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Create the Livable City

Workshop at Place du Père-Teilhard-de-Chardin and Pavillon de l'Arsenal in Paris

Introduction

The Philips' Create the Livable City workshop enables professionals in urban development to discuss, explore and anticipate the future of urban design and lighting in European cities. The workshops have already brought together more than 200 architects, urban planners, lighting designers and city representatives in completely different settings during co-design workshops across Europe. The workshop includes a seminar and a practical workshop, ending with prototype design and presentation of the prototype installations by the participants.

The workshop's challenge is to envision, create and implement a lighting concept with the support of a proven co-creative urban futures approach that is being used by Philips since 1996. At its heart, the Urban Futures matrix plots socio-cultural drivers versus city strategies, providing 16 alternative urban scenarios comprehending next options of urban design for the cities we will live in.

From Design Concepts to Mock Up Experiments

In this workshop, a unique opportunity was presented to City.People.Light participants and organizers:

to rethink on one of the most iconic squares in the world, by means of lighting innovation. For practical reasons, it was impossible and it would have scaled the nature of the Paris workshop 2015 out of proportion to directly experiment on Place de la Concorde. A fertile playground was therefore identified in the smaller, more manageable space of Place du Père-Teilhard-de-Chardin, where a number of architectural elements were provided to workshop participants to exercise their creative vision after conceptualizing solutions for Place de la Concorde.

In this respect, the below mock up experiments as described by Tapio Rosenius in their technical nature should be interpreted as key frames or synthetic images of larger stories. For each of the above concepts referred to Place de la Concorde, each team identified the essential synthesis and followed through with its plastic and visual execution at level of mock up, for the benefit of discovering new tricks and tips of the practical applied work of lighting, while offering the foundation for photographic reporting of how a first step, perhaps the most relevant and representative step in a possible project on Place de la Concorde, might look like in real life.
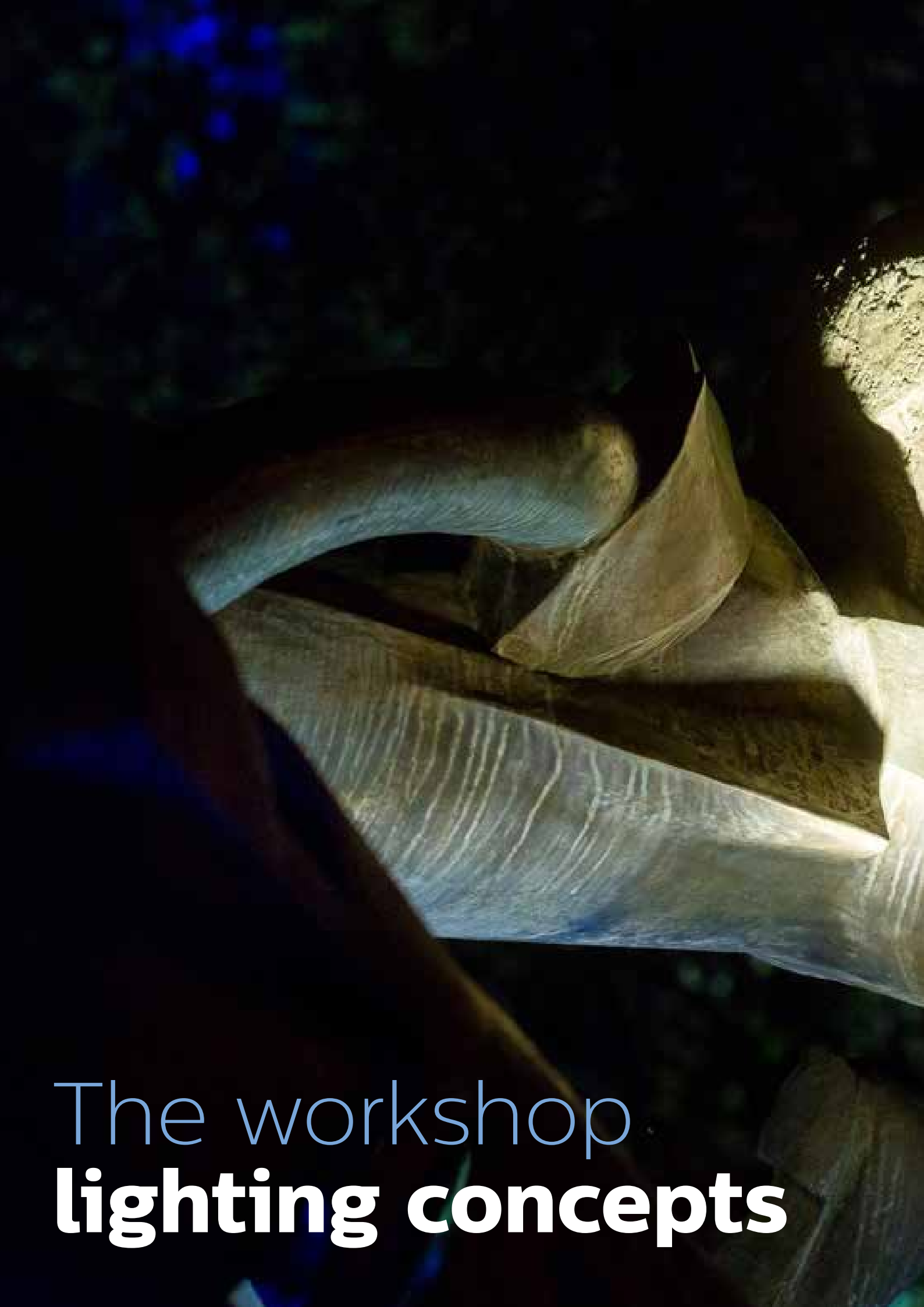
Socio cultural drivers / City strategies	ACCENT ON INDIVIDUALS		ACCENT ON GROUP	
	IDENTITY (Risk Society)	**EXPLORATION** (Experience Economy)	**BELONGING** (Networks/Comm.)	**SUSTAINABILITY** (Empathy/Biosphere)
ACCELERATION (Enabling/Supporting people's lives)	**Liquid** city	**Brandscape** city	**Eclectic** city	**Open** city
MEMORY (Reconnecting citizens /Cities to context)	**Dialog** city	**Repurposed** city	**Regionalized** city	**Geomantic** city
SEMIOTICS (Leveraging urban objects)	**Integrative** city	**Augmented** city	**Storystelling** city	**De-mineralized** city
CONNECTIVITY (Leveraging hybrid systems)	**Playful** city	**Hybrid-system** city	**Themed** city	**Agricultural** city

FOCUS ON TIME / FOCUS ON PLACE

General Analysis Urban Futures matrix

The four teams worked on the vertical axis focusing on the "Place" related urban strategies, therefore offering a conceptual elaboration of Place de la Concorde that addressed its physical dimension and functional programming in first place. The outcome in terms of major lighting planning solutions typically addressed major challenges like the size of the square, its viability and traffic management, and the proportion among basic elements like heat producing mineral surfaces versus sustainable surfaces like water

(fountains) and green (gardens). The complex picture painted by multidimensional and interdependent challenges is always resolved for each of the four concepts with one signature design gesture, enabling synthesis from analytical viewpoint. As a common universe of design strategy across all concepts, the aspiration is clearly set to rethink the square in its entirety, however massive and multipurpose and different times of the day or for different audiences, from tourists to Parisians.
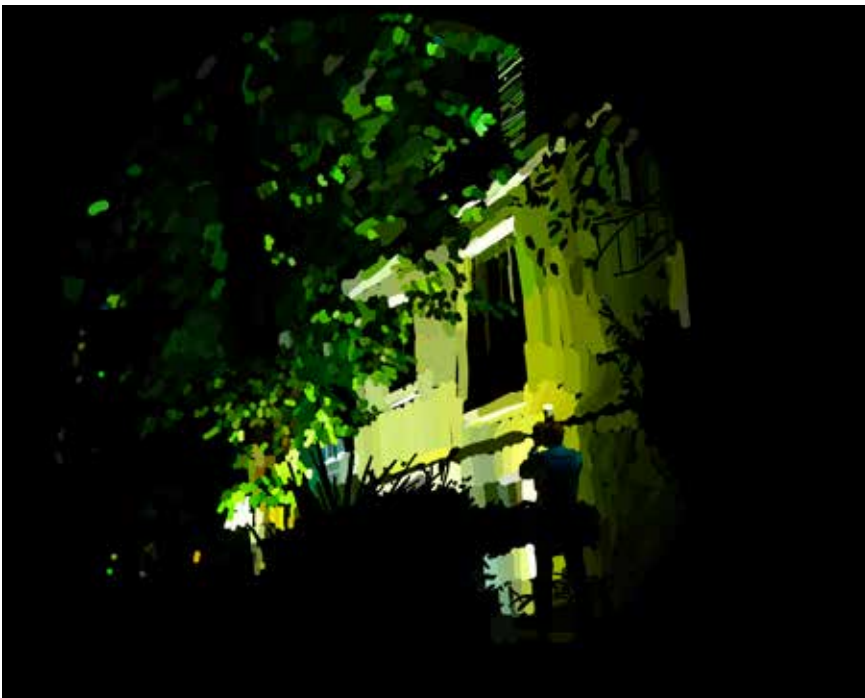
The workshop
lighting concepts

Lighting concept
"Digital Le Petit Poucet"

A combination of Urban Futures scenario's Hybrid-system City and Augmented City. The Hybrid-system rethinks the city (and its management model) as a revolutionary hybrid-system through innovative networking of relationships, with a focus on urban digital /hardware infrastructural elements. The Augmented City is the city seen through the screens of "digital reality" of virtual objects, recreating the urban experience through virtual objects and digital experiences, both in the creative process as well as in the everyday experience.

Lighting concept sketches

The first concept is centered on a digital interpretation of the classic fairy tale, Le Petit Poucet. The wayfinding mechanism is reversed from dispersing traces in the forest to the creation of a lighting path through the gardens and green areas that surround the square.

The narrative power is however not the main protagonist of the design concept, as digital technologies assume a key role in offering individual means to connect to the square in personalized fashion. The GPS orientation is supplemented by effects and echoes of Parisian icons visible from the square, from the glittering of the Eiffel Tower to single historical details. The Hybrid-system City scenario has been presented in earlier City. People.Light episodes as very complex, requiring urban networks to consolidate in governing regimes, and involving IT infrastructure. In this case, as in the following concept, the very aesthetic, programming and functional intervention on the square is the very plastic representation of this hybrid nature of system thinking, applied to deeply rethinking an iconic space in the city.

Lighting design notes

The Southeast corner of the Place du Père-Teilhard-de-Chardin has a private garden extension sheltering the Boulevard Morland facing façade of the Bibliothèque de l'Arsenal. This building of great importance was expanded by the architect Germain Boffrand in the 18th century and has been part of the Bibliothèque Nationale de France since 1934.
The workshop group chose as their site the gated garden zone, a section of the building facade and the pedestrian walkway connecting this side of the building to the main square.

As a reference to the "Digital Le Petit Poucet" lighting concept where trails are created by programmed light embedded into the floor the group devised a mock-up where linear LED fixtures were positioned on cardboard crates lighting down onto the gravel surface.

A hypothetical programming was demonstrated reacting to pedestrian movement aiming to draw attention towards the gate to the garden.
The wayfinding methodology continued with a strong glow of white light reflecting from the building façade creating silhouettes of the cast iron fence and the large trees. The tree canopies were accentuated with a concealed backlight. A technique well known in the film and theatre lighting world but seldom seen in the urban lighting context. This helped to create depth to the visual composition viewed from behind the gate and added great level of detailed texture and modelling to the trees. Another notable detail was a long diagonal shadow of the tree trunk cast precisely towards the designated viewing point. Dramatic gesture that truly completes the concept.
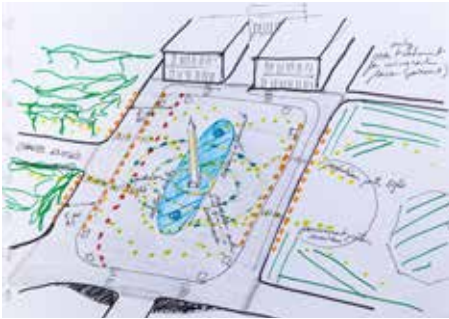

Lighting concept installations

Lighting concept

"Multipurpose Theme"

A combination of Urban Futures scenario's Hybrid-system City and Themed City. The Hybrid-system rethinks the city (and its management model) as a revolutionary hybrid-system through innovative networking of relationships, with a focus on urban digital/hardware infrastructural elements. The Themed City scenario creates urban space as an interrelation of archetypes, embodying unifying design themes that "make the city" in people's minds.

Lighting concept sketches

In continuity with the first concept, this design solution interprets the systemic approach to rethink the square from the viewpoint of physical and visual flows of automobile vehicles, pedestrian visitors and of various experiential stimuli.

Design solutions are envisioned with the purpose to regulate the traffic to repossess the square to citizens, while flexible and modular aesthetics represent the hybrid component that might address tourists or more diverse audiences, from time to time.

The visual reflex of the key elements of the square on its surfaces amplifies the thematic nature of this urban place par excellence, offering an immaterial yet plastic representation of the centrality of this urban space in context. Clear goals are set to govern the experience across individual economies of immersion and communal re-appropriation in terms of local ownership. Specific lighting effects are devoted to highlighting different details of various narrative value, e.g. the Egyptian inscriptions on the surface of the obelisk. The effect of mirroring was identified as a sort of key frame within the narrative tension between personal and societal dimensions, mediated by the cultural interpretation of programming functions and infrastructural heritage.

Lighting concept installation

Lighting design notes

The front façade of the Bibliothèque de l'Arsenal creates an imposing yet elegant focal point for the Place du Père-Teilhard-de-Chardin. The ornate symmetrical facade double doors in the center and a small set of steps leading to it. Freestanding planters with young trees flank the entrance and create a short progression towards the center of the plaza. This was the site chosen by the workshop group as a location for the lighting intervention.

To assimilate the wayfinding strategies outlined in the concept where the light strings actively shift and reorganize the flow within the Place de la Concorde the group decided to create a sequence of light lines leading towards the building entrance. Total of twelve diffused LED marker fixtures were positioned symmetrically on the floor. Tonality was set to neutral white. This created a striking effect in leading the gaze towards the façade whilst bathing the environment in soft white light.

The side sections of the façade was up lit symmetrically with four narrow beam LED spotlights in warm white tone. Linear RGB LED fixtures were positioned on front of the entrance highlighting the stone arch detail and the doors. The color tone was set to cool blue. The color was made to flow from the entrance towards the center of the square with two additional linear LED fixtures skimming the gravel surface.
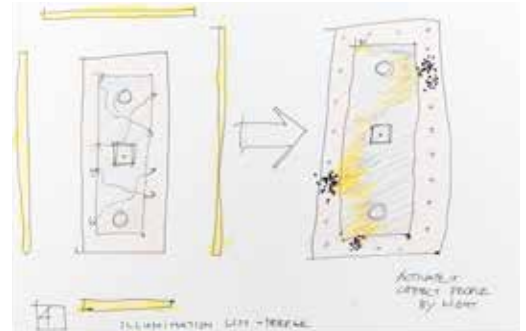

Lighting concept installation

Lighting concept **"Immaterial Icon"**

Storytelling City Urban Futures scenario is about recreating urban spaces as a storytelling framework, with new objects underpinning architectural and infrastructural history and memorable, meaningful stories.

Lighting concept sketch

Within this third concept, the square is analyzed as "space to be maintained" in its functions of focal point at the heart of the city, with axes crossing different and diverse modular themes, from gardens to bridges to buildings.

The square is therefore not addressed in terms of decoration, on the contrary it is redesigned by correcting its intrinsic proportions (green versus mineral, iconic components versus infrastructure) to expand the use and the perception of its historical flatness, here seen as a quality to preserve by means of extending the green areas and remodeling the experiential proportions for users. An innovative combination of water and green results in the creative leap identifying artificial fog as median visual attractor and key icon to be generated at the center of the square.

Lighting design is deployed with the purpose to augment the reach and the relevance of such immaterial icon, connecting it to the interactions of people. What appears noticeable is that this storytelling concept is based on a whole new design element inserted on the redesigned experience of the square, yet without any physical impact on the classic architecture, as the beaux arts would rightly not permit that. A true statement of natural aesthetics, in line with the experiments and the works by contemporary masters like Jan Gehl, this solution represents a

new opportunity to bond citizens and visitors alike, maximizing its visual impact within a storytelling theme of uttermost relevance for the years ahead.

Lighting design notes

To illustrate and to experiment with the conceptual notion of "volume without construction" the group decided to focus on a horizontal plane as the subject of their lighting intervention. The lighting appeared to have no physical structure and would not add visual clutter within the existing space. This was neatly underlining the idea of respecting the "historic and spatial value" of the original environment.

Approximately ten meter long and five meter deep section of the square with freestanding planters flanking a gravel surface was identified as the working area. Linear high power LED fixtures with RGB color mixing technology and narrow beam light distribution were positioned in line. The light was directed sideways skimming the gravel surface resulting in textured play of light and shadow. The tonality of the light was set to cool blue hues suggesting "fog". In their presentation the group demonstrated interactive lighting features designed to "activate and connect" people entering the zone. In practice a series of warm white spot lights were positioned to one side of the area and manually operated to achieve varying light patterns and movement responding to the pedestrian flow.
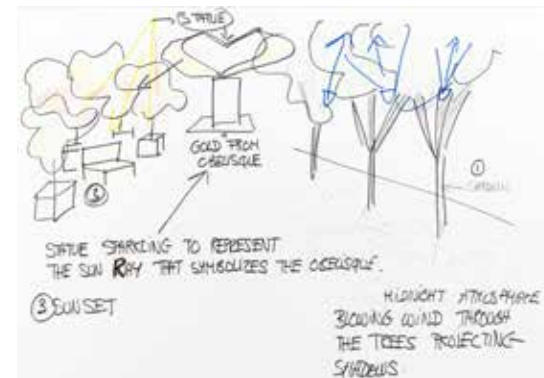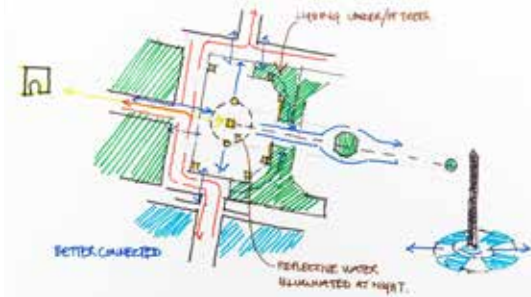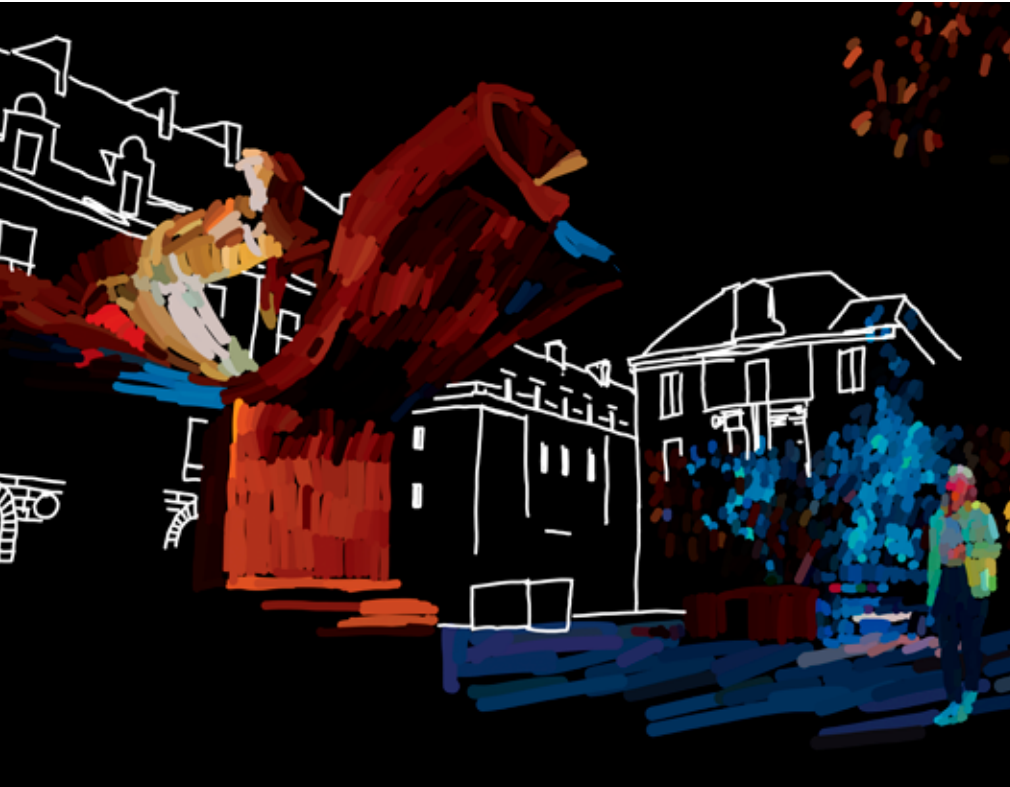

Lighting concept installation

Lighting concept
"Recuperation of Nature within the Square"

De-mineralized Urban Futures scenario is about creating a new city experience as a seamless field of nature, through the overall greening of urban surfaces.
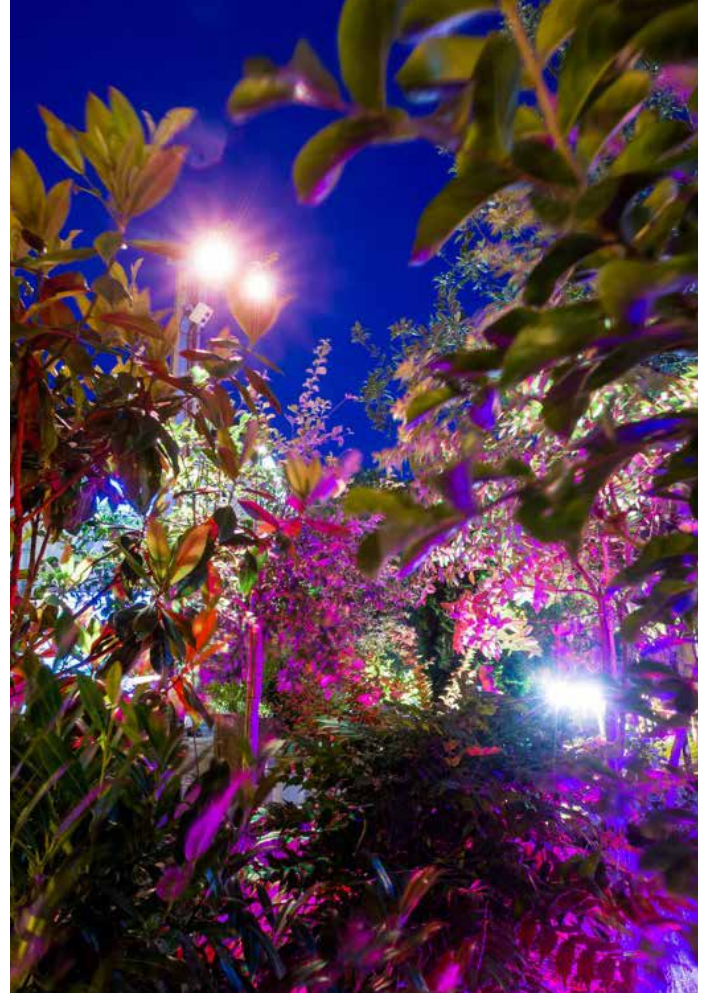

Lighting concept sketches

The fourth and last concept leverages aesthetic mechanisms and design principles in line with the approaches above described, however its main concern and active focus lie on different priorities.

Just like proposed in other concepts above, the design team worked on specific hypothesis of extension of the gardens and green areas, taking concrete measures to compress the pedestrian space to reconnect people to the central iconic and historical assets of the square, with particular reference to the obelisk. However, here the priorities are inverted and switched from experiential immersion or storytelling "suspension of the disbelief" to the pressing problem of heat as originated by traffic and mineral surfaces. Therefore, the qualifying interventions, also by means of lighting design solutions, are substantially aimed at decreasing the physical temperature of the square by de-mineralizing it. Green and water are therefore not simply aesthetic accents or iconic programmatic elements, on the contrary they do represent the core of design intent and purpose at all times, with the redefinition of priorities between the visual and sustainable aspects of the project, for the longer term. At the same time, the "recuperation of nature" is strategize without jeopardizing the urban theme of the square with symbolic icon at the center that pertains the European tradition. Plastically embodied by the historical monument and its ancillary signature objects, the ensemble

Lighting concept installations

of symbols through volumes is amplified by the newly regained status of nature, in a dialog among culture and nature that meets the eye of users, universally.

Lighting design notes

As a way to mock-up the visual hierarchy evident in the overall concept the group chose a complex part of the Place du Père-Teilhard-de-Chardin with groups of trees, seating and a bronze statue dedicated to Arthur Rimbaud by Jean-Robert Ipoustéguy. These three key elements in the scheme were each given a mood rich with symbolism. The trees were to have a "midnight atmosphere" with wind blowing through the foliage projecting flickering shadows. The seating area was depict a sunset and the statue was to "sparkle" in golden light. This warm light reflecting from the statue was to represent a sunray, which in turn symbolizes the Obelisk on Place de la Concorde. The effect was achieved by positioning two linear LED fixtures with medium beam distribution at the base of the sculpture. RGB color mixing technique was used to blend a gold amber tone. In addition two cool white LED spotlight were concealed within the statue underneath the levitating figure. This created an interesting modelling as well as contrast both in terms of intensity and tonality. An effective technique when dealing with complex volumetric objects.

Elevating pairs of LED spotlights all the way up and into the canopies achieved the tree lighting concept. Fixtures had medium beam optics and were focused down through foliage. RGB color mixing was used to

set the tonality to theatrical blue creating a receding background for the sculpture to sit against. This principal of having warmer tones as the key light for the foreground objects and the cooler and blue tones for the background wash is an effective technique often used in performing arts to create sense of depth.

The seating area had a top light creating a fantastical play of colored light and shadows in the small tree foliage. This was supported by linear RGB fixture set to deep purple effect color and fixed under the bench.
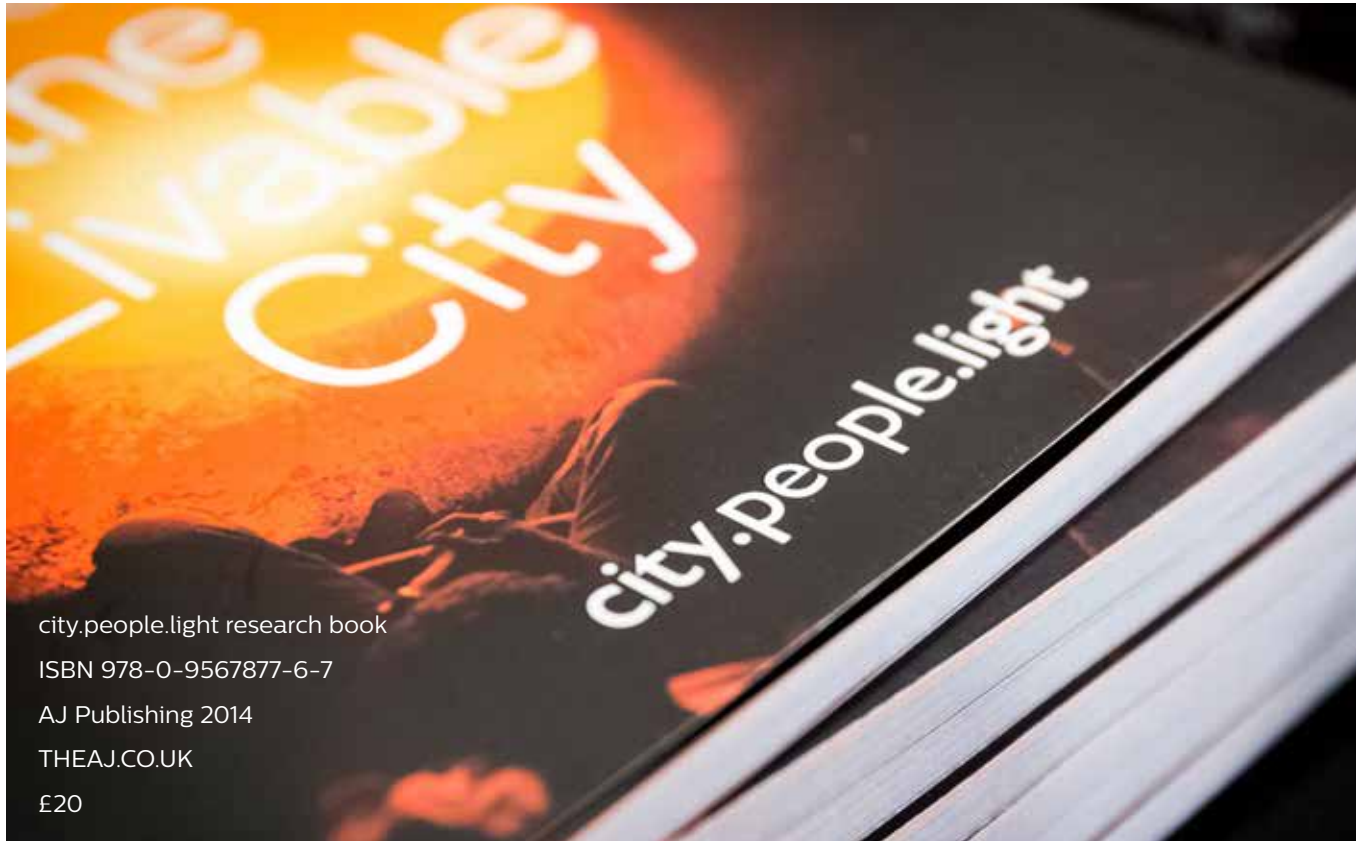
Conclusions

The co-creative sessions held as the key moment of this Paris "Create the Livable City" workshop focused on a few clear directions for the future. Firstly, either by effect of functional programming or by effect of cooling surfaces (e.g., demineralizing), cities will increasingly claim urban space as new people's sensorial playground and semantic field.

The priorities will therefore shift from traffic management or monumental scaling, to more immersive narratives, where elicited "meaning", although open to interpretation, makes people feel connected both to the context and to each other.

Secondly, in this general tension towards a new urban bonding, the identity of the city will shine in a new charisma. This will not necessarily emerge in the form of iconic arrogance: on the contrary, a new attention for the human scale will dynamically structure the metropolitan experience. Even further, it storytelling will be multi-layered, re-enacting the discovery of cultural details, while opening up the space to personal interpretations.

The city will be a richer palette of inspirational triggers, otherwise lost in the banality of the everyday. It is important to strongly remark how the main creative concerns and planning priorities that emerged from this gathering of architectural and urban design protagonists were eminently of spatial and physical nature. Concepts addressed very pragmatic challenges like congestion, direction-setting and the management of "places" with high intensity of mixed use, complicated by the needs of historical preservation.

At the same time, while recurring to greening and to similar solutions, the teams were not shy to tackle thinking and envisioning at a higher level of operational paradigms, namely addressing the specific topics of archetypical themes and hybrid systems within the macro-dimension of cities, not excluding the impact and opportunities derived from digital applications. While it might have been expected -or at least it would not have been surprising- if the collective attention of the workshop teams drifted to plain requalification or conservation, based on historical sketchbooks and archives, the sketches first and ultimately the installations as generated during this event unveiled instead a different plot defined for the great stages that European -and more specifically French- squares will continue to offer. This resulted in a full re-possession of space, re-modulated across different urgencies, those urgencies at the top of mind of tourists and citizens.

Credits

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