

Creative Technology at the IAAF World Athletics Championships Doha 2019

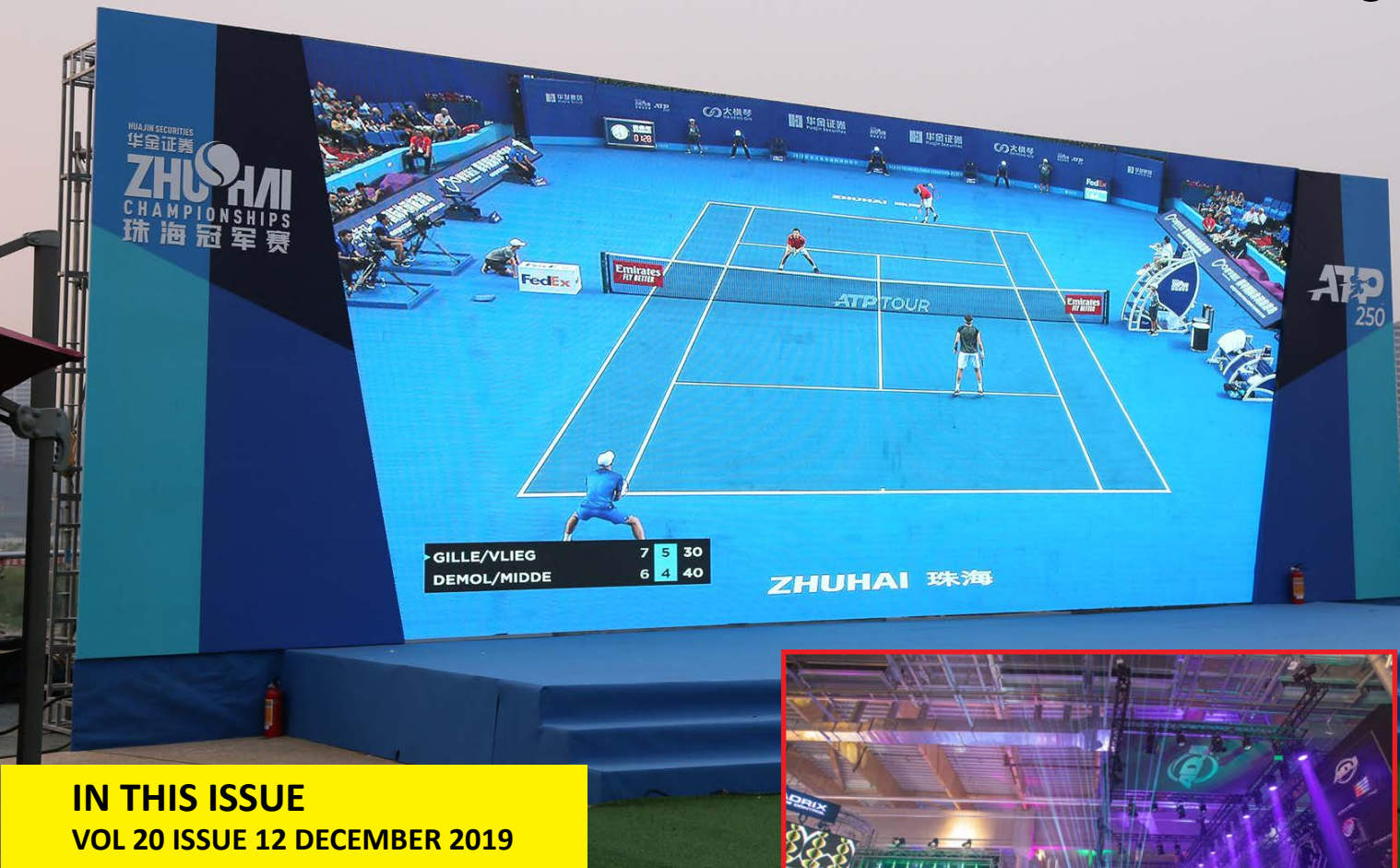


**Evan Morris on The Psychology
of Light and Colour**



**Yamaha RIVAGE PM10 Playing Key
Role in Urinetown**

**Prolight + Sound to Celebrate 25th Anniversary With
Focus on Present and Future**



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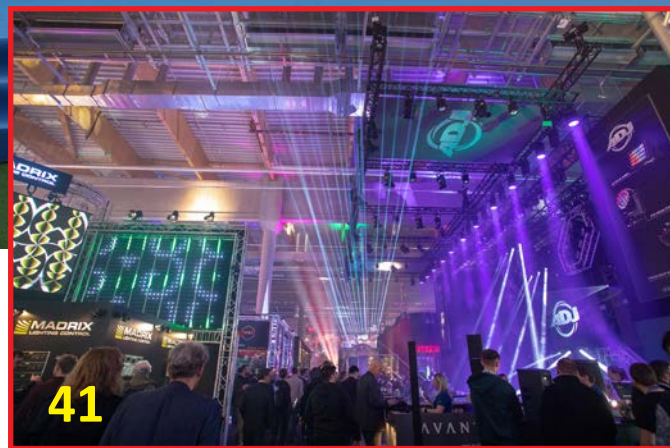
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The Psychology of Light and Colour!

LIT Lighting Design Award-winning Lighting Designer **Evan Morris** originates from consulting and designing weekly parties and karaoke for Chinese and Korean audiences in Times Square, New York City. He moved to Amsterdam in 2012 hoping that its geographical position would help create contacts all over the world. Amsterdam is accessible and one of the most significant international cities in Europe. It's also the worldwide hub for electronic music, both incredibly talented producers and performers come from The Netherlands.



"Evan Morris" Evan Morris at the MAD Fox Nightclub Amsterdam

The annual Amsterdam Dance Event is one of the most significant electronic music festivals and events. With parties at night and conferences during the day, it takes over the city for 5 days every October. This year, Morris presented in the 'Asian Invasion' conference programme designed to bring East & West parties together. There were presenters from many aspects of nightlife and production, including Event & Artist management, festival branding gurus & visual creation studios.

In his talk, Morris delved into the physiological effects of lighting and how these affect people with some really interesting results. Some highlights that can be applied to lighting design:



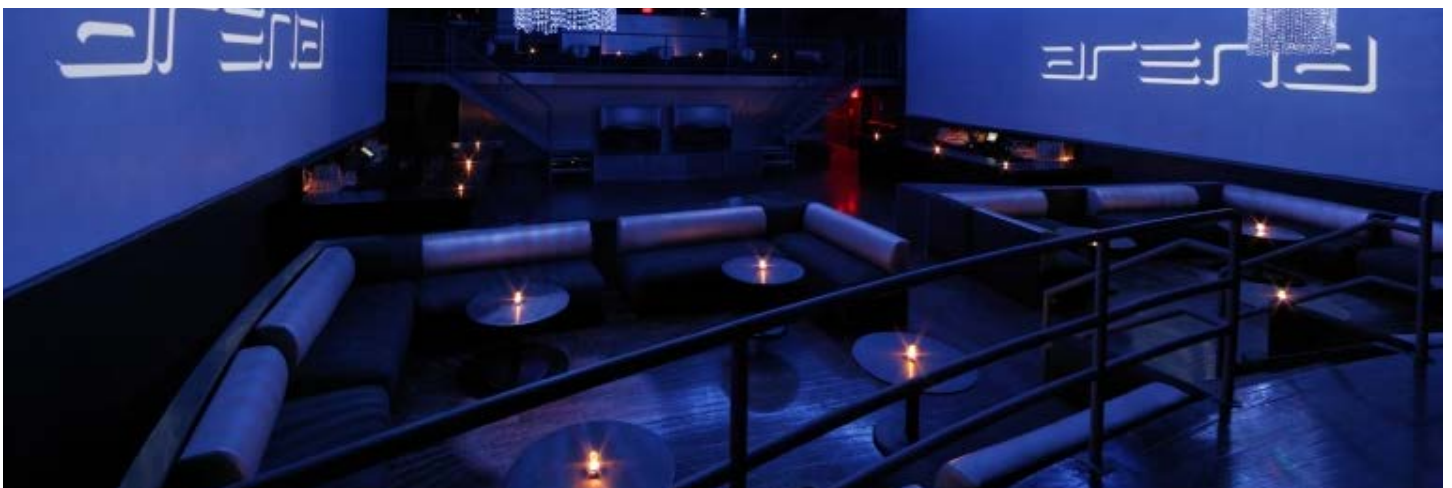
Butcher Social Club

1 - Timing

When presenting light shows with music, the impact on the audience gets exponentially larger when the two are in perfect sync. Our brains are all hard-wired to 'light up' when we receive signals at the same time from two or more senses. It's like fireworks inside our head! In large festivals, they sometimes time-code to the musical program - this allows for extremely tight integration. For smaller venues, finding tricks to operate the lighting in sync with the musical breakdowns and drops are extremely important.

2 - Movement

Today's lighting can move all different directions, and it usually comes from many different angles at once. Moving lighting not only provides



Arena Nightclub, NYC



Pulse Karaoke Lounge and Suites, NYC

excellent aerial shows for the audience to look at, but it can even help foster group cohesion. When the movement light changes speed with the tempo of the music, shadows also move in sync with the beat. When one looks over the crowd, it can appear as if everyone is moving to the music even when this is not necessarily the case.

3 - Colour

Colour is one of my favourite topics - there are so many possibilities! We see colour every day and often see coloured lighting. Specific colour combinations are one of the main ways I use to differentiate between tracks & impact audiences. Whether mixed with RGB LEDs or by colour filters on white light, coloured lighting involves frequencies along a scale - not too different from sound frequencies & musical scales.

4 - Red

Even though colours mean different things in different cultures, specific lighting frequencies have a particular impact on humans. Red light is one of the most important. It activates adrenaline production - so it can really get the crowd going in a way that nothing else can.



Arena Nightclub, NYC

5 - Blue

The other base colour for lighting work is blue light. Like red light, it also simulates a glandular response, but this time it's melatonin. Blue light can, by itself, make people relaxed and comfortable. Too much can make the audience sleepy, though!

Further reading: www.excitinglight.com

Credits for Images:

Arena Nightclub, NYC © Exciting Light

Pulse Karaoke Lounge and Suites, NYC © Exciting Light.

THE BUTCHER Social Club in Central Amsterdam

FUTURE PREDICTIONS



Aideen Malone
Lighting Designer



Omer Israeli
Lighting & Set Designer,
Cochavi & Klein



Evan Morris
Founder and Lighting
Designer, Exciting Light



Richard Neville
Designer and Director,
Mandylights



Bart Kresa
Projection Designer,
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Steve Cain
Head Engineer, Media
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Direction Company

Renkus-Heinz
Founder Reflects
on the Pro Audio
Industry

TiMax TrackerD4
Enhances the Audio
for the Royal Edinburgh
Military Tattoo

PLSG2020
Highlights Digital
Trends and Extends
Product Range



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Future Predictions

Entertainment Technology Asia finds out what caught the eye of lighting, video and set design experts in 2019 and what's in store for 2020!

LIGHTING DESIGN

What was the single most impressive technological intervention for you in 2019?



For me the most impressive technological intervention this year was the brightness and optics of the latest LED moving light fixtures. I used ETC/High End Solaframe 3000 Moving spot outdoor in the Avignon Festival. I was lighting Outwitting The Devil for Akram Khan Company in the Palais Du Pape. The fixtures were at a height of 30m from the performers. They were incredibly bright with their 32,000 lumen output. My team and I were so impressed. We were also really

impressed with the optics and the colour mixing.

When I was lighting Death of A Salesman at the Piccadilly Theatre in London I had the opportunity to use Ayrton's Ghiblis units. As Mac Encores are now the norm here in the UK I was impressed with how much brighter the Ghiblis were in comparison. The shutter assembly has much more flexibility as well. The colour mixing is very similar. As the show came out through the proscenium I had quite a chunky advance bar in the audience's eye. Physically I love the look of the Ghiblis units, very clean and sleek.

I really feel with units like these and the development in technology, we are now coming closer to having units that will compare with brighter discharge units and will have rigs that are more eco-friendly.

Which technology do you think will have the greatest impact on the industry over the next year – and why?

I believe LED technology will have the greatest impact. It is crucial that we find a more eco-friendly way to light shows without compromising on design quality. I am personally very keen to have a brighter LED generic profile that compares with the light output of a 750watt ETC Source 4 Profile but doesn't use the same power.

Aideen Malone, Lighting Designer
www.aideenmalone.com

What was the single most impressive technological intervention for you in 2019?



Robe MegaPointe. As being a lighting designer and operator, I must thank Robe for bringing us the best moving head that I have seen in years. The optics are amazing - add to that the unbelievable light output, well-saturated CMY colour system and beautiful effects engine and you will get maybe one of the best products out there - for almost every scenario.

Which technology do you think will have the greatest impact on the industry over the next year – and why?

The LED market is getting bigger and bigger each year with improved technologies and fixtures with high CRI light output. Almost all of the main fixtures manufacturers are producing new versions of their products based on LED technology, such as the new Ayrton's LED profiles or the new Robe Esprite which I saw in a demonstration in December 2019. The gap between LED to HMI and tungsten is getting smaller and smaller with each year and I'm really curious to see what 2020 will bring to us in those fields.

Omer Israeli, Lighting & Set Designer, Cochavi & Klein
www.cochavi-klein.com

What was the single most impressive technological intervention for you in 2019?



One effective intervention I saw on a commercial shoot was where the design completely changed a week before filming. Trading one complicated design for another, it was demanding on every department.

Astera Tubes - being so versatile - saved the day! They work in lightboxes, as video walls, and as softboxes at times.

Which technology do you think will have the greatest impact on the industry over the next year – and why?

Further integration of high-powered LED's, batteries, and wireless control could have a significant impact in the coming years.

As these fixtures get smaller, more reliable and diverse, they open the door for designers of film, festivals, theatre and nightlife events to incorporate light in ways not previously possible.

Evan Morris, Founder and Lighting Designer, Exciting Light
<http://www.excitinglight.com>

What was the single most impressive technological intervention for you in 2019?

2019 seemed to be a huge year for waterproof and outdoor fixtures - we're finally seeing most major manufacturers developing outdoor fixtures with attention to detail in optics and performance. Previous outdoor lights have always sacrificed features for weather resistance, but many new fixtures are now being released that means buildings, mountains and anything outside can be lit with more precision and a wider range of effects than ever. The possibilities are limitless and

that's hugely exciting for festivals, outdoor events and architectural lighting disciplines.

Which technology do you think will have the greatest impact on the industry over the next year – and why?

The advent of MA Lighting's MA3 hardware (released in 2018) and software (released late 2019) will really help to re-define the way lighting shows are programmed and executed for the next decade. The industry has quickly adopted the MA3 hardware, which is widely regarded as a huge step forward from the arguable industry-standard MA2 platform, and the recent release of the software shows huge promise that will give designers and programmers a huge amount of additional creative flexibility in the coming years.

Richard Neville, Designer and Director, Mandylights
www.mandylights.com

VIDEO DESIGN**What was the single most impressive technological intervention for you in 2019?**

In 2019, projector brightness increased. The new projectors that are 50,000 lumens will allow us to do larger architectural projection design shows with less equipment.

Which technology do you think will have the greatest impact on the industry over the next year – and why?

I believe that as technology improves, the design must also improve. Higher resolution projectors challenge us to make more detailed and seamless designs. Ultimately, I think that elevating design to take advantage of, and to challenge, new technology will have the greatest impact.

Bart Kresa, Projection Designer, BARTKRESA studio
bartkresa.com

What was the single most impressive technological intervention for you in 2019?

Combining the smart use of a mixture of display mediums, such as projection & LED, with a real-time tracking system and running real-time generative content on a powerful media server to create virtual environments, and new reality! The efficiency of producing and adjusting assets without render time, and the interaction of talent with these virtual worlds is just phenomenal.

Which technology do you think will have the greatest impact on the industry over the next year – and why?

Without a doubt, it will be media server technology. The systems are getting more powerful by the day, not just in hardware, but the software. Alliances between software platforms and companies are mixing up the backbones of the gaming industry and bringing it into live event generative content and completely blurring the lines of what is possible, what is the reality and what is virtual. This combined with bigger, brighter laser projectors, and finer pitch LED tiles, completely opens up creatives to be able to achieve anything in far more efficient turn arounds. The future of live events, entertainment and film are about to enter a new era.

Steve Cain, Head Engineer, Media Server Specialist
Technical Direction Company
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