

# FROM STEPHAN HORN TO 豪恩小白





STEPHAN HORN

IALD、PLDA(专业照明设计师协会、国际照明设计师协会会员)DIPL. ARCHITECT .USI .SIA 瑞士建筑研究院建筑学硕士Professor, University of Applied Sciences Darmstadt, Germany德国达姆施塔特应用科技大学教授Director Atelier Stephan Horn Wiesbaden, Germany德国威斯巴登 Stephan Horn 设计工作室 总监Board Member and Liaison, PLDAPLDA 理事

我想没有人会拒绝给国际友人起中文名这件事情,至少本人是不能免俗的,动用一切脑细胞,搜索记忆,深入挖掘当事人性格、特点、原名的含义······几经纠结后,一锤定音,如释重负,倍感自豪。

豪恩小白就是这么来的。

I don't think anyone could refuse giving a Chinese name to a foreign friend. At least I cannot. What' why I go deep to the mind, searching all the memories and digging up his personal characteristics, original name and etc, after days and nights of brainstorming and write down HORN WHITE on the table, in Chinese of course.

Stephan Horn 第一次来中国是今年 6 月份,广州国际照明展览会期间,一身白衣白裤,银白色的拖箱,往白色 VIP 室的白色沙发一坐,你们懂的。那时,我们亲切的叫他 Stephan,一个意为"桂冠",传承古希腊文明的称谓。

The first time Stephan Horn came to China is in June for the Guangzhou International Lighting Exhibition 2013, white shirt, white trousers, carrying a silver luggage. And when he sat in the white sofa in our white colored VIP room, you can imagine. At that time, we call him Dear Stephan, a name carried ancient Greek culture, meaning CROWN.

当然,他的专业背景也完全撑得起这个名字。全球排名第一的瑞士建筑研究院,是 Peter Zumthor, Mario Botta 以及 Antonio Citterio 等一票国际著名建筑师的高定工厂。因为光的魔力,自学成才,与灯光共舞 15 年,声名鹊起,彼时欧洲照明设计师协会 European Lighting Designers' Association 才刚刚成立。

And of course his background is crowned. The top one architect university in the world, Academy of Architecture, Monorisio, Swiss, HOUNT COUTURE manufactory for famous international architects like Peter Zumthor, Mario Botta and Antonio Citterio, etc. Stephan was studying there before he was lured by the magic of light. After that, he became one of the auto-didactic generation in Europe on lighting design for 15 years.

Stephan Horn did his first lighting-designs and installations already as a student in 1998.

早在 1998 年 Stephan Horn 还是一名学生的 时候就做了第一次的照明设计和安装。

The wide range of projects he does today, started with small-scale retail, followed by lighting designs for churches and universities. Further he did urban outdoor designs and several well-recognized events like the "Architecture Biennale" Rotterdam, Netherlands with PLDA or the "Architecture Triennial" Darmstadt, Germany as well as a luminal installation in Frankfurt, Germany, during "light & building".

时至今日他做的项目非常广泛,从最开始的小型零售,接着为教堂和大学做照明设计。此外他还做了大型的户外设计和一些公认的大型活动,像荷兰鹿特丹与 PLDA 举办的"建筑双年展"、德国达姆斯塔特的"建筑三年展"以及德国法拉克福的"光与建筑"等。

2007 until 2008 he has been the responsible lighting designer at BDP-Lighting in Manchester, UK for the "Libyan Universities". At that project he was responsible for urban master plans as well as the interior lighting schemes, when he developed the lighting for more than 650 ha urban area and 1.394 buildings within a few months.He focuses a lot on media facade & content research. His projects frequently become published in national and international magazines.

2007 到 2008 年,他已经成为英国曼切斯特 BDP 照明对接利比亚大学群项目的主照明设 计师。在那个项目中,他主要负责城市总体规 划和室内照明方案。在短短几个月内,他开发 了超过 650 公顷的市区和 1,394 座建筑物的 照明。他提出了很多媒体外立面及内容研究。 他的案例常常成为国家和国际杂志刊登出版的 对象。



Alighting: Have you ever meet any big problems or encounter any challenge during all these years as a lighter designer? How do you solve them?

《阿拉丁》: 您的设计师生涯中曾遇到哪些重大的困难? 又是如何解决的?

Stephan: I have to say, all my projects received positive responses. Like Herbert Cybulska, President of PLDA, and James Wallace, International Director of PLDA, we are the auto-didactic lighting designer generation. So I'm picky and valued the communication with customers. But what's more important is that I like challenges, and I'm hunting for challenges. In 2009, I got a project for Darnstradt University, in which innovated indirect lighting were used. But when I was developing the project, we needed to break the local standard. When I look back to my whole career as a lighting designer, it was challenging. However the result is that local government changed related standard for what I have designed and carried out was so much a better way. And this experience is also very important for me.

**小白**: 我的每一个设计得到的都是正面的反馈,从来没有负面的评价。和 PLDA 主席 Herbert Cybulska 以及国际部主任 James Wallace 一样,我们在那个年代成为灯光设计师,都是自学成才型的。所以,我会挑剔客户,也注重与客户的沟通,但我更喜欢不断挑战自我,在项目中不断寻找新的挑战。2009 年,我曾为 Darnstradt 大学设计一个项目,创新性的使用了间接照明,该项目完成后,直接导致了当地政府修改类似项目的灯光设计标准。在我的职业生涯中,当时的情况可能就是我最困难的时候,但结果却出奇的好,也让我非常难忘。

Alighting: What do you think a qualified lighting designer should be? Do you mind giving some suggestions to young lighting designers?

《阿拉丁》:您认为如何才能成为一个合格的灯光设计师?对年青的灯光设计师有哪些建议? Stephan: No matter where you are from, and no matter what your background is, you can learn lighting design, even if you are taking it as a second profession. It doesn't matter. Light is magic, and its influence beyond imagination. But you really

**小白**: 不同背景的人可以从不同学科的角度来了解并学习灯光与设计,无所谓灯光是否只是你的第二职业,光是有魔力的,它的影响力起于想象,但你必须由深厚的功底,才能厚积薄发。

have to accumulate a lot and be steady.

Alighting: Since you' ve been to China, do you mind telling us your first impression of China, and your idea about the development of Chinese lighting industry?

《阿拉丁》:您两次到中国,印像如何?怎么看待中国的照明及照明设计的发展现状?

**Stephan:** I like China, although it's a little bit too bright and a little bit out of control. I know Chinese lighting designers who can compete with any designers around the world and I found high-classed projects with really beautiful design and atmosphere here. But terrible designs exist too. So I found two extremes here.

**小白**: 我喜欢中国,尽管她有点儿太亮了,看起来有点儿失控。同时,我也发现了一些高端的作品,设计和意境都很好。所以,中国目前的现状在我看来是两个极端,一方面有跟国际水平相当的灯光设计师,一方面又有失控的灯光设计作品。

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# ALIGHTING'S





## RESIDENTIAL 住宅

the early fifties, became completely renovated in 2012.

这个建于上世纪 50 年代初期 600 平方米的 C 为建筑体不可或缺的一部分。 型洋房,在2012年经过了全面的改造。

The client asked for a lighting design that should help the more functional architecture, which is not really following a certain style, to change into an atmospheric and comfortable meanwhile representative living space. The wish was to create a holistic solution in which architecture and lighting design become a consistent space defining solution. So that lighting becomes an integral part of the architecture.

让建筑变得大气而舒适,同时代表着生活空

This 600 sqm C-shaped bungalow of 间,而不是仅限于一种既定的风格。业主期望 能够创建一个建筑设计和照明设计在一致空间 里予以明确解决的完整解决方案,以便灯光成

#### Overall Lighting Desing concept 整体照明设计理念

The task for the private residential project was mainly to create atmosphere 通用语言。在这种方式下以光的名义模型化和 and well-being.One requirement was to integrate the luminaries into the existing architecture and building structure. 对于私人住宅项目的任务主要是营造气氛和幸

福感。其中一个要求就是将灯具和现存建筑以 及建筑架构合并成一体。

used in the building and that the light in the different areas fulfills the appropriate needs of quality and atmosphere following a recognizable over-all character. In that way the architecture and space should be modeled and underlined by the light.

最初的想法是开发一门如何在建筑中运用灯具 以及光在不同领域满足质量和氛围合理需求的 强调建筑与空间。

A certain rhythm of dark and bright, of light and shadow create very interesting spacial experiences. Some color changing was also requested and became integrated into the basic lighting as an 业主要求照明设计要运用到更多的功能建筑, The initial idea was than to develop a element that additionally even rises the general language how luminaries are quality of the space but is not needed for its effect or missing if turned off.

黑暗与光明、光与影的特定节奏能够创造非常 有趣的空间体验。一些颜色的变化也被要求作 为一种基本元素融入基础照明,该元素甚至能 提升空间质量,而当关闭时没有必要顾及它的 效果或缺失。

#### Details 设计细节

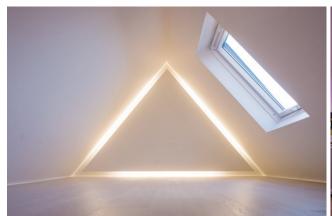
autonomous BUS system.Due to the color-changing in several areas and the glass-touch control units in every room it uses DMX-controllers as a master system which is further controlling DALI luminaries and groups via appropriate gateways. In the background a DMX-Server is operating 24 hours.

照明控制通过一个自动化 BUS 系统。由于颜 色变化区域分散,玻璃触摸控制单元也在不 同房间,照明控制以 DMX 控制器为主控系 统,通过合适的途经进一步控制 DALI 灯具 和组群。后台的 DMX 服务器 24 小时不间歇 运作。

The light characteristic is based on halogen 3000 K, fluorescent lamps and The Lighting is controlled via an LED are on the same color temperature. Only a few ceiling solutions have additionally 4500 K components to create a daylight impression for several situations.

> 光的特性在卤素灯3,000K, 荧光灯和LED 相同色温时体现。只有少数天花的解决方案是 另外运用 4,500K 分量去体现不同情境下的日 光印象。















Lamps: OSRAM

控制系统: e:cue

灯具供应商: OSRAM

Control-Software: e:cue

Capital of Hessen, Germany

**地点:** 德国黑森州威斯巴登市中心



Basic Information 项目信息

Capital of Hessen, Germany

照明设计单位: o\_pium ltd. UK & D

LED-Profiles & DMX controls: Traxon

Location: City Centre of Wiesbaden, State

LED 设置和 DMX 控制系统: Traxon

Owner: Private Landlord, Wiesbaden, State

业主: 德国黑森州首都威斯巴登市的私人业主 Architect: Kok Meng Y ü n, Wiesbaden D / CN

建筑设计单位: Kok Meng Y ü n, Wiesbaden D / CN

Lighting Design Company: o\_pium ltd. UK & D

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# ALIGHTING`S





## FACADE 媒体立面改造项目

As part of the renovation of a former office building, the intention was to give the area a visionary impulse and to upgrade a degraded quarter by using a seasonable lighting design.

作为一个旧办公大楼改造项目,设计师希望通 过适宜的灯光设计提供一个遐想空间,并提升 这个已经退化的区域形象。

The project was about transforming the office building in a combined residential and commercial complex, which is composed out of several building volumes. A dynamic facade illumination became installed, that is driven by a media server. The LED Modules are monochrome LED-Lines, which were mounted in clearly & conceptually defined areas on the vertical joins.

公大楼为集住宅和商务用途的综合性楼宇。新的建筑外立面安装了由媒体服务器的驱动的动感的外墙照明。单色灯带的 LED 模组被安装在建筑的垂直连接上,清楚地界定了区域的划分。

#### Overall Lighting Design concept 整体照明设计理念

Starting point for the Lighting Concept was the Facade Design composed of glass panels in different sizes and red colors. Although the variety of the glass panels the facade became ordered in a very compelling way.

照明理念的出发点是在外立面设计中将不同尺 容。建筑外立面的花寸和红色系的玻璃面板组合起来,尽管镶嵌在 划刺激观众的感知。 外立面的玻璃种类繁多并以一种非常抢眼的方式规整排列。 The content wa

该项目由几个独立的建筑堆砌而成,是改造办 The lighting design idea was to overlay

the cubic volume with a superimposed stratum, which changes the appearance of the building from daytime to nighttime. The concept was clearly to use a very low resolution even abstract pixeling to remain very conceptual and to stay away from picturesque with the content. The nightscape of the facade wants to irritate the observer's perception with a dynamic programming. 照明设计思路是用具有层理的岩层覆盖整体,从而改变建筑从白天到夜晚的外观。这个概念很明确地用一个非常低的分辨率,甚至抽象的像素,来保持非常性的概念和跳脱奇特的内容。建筑外立面的夜景照明想以一种动态的规划刺激观众的感知。

The content was cue list by cue list especially designed and programmed for this installation. No predefined algorithms

Basic Information 项目信息

Owner: City of Offenbach, Hessen, Germany

**业主:** 德国黑森州奥芬巴赫市 **Architect:** Katz & Partner, Offenbach **建筑设计单位:** Katz & Partner

 $\textbf{Lighting Design Company:} \ o\_pium \ Itd. \ UK \& \ D$ 

灯光设计单位: o\_pium ltd. UK & D

**Lighting Provider:** LED-Profiles & DMX **controls:** Traxon

灯具供应商: LED-Profiles & DMX controls: Traxon

Control-Software: e:cue

控制系统:e:cue

Location: Hermann-Steinh user Str. 263065 Offenbach, Germany

地点:德国奥芬巴赫市赫尔曼.施泰因豪泽街263065

Year of Completion: 2011

**竣工时间:** 2011 年

这个安装的手法需要一个提示特别的设计和编程,没有使用定性的算法保证了一个高定制解决方案的意义。这个建筑照明的设计和创意都令人是难以置信的。

#### Details 设计细节

In this project became LED-lines mounted into the vertical joints between the glass-panels, that followed their own rhythm and their own conceptual rules, to superimpose the building a stratum. This stratum structures during daylight the facade due to its physical presence of the profiles and dissolves the geometry of the architectural volume during the nighttime. It succeeds to change the dayscape to an nightscape of the building. Only cool-white LEDmodules were used. The size of each with 1,7 cm x 50 cm as one addressable pixel doesn't allow picturesque contents but only abstract light-scenes, that occur only by difference in brightness.

在这个项目中,LED 灯带被安装到玻璃面板之间的垂直接缝中,然后根据设定的概念性规则和节奏,来叠加建筑物的层数。白天这一阶层外墙的物理性 OFTHE 型材,在夜晚因为使了冷白光 LED 模组,呈现了几何体积的形状,

成功地让建筑的白天景观延续到了夜晚。每个 LED 的大小都有 1.7cmx50cm 像素,没有奇 特的内容,通过亮度的差异抽象成了光的场景。

### Further Materials and Information 补充材料

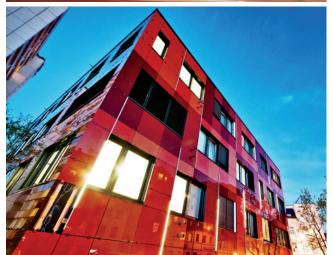
For the inauguration and some special events a composer was asked to create in direct coordination with the content programming to write individual songs. The system is controlled by an e:cue Lighting Control Engine based on the DMX protocol. 为了落成典礼和部分特殊事件性的需要,邀请了一个作曲家协助在照明控制系统的内容编程上加入歌曲,该系统控制引擎基于DMX协议。

Different animated Illumination scenes (so called contents) were programmed with the e:cue Software LAS and permanently saved on the media server. Those animated contents arise from separately triggered 500 mm long LED-Modules. The triggering takes place via dimming modules to be able to handle in a creative way all percentages of luminosity and brightness.

根据不同照明动画场景(所谓的内容)进行的编程,通过e:cue软件LAS被永久保存在媒体服务器上。这些动画内容来自单独触发的500毫米长的LED模块上。触发发生通过调模块能够创造性地处理所有的光度和亮度百分比

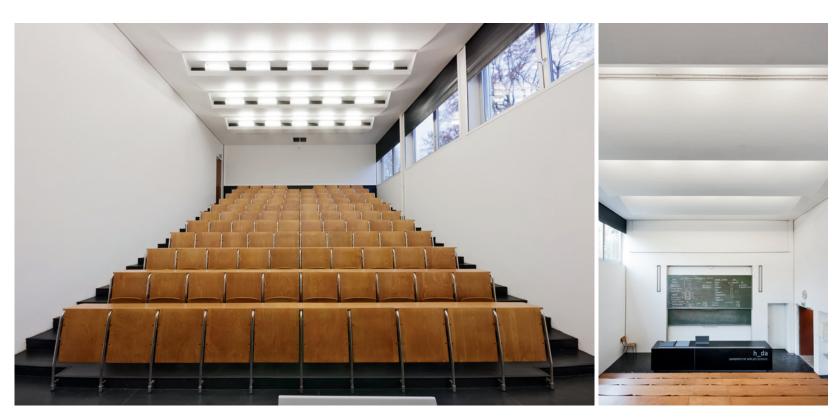






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## AUDITORIUM 礼堂

The Faculty of Architecture at the University of Applied Sciences at Darmstadt, Germany, is seated in a beautiful International style " 1930s atrium building. Like most of the original international style buildings it finally needs to be refurbished in 2008. 德国达姆施塔特应用科学大学的建筑学院坐落 在一个美丽的有着国际风格的 20 世纪 30 年代 的中庭建筑。

In 2002 the faculty decided not to move out of the building for the necessary refurbishment, because that would have meant to leave it behind and to start permanently in a new faculty building. So the constructions were proceeding parallel, during the faculty activities. So the constructions were proceeding parallel, during the faculty activities. 2002年, 教学人员决定不搬出这个需要重新 整修的建筑, 因为搬出来的话意味着彻底离开 这里并要在另外一个新的教学楼开始新生活。

在 2002 年该系(全体教职员)决定在进行必 要的整修建设时不搬离建筑,因为那意味着将 其抛诸脑后,一个新学院大楼的永久性开始。 因此在教学活动期间,建筑翻新并行。

So it was not surprising that the Lighting

Designer Stephan Horn was asked to do the lighting when the summer break had already started and that the completion of the auditoriums was asked within a 12 
The main goal was to realize the weeks time. The faculty asked Horn to create a lighting solution for the space that fulfills the required standards by keeping the architects vision, which foresaw only the use of indirect light. 所以,在暑假已经开始的时候,学院希望照明 设计师斯蒂芬・豪恩在 12 个星期内完成照明 设计并完成这个礼堂的项目的要求就并不令人 感到意外了。院方希望豪恩以一个建筑师的眼 光为这个空间提出一个能够符合要求标准的照 明解决方案, 所以该方案只采用了间接照明。 所以当暑假已经开始时照明设计师斯蒂芬・豪

恩被要求做照明设计以及被要求在12个星期 内完成礼堂项目也就不新奇了。学院让豪恩为 这个空间提出一个以建筑师的眼光来看能够达 到要求标准的照明解决方案,该方案预计只采 用间接光。

### Overall Lighting Desing concept 整体照明设计概念

aesthetical vision with the clear objective of a light-acoustic ceiling that distributes light only indirect. This, of course taking into consideration all the appropriate standards, but focused especially on BREEAM. The current state of technology requires for a lecture hall (auditorium) of this size and shape with rising seating rows and a maximum room height of 7.5m in any case direct lighting, because you couldn't achieve the required lux-levels (500 lux) all over the space with the available indirect luminaires. Direct light is therefore rather necessary.

主要的目标是通过一个分散间接光的光声学吊 顶, 实现审美视觉的需要。这当然考虑了所有 合适的标准,但尤其注重 BREEAM。当前技 术状况要求一个演讲厅(礼堂)的大小和形状 及其上升排座椅和高 7.5 米的最大空间无论在 任何情况下都能直接照明, 因为你不能在现有 的间接照明空间上达到所需的力士水平照度 (500LX), 因此, 直接光源很有必要。

Due to latest scientific discoveries the application of standards can be discussed with serious arguments: The newly discovered third retinal photoreceptors, that are suppressing the melatonin and because of their spectral sensitivity, allow to create either effective either energysaving light applications. The individual visual needs as well as meeting the requirements of visual functions can be taken into consideration.

由于应用标准的最新科学发现,严肃的争论势 必产生: 新发现的第三个视网膜感光细胞能抑 制褪黑激素,并且因为它们的光谱灵敏度,允 许创建有效的节能灯的应用。个人的视觉需求, 以及满足视觉功能的要求可以考虑。

This lighting design is based on the results of a study by the U.S. Department of Energy: "Energy Efficiency and Renewable Energy to "Spectrally Enhanced Lighting" (SEL)", which is about to transfer the above-described attemption into practical application and to examine the results of energy savings. 这种照明设计是基于美国能源部的研究结果: "能源效率和可再生能源的'光谱增强照明' (SEL)",这是关于转让上述尝试进入实际 应用和节约能源的效果研究。

Based on their studies it is possible to reduce the initial value of 500 lux using standard lamps of a colour rendering greater than 70 and a colour temperature of 3500 Kelvin to approximately 360 (!) lux by using lamps with a colour rendering higher than 80 at a colour temperature of 5000 Kelvin. The physiologically perceived brightness is the same. Studies of the Technical University Illmenau, Germany and of the Technical University Darmstadt, Germany conclude similar. Regarding the light distribution, the use of indirect light on such a huge surface creates an incredible uniformity, which is an additional positive aspect.

根据他们的研究,采用大于70的颜色绘制、 接近 360 标准灯的初始值(!)的 3500 开尔 文色温、在5000开尔文色温时力士用灯的颜 色绘制大于80,可能减少500力士。生理感 知的亮度是一样的。德国技术大学的照明研究 和德国达姆斯塔特科技大学的结论类似。关于 配光,间接光如此巨大的表面使用创造了一个 难以置信的均匀性,这是一个额外的积极方面。

#### Details 细节

An appropriate lighting scheme using the minimum of direct light to fulfil the

requirements and using the by BREEAM required technology, which is a fluorescent tube or a compact fluorescent lamp already reaches a low value of energy consumption of 3240 watts = 3.2KW per hour at full load without dimmed areas and zones.

一个适当的照明方案是运用最小的直接光和 BREEAM 要求的技术去满足需要, 那是一种 已经达到在满负荷的 3240 瓦特 = 3.2 千瓦小 时的能源消耗无暗区带一个较低的值的荧光灯 或紧凑型荧光灯。

The solution realized in Darmstadt provides only indirect light. Here we end up with 30 55W compact fluorescent lamps and a value of energy consumption of 1830 watts = 1.8 KW per hour by full load. That is slightly more than half of the consumption of today's state of the art solutions fulfilling the required standards. 该方案实现了在达姆施塔特只提供了间接光。 在这里,我们结束了3055W的紧凑型荧光灯 和一个值在满负荷的 1830 瓦特 = 1.8 千瓦小 时的能源消耗。那是为了满足如今国家艺术解 决方案要求标准的略超过一半的消费。 🖊





Basic Information 项目信息

Owner: Government of the State of Hessen, Germany

业主: 德国黑森州政府

**Architect:** Faculty of Architecture, University of Darmstadt

建筑师: 达姆施塔特大学建筑学院

**Lighting Design Company 照明设计公司和主设计师:** o\_pium ltd. UK & D

Lamps & DALI controls 灯具和 DALI 控制系统供应商: OSRAM

Fittings 配件供应商: iGuzzini

Year of Completion 竣工时间: 2008

Location: Campus at University of Darmstadt, Sch fferstrasse 164295 Darmstadt, Germany

项目位置: 德国达姆施塔特大学校园

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