providing the light in a way that is going to let the surfaces articulate themselves. It's part of the natural lighting way. If you think of the sky outside what you've got is you've got a big flat sky and if you're lucky you've got the sun. So if you do the big flat sky, here is what you do start to bring in shafts of light or direction of light or modelling light then it does feel more natural and the contrast is more natural so it's easier on the eye to look at things. Up here initially the up lighting, we have, you see, these are spotlights and those were put there on the basis that we were going to put some stuff in there. The stuff actually went in there with nothing like what was originally planned, mostly furniture. So these don't to a degree fulfil the function they were originally intended to. They have got a couple of pieces of artwork in which they are lighting, so it is part of that language of lighting that relates back to nature as far as possible.

WLM You … you see from outside and inside.

KS In every case we want to know what the building looks like at night from outside.

WLM If it's an office block?

KS Yeah anything, we need to know what it looks like from outside, especially in these days of energy consciousness if you can use lighting that's there already fulfilling another function, to create the visibility of the building then that's a very positive thing. So lighting needs to be thought about and if what's there already and will do the job then you don't need to add too much to it. We had a very specific case with this building, functional case in so far as over here is a heliport which is used for an air ambulance so we had incredible constraints as to what we could do with the lighting so we didn't upset the helicopter pilots, so they don't crash into the building, or crash anywhere else for that matter, mind you if they're going to crash, next door to a hospital might be the best place! So we had constraints, but always, always I want to know what the building looks like from outside from the inside lighting.

WLM And knowing what it looks like, I mean there's a difference between what it looks like and having a similar effect of kind of creating awe and wonder and curiosity or confidence or whatever the kind of message is that you want to say about the building. I don't know was there something about this building that was you know, that was being said, that the lighting somehow could substantiate?

KS Not much more than what I said really. I mean the idea was to give some elements of challenge but to make it a sort of dynamic environment.

WLM And the exterior lighting was too.

KS Well the exterior lighting was to identify the building as much as anything else, and it was based around the copper box. I don't know why this photograph has not got the copper box lit, I know the lighting was taken out of the project for cost reasons, but there is actually because it's too early, I ran it a bit later on that light would come on because again everything is on censors and whatever. So the idea was that, it became the illuminated element that identified the building. Against that most of the building was in silhouette and had a big frame and the punctuation of the entrance windows. Along there was the wing of the lecturers offices, The activity of different lecturers being there at different times would be represented by their lights when the other lights weren't on.
This is what I was saying earlier about the Scandinavian approach, this is Inverness which is pretty far north so their winter daylight availability is pretty low. Everybody arrives at that building in the dark and everybody leaves the building at night in the dark. There's a lot more scope for that sort of thing and again it was just a really nice project, apart from all the arguments because it was a … building, it was where you could step back from it. It had a defined purpose, the building could be expressed. Not withstanding all the constraints that we had because of the sighting and the cost and everything else, we still managed to get pretty much what we wanted to do, but

there was a lot of fighting. You know it was I was very happy with the way that turned out, the way that we got what we wanted.

WLM I mean looking at that, you would say there is a sense of intrigue about it, it's not showy, it's sort of intriguing. Shall we look at another one?

KS Yes which one do you want, the restaurant or the church?

WLM Whichever one you want. Lets talk about something that's really different. What about this?

KS *PIFSS* Building oh my god, it's the Public Institute for Social Security.

WLM The PIFSS building.

KS OK the brief of this is extremely interesting. You have to know a bit about Kuwait. It's a very small oil state on the Gulf, it's stuck between some uncomfortable neighbours, Iraq on one side and Saudi on the other. The population is miniscule, I'm trying to remember what the number is, really small about half a million Kuwait's I think there's 2 million people who live there, the other 1-1/2 are all people who come and work and go. Now this is a Government building, it's the one building where every native Kuwaiti will interface with the Government because this is where they go to sort out pensions, any other social payments and all the rest of it. Now the organisation is incredibly successful to the point that, they are paying a pension about 1-1/2 times the average Kuwaiti's wage when they're working and Kuwaiti's if they're in Government service then they only have to work 20 years for them to have a full pension. Anyway the guys who run this, because of this sort of approach are actually quite young, I mean they're in their, the top guys, are in their early to mid 40's and they were quite adventurous, within certain constraints. So the brief was to provide a remarkable building, a building that was really attractive to the people of Kuwait, it had the opulence that expressed how good the organisation was doing what it was, as comfortable as possible for the people that come to the building. As well as that they had a couple of very distinct special areas like the exec areas which are just a mini palace and things like this which was a kind of lecture theatre.

WLM Wow.

KS Now the building background is exciting as well because it was actually designed, as you might imagine from the shape and form of it, back in the 80's … art deco renaissance. Due to a certain conflict with the neighbours, the first Gulf war this got canned, got shelved and a 10 year hiatus while they did the reconstruction in Kuwait after that war. Then they thought, oh right well we do need to think about our building because we're in a commercial tower which wasn't very nice to be honest, it was overcrowded, it was horrid. They decided to look at this project again and said, oh we liked the building then, we don't dislike it now. We can't put it on the site we were going to put it on it will have to be somewhere else. Oh it's not going to fit the same way round on this site so we'll put it this way round. Ah actually there needs to be more floors on the top. They did this with the local architecture practice who are very bloody good at it, you know very good at interpreting and developing designs and then we were brought in to think about lighting design. I was trying to remember whether we were initially asked to do the exterior and then got the interior, I can't remember. Anyway this is a job where we had to do acres of presentations. A 3 options for everything job. And the exterior lighting, the tone was set that we want something that looks like an import civic building for most of the year but they have celebrations during February, a run of celebrations where it's become the local practice to light up everything in as crazy way as possible. So what they wanted to do was to find a way of lighting the exterior of the building that would provide a possibility of doing changeable dynamic lighting for the festival events which is the Eid Festival and then there's National Day which is when Kuwait was founded and then what's the other one.

WLM Ramadan.

KS No this is way after Ramadan this is February, when they kicked out the Iraq's basically, those are the 3 major celebrations so they basically party the month of February. This was quite a while ago, just when these were coming on stream. So we thought about it and we had a number of ideas and this idea was based on using 3 colour LED's to provide a *white classical look* which photographs rather pink for the normal look of the building.

But using a 3 colour system to do it so that we could have fully programmable all singing, all dancing thing that could be reprogrammed as they wanted year on year for the festivals. So that was what we set out to do and that's what we did with the exterior. I mean when these things are done it's all dynamic.

WLM So really you're kind of creating a *tableau* that they could play with rather than actually deliver a specific kind of emotional effect?

KS Well I mean this is basically, this was the core thing that they wanted to have. In order to do that though we made the tools so that they could actually do what they liked. I think talking about emotionalising some of the stuff in the interior is much more interesting, I think they focus on 2 areas. One is the boardroom room and this. Now this was interesting. What they had was they had big board meetings and they have quite a keen young leader so what I thought we'd do was we tried to play a little game with him. What we have up here is we have … blue light and warm light, always … so he could actually vary the colour in that area. So what we thought was worth a try was to see if when they had board meetings, I mean they do get quite heated. Was to allow that colour to be controlled on the AMX thing that sits at the Chairman's table. So he has the ability to change the warmth or colours of that colouring according to how he feels the mood of the meeting is or should be. So you know if he thinks everything is heated then you can whack the blue up a little bit, and have that report back as to how effective it was in controlling people's emotions, but the idea is to have warm or cool so you could actually have that sense of you know changing colour in peripheral vision which potentially could change mood.

WLM How does it work, if you want people to calm down do you put a bluer light, that's the thinking?

KS That's the thinking.

WLM Is there kind of a from a psychology and stuff is there actually under pinning to the fact that blue light actually makes people calmer or red light makes people…?

KS Yes and no, there is a lot of research, there's a lot of stuff being done, when you actually start analysing research there's very little that is 100% conclusive. This is a major problem with lighting research. What you see is all the experiments are done, not as we would do them as social psychology they're done as psychologists looking at people constrained in particular things, try to narrow it down into isolated things, which I think is a really inappropriate way of dealing with lighting research. Because lighting is part of so much else you have to look at the big picture.

WLM You can't just make it one unit that one variable where everything else stays the same?

KS Well you can determine some things.

WLM Here your probably could actually that could be a great experimental kind of.

KS It would be great. The problem with a lot of projects is getting post occupancy feedback, because when you do things like this none of these people give a damn and none of them can be arsed to spend the time to fill in a form. And they won't like people observing board meetings in these places.

WLM If we made the effort to research on these things.

KS I'll tell you what we could do it in Philips boardroom and lets see, the head boardroom.

WLM That's actually a cracking idea isn't it so you could do that.

KS Prolong these things.

WLM I mean intuitively I'm not being funny but do you really believe that if we had red lighting in here we might be a bit more animated and if we had the blue lighting we might have been a bit more lethargic?

KS I think yes. I think there are circumstances that the colour of light can have a great effect on how you feel, and it's not primary blue to primary red. It's within the natural range of colours and I mean this is another thing I feel very strongly about, about emotion, about light, is that essentially you have to go to look back at what humans are and what we are is animals or primates. We have had good artificial lighting for probably not even 2 centuries you know a century and a half maybe. Before that time we have evolved working with light in a natural form and the 2 natural forms of light are daylight and fire and if you think about it during the day when we're active we've been working under daylight which is predominantly higher colour temperature, predominantly well again it varies from being low contrast to high contrast, whether you've got the sun or not, when it's high contrast it's easier so you start to see natural where you can look at that and explain why you feel better. Oh right I can go out hunting now because I can really see clearly, it's easier for me to actually catch my food whatever when the sun is shining than when it's dead and flat because you know all the animals that are camouflaged are better camouflaged, yeah it might be easier to hide but it's going to be more difficult for me to pick out a target. And when you get to the evening you're more relaxed, that was when we've had fire, we've had fire for many millennia.

WLM And mysterious and warm.

KS Yellow you know flickering and all that sort of dynamics that you expect from it.

WLM It's quite … through your psychology as a kind of motif I mean that's a very interesting approach.

KS Well it is very central to the way I think about this sort of thing. I mean that is how I think when I'm dealing with inhabited places. When you talk about events and that is what this is about, then you're more free because you're talking about having people in an environment for a shorter length of time. They're expecting something different and more exciting in order to be entertained or whatever. So in that sort of situation, and to an extent with external lighting schemes like that you do the same thing, you're not looking to create light, what you're looking to do is to create something which is interesting and exciting. So then you're freed from these constraints of sticking to what is natural. Anyway coming onto that. This gave me a chance to do something I've wanted to do for a long time. This is the nearest I've had to the interior of a 1930's Super Cinema to play with. If you look back at what was happening in the late 1920's and early 1930's that was when all the big you know 2-3-4,000 seat cinemas were made. Each of them, especially the ones around London I particularly like the Rainbow, Brixton Astoria, Streatham Odeon, there's one in Tottenham Court Road and the New Victoria, all those were built around the same sort of period. All the interiors were incredibly heavily themed and they all had really amazing lighting systems in them. They all had degrees of colour change. They were all thought through in the same way as we think of things now. They were on, sometimes, the leading edge of technology of the day in terms of automatic lighting systems, great big resistors, saltwater with electrodes being wound in and out of them by machines. Anyway that whole thing, which we think now we can do all this now with LED's.

WLM They were doing it?

KS It was being done with a lot of incandescent coloured lights in those days and I must admit what a certain company recently did to the New Victoria I think was a real shame.

WLM I don't know what they did, it's presumably kind of art deco?

KS Yeah well basically the New Victoria was designed as it was supposed to be an underwater palace so when it was originally done it had 3 colour lighting system, not red, green and blue but there was an amber, green and blue lamp and the story goes that, because they weren't quite right the architect and the engineer on the job spent the night before opening going round and changing about 2,000 bulbs in there, changing at least a third of them to the right colour so that when the thing opened the washes of colour were exactly what they wanted. Now it's got RGB bloody LED's in it that are, the pictures I've seen it looks like hideous, nothing like what it was intended to look like.

WLM It is amber, blue and green, why amber?

KS Well it was to create white with the blue and the green.

WLM But now in RGB?

KS Well we've done RGB because basically the amber, blue, green was one concept, the concept was the underwater idea what they wanted to get was blues and greens and whites, all cools. The amber was there to de-saturate rather than to create an amber. Now we've got red, green, blue on the mistaken assumption that you can make any colour from a red, green and blue LED which you can't (laughs).

WLM So this is your Super Cinema?

KS This was an opportunity to work in the same sort of way and using the same sort of technologies. This was all done with cold cathode. What I wanted to do, well people are going to be driven there sat down and listening the most boring kind of financial presentation you can possibly have. So I thought, that's really unfair. If people are coming into a place that looks and feels like a place of entertainment they should be entertained, so what can I do? What I can do is I can put a lighting system in before they get the boring crap we can entertain them. So what we had was very soft slow sweet colour changes that just trickled down and again just to make sure we got people paying attention at the end of it, rather than the lights just going (makes a noise). What happens is there's a colour change sweep to blue that goes from the back to the front, so basically your peripheral vision sees that coming so you immediately focus forward. So you get everybody's attention at the stage.

WLM So not surround sound but surround light.

KS Yeah surround light it goes down to blue then fades. So nice little trick using a bit of psychology in terms of that element but again using light as an entertainment medium, they loved it, really good client from that point of view. But that's the sort of, that's the extreme end of what you do, this is the slightly more subtle end and there's an even more subtle end which is the sort of things like, making sure you've got a lit ceiling in there so that you have that continuous light playing above you from the outside to inside.

WLM So there's sort of degrees of kind of explicitness about what your lighting does?

KS Yeah it's more fun to do the more subtle stuff (all laugh).

WLM Again your tone of voice was most excited talking about that actually (laughs).

KS It is but that's a very easy exciting thing to talk about, whereas this is entertainment lighting, this is where I came from so I mean obviously I've exhausted that but I have exhausted the need to force that into a project to exercise the requirement to make lighting entertaining. I have the skills but it's when to use it and when not to use it.

WLM So there's a kind of more intellectual subtlety?

KS Yes.

WLM I mean shall we have a look at St Mungo's. Lets look at the church.

KS Churches are always great fun to do. They all have, well something that's happening has been happening for some time in churches. I mean everywhere in the world for the last, certainly for the length of my practice 20 years, we've had the same things going on. Congregations are diminishing, congregations are getting older, the celebrants by and large are a lot younger than the congregation. They're coming from a culture that is much more entertainment and theatrically focused.

WLM So celebrants being the priests?

KS Yes so what we have in a lot of situations is the priests wanting to be the star of the show so you've got a much more stagier approach to the areas of celebration, but in the meantime you've got to think very carefully about how you deal with the aging congregation and what they need to have because their eyes are not so good in terms of working lights. What's happened in the last 4 or 5 years is that churches have discovered power point

and more and more churches have got bloody great screens with the words you know the hymn words and everything else coming up on power points.
So to an extent that is the run of what happens in churches and it varies from church to church, congregation to congregation, celebrant to celebrant as to the amount of activity or change that they're prepared to deal with. The other thing that churches have suffered from and still do to a large extent is there seems to be a certain breed of electrical engineer who is religious and who gets himself on the building committee and is you know really, really interested in the technology of providing the cheapest possible light source. The number of churches you go into that are lit by high pressure sodium or mercury discharge lamps or whatever which are killing everything is huge, and the worst thing yet is that they're usually still in post and you have to discuss with them and argue with them at times you know the reasons for taking out all this super energy efficient lighting which is absolutely shite. The main reason for that being cheapness in first cost and the amount of use you have is there's not even an argument in terms of energy use at a cost level or going to the high efficiency lighting equipment. Apart from the fact we're also back in a situation having a nice warm incandescent *tungsten* firelight, light to help with the comfort and warmth and correct emotional reactions. So essentially this, this is a Catholic church and it has quite a different kind of set of uses from most Protestant churches in so far as they have a lot of services, short ones, almost everyday and there's a large amount of casual use of the church for praying, there's going to confession all these other activities they have within the church. So what we needed to do here was to leverage a control system, the cheapest lighting we could put in because he didn't have any money, how to get it to achieve both the highlighting levels so that people could actually read their prayer books, hymn books and god knows what else but also be able to get to these states like this where people were going in for private prayer in the evening or whatever. It's all scene setting, it's very simple technology, but the idea is to change the mood and to change the focus within a church for the different kinds of use that the building has given.

WLM Such as what would be the different moods?

KS This is a private prayer setting. There's light on the altar, there's low light down here because people are not expected to read they're expected to just go in and say their prayers. Focus up on the crucifix there that's the only thing that is not warm.

WLM Because?

KS Because actually because it's quite a nasty thing you know, get the edge on it basically, get it cold, get the power, the fear the pain the Catholic guilt trip, the things all about you know, sticking someone on a cross and nailing them onto it. So that focus there led to a very good technical solution at the same time.

WLM So the light is less comfortable there I guess?

KS Well yeah you want to make that guy look a little bit unhappy so he's under lit, cold light, compared to everything else which is really warm and sumptuous you do get that sort of sense of pain. So that is a nice contemplative setting, focusing on things, Madonna is also lit in that so again you can focus on whichever bit you want to.

WLM There's also the sheer fact they stand out more if you have them with the white light as opposed to the red light.

KS Not necessarily.

WLM I mean just looking at that they seem to I mean if you close your eyes they seem to be.

KS That's not cold light that's warm light on that one. It's a much higher intensity I mean it's quite a blue figure you can see there from the … writing. So you go from that's a sort of normal small service state, that's a private contemplation state, this is a bigger service state but without the intensity on the back so we're actually bringing more attention here and there's more light coming … is more important here necessarily than there and you've got a more full … so the lighting is further back into it.

WLM So does that make it a more full public address mode?

KS Yes.

WLM So in a sense it's a bit darker?

KS It's a bit darker and also it's a bit more contained, so what we're trying to do is to get people to group together closer to the action so to speak. So increase the level of intimacy.

WLM Oh so there's a kind of herding?

KS Yeah.

WLM So talk to me about how you pull people together?

KS Oh it's so crude. You light the bits where you want them to be and you don't light the bits where you don't want them to be.

WLM Yeah the thought process to get to the technology, the thought process behind is not crude at all. I mean the idea of kind of using light to kind of pull people into an area, or is that just…

KS It's nothing particularly new I mean this is all studied the American's were doing it in some supermarkets in the 1950's where they did a lot of studies of how to control the flow of people up and down the aisles in supermarkets by changing the lighting, but it's also subtly to get them to the places where they wanted to buy stuff or to reduce crowding in what area or whatever. Very little of it was ever implemented in any great extent but I mean there's the studies of how easy it is to get groups of people to move by changing lighting condition. It was really well done at the time but virtually nobody ever looks at it these days. Supermarkets are much, much more interested in using smells, they pump, where they've got the fresh bread thing they pump the fresh bread thing over to the entrance to make people feel hungry.

WLM Anything more to add on this?

KS I think the only other thing was there are a lot of little areas of light as well in here. I mean these are all different saints so the idea was we had saints down one side, so that all the key things that Catholics wanted to use to tell, you know to help tell their story were all accented around the side, and in the centre was a sort of celebration area, all manoeuvred and machined round and controlled in order to do that.

WLM Because from me looking at it, it does seem in a sense, if you think of a catholic versus Protestant perspective, possibly the Catholics being a bit more mysterious, a bit more into the ritual. Whereas when I imagine a protestant I imagine everything white.

KS Scottish churches.

WLM And what you have here is that and then these kind of you know within the … kind of dark some little bits of features lit up to tell a kind of individual anecdote or story or thing within that context which kind of like just very.

KS Iconic.

WLM Use of the icons in a way. Are you catholic or protestant?

KS By culture I suppose I'm protestant but by belief I'm a pagan I think because pagan is all about sun worship and fire worship and all these things that I think are the important things to life.

It's a very dramatic expression in contrast.

WLM It looks like a jewel.

KS Exactly well that's a point, this is now a theatre of worship it's not a factory of worship which is what it was built as.

WLM And you play with light it's a bit gruesome the lighting.

KS This approach is how we picked out the individual objects is very much stuff we learnt from exhibition lighting because I was saying about all these different areas cross-fertilising.

WLM Can we just drill down, I mean how, I mean let's take, what's that is that Mary who's on the altar.

KS Well basically that's not Mary.

WLM This one is this one I think it looks the same.

KS I don't think it is. No it's not because that's at the end of one of the things. They all have their own saints and they all pray for their own saint the Catholics.

WLM There's a lot of personality.

KS Although some of this stuff is quite similar the surrounds and all the rest of it, they are in different locations.

WLM But the way you've actually chose so you've got a general kind of low level warm *luminosity* sort of surrounding it.

KS Actually what we've done is we've actually worked by, and this is what I was saying about understanding how light goes beyond to where you point it. We've used the bouts like the secondary light to provide a lot of the ambient illumination. So I mean if you start looking at textbooks and you say, oh you should have contrast at 1-3 or 1-5 bollocks. You have the contrast that you need and if you over contrast then what you're doing is you are actually putting more light around. So the contrast issue here is still not right according to the book. There is light around the place for people to be able to walk around without having to put light everywhere.

WLM And then here you have this, do you know how this would have been lit?

KS That is lit by, I think, one *AR111* in very much an exhibition type light fitting.

WLM From the roof?

KS From a beam up there.

WLM So it's been spot lighted?

KS It's a spot light yes. Yes pretty much all the light fittings there are spotlights. The ones that are doing this are just being carefully targeted they're the ones that are mounted on these ledges here. There's carefully targeting one down and one across so that you get an apparent general level of illumination at that level without it all coming from direct light as opposed to having a big area like disco's where the lights splosh.

WLM I'm conscious that you have a meeting at 1. The one thing I guess remaining that we haven't talked about is what you think is happening in the future? Where we're going and what the trends are and how you feel about them?

KS OK.

WLM In terms of originality I guess.

KS Well in relation of originality well the thing that worries me most at the moment is the general drift in controlling the availability of different light sources on grounds of energy use, that's one of my major worries at the moment. Because I mean we use tungsten halogen a lot, we also use the best available tungsten halogen the most efficient ones, and you can do things with those that you can't do with discharge lamps. I mean you can't dim with discharge lamps properly, dimming is a vital part of the tool box to create emotional feel and emotional change. You can dim some fluorescents but the colour characteristic of fluorescents is disturbing, it's very simple to say why it's disturbing. It's a non continuous spectrum, basically a fluorescent white is made out of a number of different peaks of colour, made out of phosphors and the eye in general reads this as white, but the visual system is working much harder to make that white than a continuous light source makes it work. An incandescent light source and all the rest of it daylight and firelight have this idea of continuous spectrum a soft curve, whereas every other light source we know has a series of peaks. Interestingly enough there's a lot of talk about LED technology, it's seriously in the market place, seriously miss-sold. It's not the solution for everything. Tests have been done with LED lights show a lot of them are much closer to a continuous spectrum than any of the other discharge light sources. Largely I mean they work by having a usually a blue core light source and then one set of phosphors that actually fill in the rest of the spectrum. So instead of giving 3 peaks like you get with the tri-phosphor tube, you get this smooth curve which is the phosphor and just one peak with the blue. There's been some studies done of the psychology of colour and people do find that warm white LEDs are a comfortable, acceptable nice light source to look at things by.

WLM It's actually reducing the quality?

KS Very much so. And they have lots of other problems which I won't go into here because it's not relevant, but that I think is one of the most challenging things that we have to face in the next wee while. LED's are coming on, there's a bunch of problems with them because I think the problems with them are much more to do with the manufacturers than to do with the end users. Because LED's are totally unlike any other light sources ever been in play because it's a piece of electronics, it's not a piece of effectively mechanical transfer of electrical energy to light. So all the problems that happen with LED's are because of that and because of people not understanding that's what it is and how to work with it. Earlier on I talked about the period of super cinemas the 1930's which was, to me, one of the real golden ages of light because you don't just need to look at that the other thing you can look at is, a good example is William Holden and the underground stations. Those were absolutely amazing pieces of lighting design.

WLM William Holden?

KS William Holden was the architect for London Transport or the underground or whatever it was in the 1930's and he designed a whole bunch of stations that still exist. I'm trying to think now. I think Southgate is probably the most local to everyone. Basically what he did was he was taking the best technology of the day and the newest technology and he was building things out of concrete and using the then new *Critall* metal frame windows. So he was making these stations into lanterns that worked in 2 ways. During the day they took a lot of daylight in right above the escalators usually right in the ticket hall, so there was a lot of natural light coming into them. And at night he reversed the whole thing by putting the artificial lighting in such a way that those glazed areas glowed out and became lantern indicators. He also used a lot of you know he was the guy who invented the blue glass strip with the etched underground and station name lettering that goes round the edge of stations. He also on the escalators, and there's very few of these left, he had columns that went down the escalators with a bowl on the top which had stuffing great incandescent in. So there were all those important things that were lit, you know reflectively so the whole thing was just full of light, not at high level, but enough. There were one or 2 of those installations left which have been fitted with discharge lamps.

WLM Yeah I've seen that I know what you're describing.

KS What that was to me was the golden age of lighting design where lighting design was very much part of the architectural package. Light seemed to be much better understood then by architects than it is now, and I put that down to a failure of education of both architects and engineers.

WLM Well you can see how within the whole vibe of art deco and the kind of modern relish, electricity was really exciting and lighting was the most exciting, and I guess people just kind of take it for granted I guess, I don't know.

KS Yeah I mean they did have some new technologies. I mean like we have LED's now they were running with *cold cathodes* you know they had coloured light in a tube which would bend around and you could do all sorts of things with. So they did have some of that new material and they were being every bit as creative as is done today, if not more so. And then there seemed to be, I mean the War I think interrupted that and then there was a period where there was some pickup of that but not a great deal, there were a few projects and a few things like the Festival of Britain, there was some energy in the lighting direction Skylon a lighting object more than anything else. Then it fell off in the late 50's and late 60's. At the end of the 70's it started to come back into play. By that time the architects were so focused on other things that they were far too tied up with you know concepts and all those new things.

WLM Economics.

KS They just didn't seem to pay attention to light and it was then at the end of the 70's and 80's that lighting designers started to appear, mostly from be it theatrical backgrounds like myself to fill in this gap of lack of knowledge or lack of application from both the engineers who used to be well into this and the architects who seemed to have lost the grip as well. I think in the long term really this is another maybe golden age of lighting led by lighting designers and led with LED technology. In the long term I think we shouldn't exist, what should be better education of architects and architects should know much more about lighting and they should be much more capable to really understanding their spaces as 3 dimensions when they draw them. There are a lot of bloody architects who are so pernickety about a ceiling plan which is something you never see except on a drawing. As soon as it's in 3 dimensions you never see it flat, or at least not unless you're drunk and have fallen over. And even then (laughs). It's got perspective to it. A number of people I've worked with just don't get it.

WLM What is the 'it', is 'it' the subjective reality experienced by the users, is that really what it's all about?

KS I would like to think that, that is what I'm trying to give to the game, is to think of these and think how they're seeing the building and think how they've had to find their way through it, or attention be brought to one point. I mean there's so many things you can do you know, you light entrances, you light reception desks, you light points of focus or interests. You can manoeuvre people round by lighting over there by the lifts so that you know their peripheral vision is attracted there so they see where the damn lifts are, don't have to ask reception they can tell where they are. You know those sort of things are regular things we put into projects all the time and some people are aware of what we're doing and some of them aren't.

WLM Good so the big thing is to have asked the question, not necessarily the techniques of how you do it because as you were saying the techniques of how you do it are straightforward. It's actually having the mental reflex to think about it and maybe to actually have that as an integrated part of an intellectual process?

KS Yeah it's understanding how you see in a mechanical way in terms of what activates responses in the brain by use of light, like how your eye goes to it and things like that. The reverse of that, bright light something that I want to see that you've got to avoid doing and that's the biggest fight with bloody architects because they always want to put windows in stupid places. And they don't realise what they actually do is they create darkness by putting windows in the wrong place. It's the thinking and understanding of those kinds of things, back to the idea of the human animal really, how you react, how you feel about different qualities of light, different colour temperatures. Continuous spectrum, not continuous spectrum. That's another reason why indirect lighting works because you can get away with a lot of, you know with fluorescents if you bounce them off something the kind of problems tend to dissolve a bit because there's a more softening on a white surface, they become less aggressive.

WLM That's been magnificent thank you very, very much.