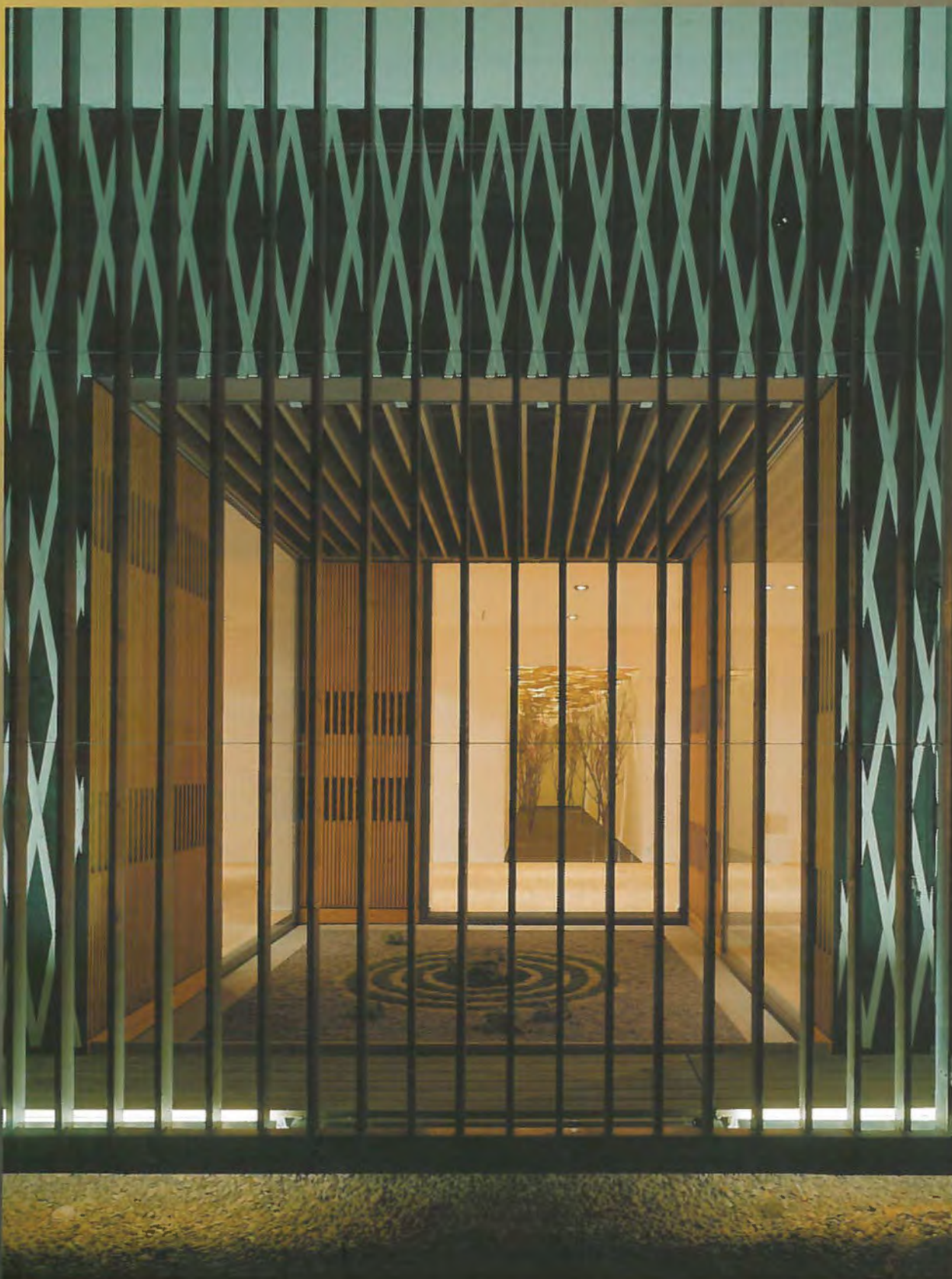


PROFESSIONAL LIGHTING DESIGN

Magazine for
professional lighting design



MAIN TOPIC
Media facades

LIGHTING DESIGN
Merck Serono media facade
in Geneva/CH

Baufritz showroom
in Erkheim/D

INTERVIEW
Chanel Store in Ginza/J

PROJECT REPORT
The systematic cultivation
of media facades

PRACTICAL ISSUES
The media facade –
a challenge and a chance

Media facades in the urban
context

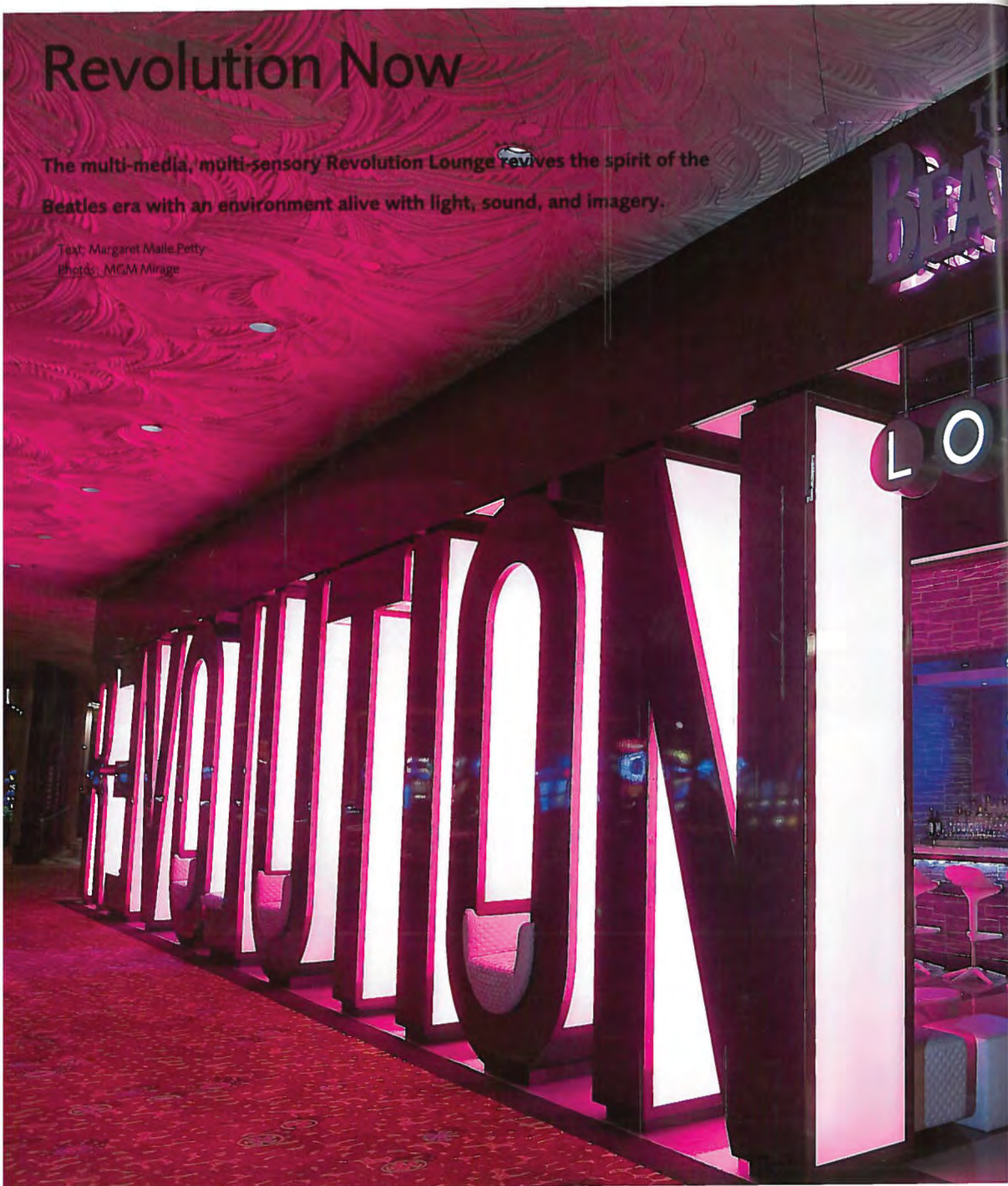
CRITIQUE
Architainment or content

PERSONALITY
Have you heard of...
Simo Leinonen?

Revolution Now

The multi-media, multi-sensory Revolution Lounge revives the spirit of the Beatles era with an environment alive with light, sound, and imagery.

Text: Margaret Malle Petty
Photos: MGM Mirage



You say you want a revolution? Well, it is already here – and it is a revolution in light, sound, color, movement and time.

Conceived and created by the fantastic imaginations behind Cirque du Soleil, the Revolution Lounge opened in Las Vegas in December 2006 as an extension of the experience of their latest show, "Love" at The Mirage. This show, which celebrates the musical legacy of

The Beatles, draws inspiration from the poetry of the iconic rock band's lyrics and explores the stories created in their songs through a series of scenes inhabited by real

and imaginary characters. The youthful energy and spirit of Cirque's Love show served as a catalyst for the design of the Revolution Lounge, which brings together elements of collective experience and memory of the past into the present, melding both artisanal, hand-produced elements with the latest in interactive technology and multi-media design.



Entering the Revolution Lounge via the Abbey Road Bar, you pass by the ten by 50 foot luminous letters that spell Revolution. Once inside, you notice that the "L" and the "E" are reversed and spell "Love", the name of Cirque du Soleil's latest Las Vegas show



For the design of the Revolution Lounge Jean-François Bouchard, Director of Creation for Cirque du Soleil, assembled a diverse team of cutting-edge designers largely from Montreal, Canada, including architect Stéphanie Cardinal of Humà Design, lighting designer Nol van Genuchten (also with Cirque du Soleil), multi-media designer Sakchin Bessett of Moment Factory, Billy Keays, creative director of Switzerland-based interactive technology firm Virtango and Associates, and DJ Alain Vinet for music direction. From the very initial stages of the project, the entire group met to brainstorm and discuss the development of the concept for the Revolution Lounge long before any design decisions were made, thereby



allowing the wealth of creative minds on this project to take inspiration from one another and to ensure that all aspects of the project were addressed simultaneously and holistically.

As the first Cirque "Experience" lounge much thought went into exactly what this experience should be and what kind of atmosphere would best convey the spirit of the "Love" show featuring in the adjacent theatre. Bouchard's creative team decided first and foremost the lounge should not try to directly translate scenes or aspects of the show into the architecture and design of the space, and furthermore, that it also should not be seen as a museum or collection of Beatles memorabilia. Instead they felt it was critical that environment engage visitors in the memory and experience of the Beatles music and ethos, as well as the communal culture of the 60s era.

Out of these early discussions emerged the core concepts driving the design of the Revolution Lounge, including the transition from black and white to color, the dualistic relationship of love and revolution, and the interactivity of communal experience. Throughout the Revolution Lounge these key elements are interwoven and layered, through architecture, light, and sound creating an engaging environment far from the typical bar or lounge.

To enter the Revolution Lounge, you walk through the Abbey Road Bar, but even before you enter the lounge the notion of "revolution" is literally spelled out in ten foot high by 50 foot luminous letters. Thematic invention occurs with the orientation of the letters themselves: once inside the bar you notice that the "L" and the "E" are reversed, so that within "revolution" you find "love."

The oversized glowing letters also serve as seating for the bar and occasionally as platforms for go-go dancers (keeping in the spirit of the era).

The transition between the Abbey Road Bar and the Revolution Lounge is designed to visually transport guests from the 21st century into a world, not specifically of the past, but evocative of the unique world of the Beatles. At the entrance of the Revolution Lounge, you are greeted with a glowing "graffiti" wall inspired by real graffiti found on the wall outside the Abbey Road Studios, where the Beatles recorded their first single, Love Me Do. For this homage to the famous studio, the Moment Factory created a dynamic screening panel that brings the graffiti to life. As Bessette describes, "We were inspired by the layering and complexity of the graffiti outside the Abbey Road Studios, we felt it captured the public fascination with the Beatles and the sense of personal identification people have with their lyrics." The wall taps into this connection, creating luminous graffiti that fades in and out, displaying keywords and lyrics from Beatles songs, playing with notions of memory but also giving the space a sense of movement – also intended to be a reference to the street and the activity of London's Abbey Road. The graffiti achieves both its luminosity and layering from laser-cut stainless steel back-lit with color changing LEDs. Just beyond the graffiti wall are acrylic glass doors that blur the boundary between the Abbey Road Bar and the Revolution Lounge mixing reflections and transparency with a subtle psychedelic effect.

Once inside the 7,700 square foot Revolution Lounge, the imagery, architecture, and lighting join together to create a fully-realized sensory experience organized around the primary design concepts initially established by the design team. While there are several smaller sub-lounges and VIP areas, the majority of the lounge is open plan and unified by architect Stéphanie Cardinal's ceiling, a dramatic physical interpretation of the Beatles' song Lucy in the Sky with Diamonds. Anchored by three support pillars, Cardinal composed a series of fragmented, shard-like ceiling panels hung at various angles and heights to give the impression of a diamond frozen in the act of shattering, almost as if these diamond fragments they were falling from the sky and taking the ceiling with them. Giving definition, depth, and movement to the suspended ceiling panels is Van Genuchten's remarkable lighting program, which brings color and sparkle to the "exploding" diamond shards. Seeing opportunity in the "cracks" between the suspended panels, Van Genuchten proposed that they be filled with dichroic glass pendants to create an experience of changing color, while also emphasizing the shift from black and white to color – one of the key design themes. Van Genuchten was attracted to the simplicity of the technology, as he describes, because "it allowed me to change the color of things, not because I programmed it as such, but because light passes through it at a different angle or because I look at it differently." Filling the spaces between the panels took over 40,000 individual pieces of dichroic glass, each suspended from the ceiling on single ball chain strand, which allowed for variations in the height of each piece of glass (producing an overall "scaloped" appearance) as well as allowing the glass to spin freely. To accommodate these strands, van Genuchten designed a ceiling system comprising three layers of curtain track, from which the glass pieces were each individually suspended. This system was necessary



to allow access to the ceiling to focus and change lights, as well as for general maintenance and adjustments. The biggest challenge however, as van Genuchten describes, was lighting the glass pieces against the black ceiling elements. In order to see the color in the glass, van Genuchten had to put "an ungodly" number of track lights with MR16 fixtures in the ceiling behind the glass, so that when guests look up at the ceiling they see numerous sparkling points of light. To add a second layer of light and interest, van Genuchten mounted Robbielights (a point source was desired rather than a big cluster of light) on the back of the ceiling panels and directed them up towards the glass elements. This allowed for some color mixing as well as giving van Genuchten the ability to change the color of the ball chains as well.

The relative simplicity of the technology (if not the construction) of the ceiling's dichroic "chandelier" contrasts with the lounge's multi-media tour de force – a 62 foot long, 12 foot high animated wall serving as the backdrop to the main bar. In keeping with the timelessness of the Beatles experience, the media wall was designed to be "both psychedelic and contemporary" as Bessette describes. What is most remarkable about this wall is the depth and layering of the animations and lighting effects that combine seamlessly to produce a fantastic visual and kinetic narrative. Psychedelic, but in a 21st century manner, the Moment Factory uses multi-media-projected video sequences, LEDs, two-way glass, mirrors and the physical depth of the wall to animate the entirety of the bar wall. Following the theme of the Yellow Submarine, the media wall has four "portholes" formed by round SACO LEDs, which project images behind two, two-way mirrors creating an appearance of infinite depth and dimensionality. Continuing this kind of visual complexity, for the wall itself the Moment Factory designed a three-dimensional frieze with circular patterns and mouldings, onto which lights are projected in multiple directions. The projected lights in combination with the mouldings create shadows, which are then illuminated with colored lights and projected images. Bessette explains, "We lit the relief at a steep angle to create shadows, and then we lit it straight on to eliminate all those shadows. The tension and rhythm between these creates the appearance of movement on the wall." In order to achieve absolute precision in the animated sequences, images were cut on site around the frieze. The combined effect of the depth of the frieze, the tight sequencing of the lighting, and the clarity and careful choreography of the projected imagery is remarkable. You can stand at the bar and watch as the Beatles walk from one end of the wall to the other, into and out of the LED portholes, or as a silhouetted "black bird" lands on the wall and enters the frieze, splintering and turning into dozens of black birds moving over and through the animated virtual landscape. There are 12 different animation sequences, each exploring an aspect of Beatles iconography.

The visual journey provided by the Moment Factory's multi-media wall is complimented in the design of the musical atmosphere of the Revolution Lounge. DJ Alain Vinet designed a musical program for the lounge around the number four, which symbolizes the four Beatles, the four periods in their careers, and the four letters in the

word "love." Vinet's program merges both sound and light like so many aspects of the lounge, engaging patrons on several sensory levels-and is divided into four stages: the first stage features songs of the Beatles themselves, the second their sources of inspiration, third the songs the Beatles have inspired, and fourth, contemporary techno music. Each stage has its own lighting profile that is designed to evoke the feeling and atmosphere of the music, beginning with black and white with the first stage and moving through a range of colors and finishing with hot pink.

Guests are encouraged to interact directly with the Revolution Lounge and create their own imagery through seven, low interactive cocktail tables designed and fabricated by Bill Keays, in collaboration with David Small of Small Design Firm. The tables, which at first appear much like typical tables, are divided into two touch-sensitive screens, which can be activated either by human touch or objects. One side reacts to glasses and objects (the O-zone) and the other to fingers (the G-zone). When an object is placed on the O-zone or a drawing or word is inscribed on the G-zone, the table responds, taking on the colors of pre-established patterns, such as flowers, waves, Beatles figures, etc. and follows the movements of the user. But that is just the first level of interaction. To emphasize the communal nature of the experience, lounge staff, called "Consuls" wander throughout the bar with rings that allow them to upload selected guest "graffiti" onto screens located on the central pillars. The novelty of this technology is infectious. No doubt in part because it allows patrons to do more than just passively absorb the environment, but rather allows them to actively engage in the imagery of the bar, and to add their own personal experience and creativity to that of the group. This kind of technology turns the spectacle into a shared experience, fostering a sense of community and interconnection, which is very much in keeping with the social revolution of the 60s and was, of course, very much the intention of the design team. ¹⁶

Project team:

Design director: Jean-François Bouchard, Cirque du Soleil

Architect: Stéphanie Cardinal, Humà Design

Lighting designer: Nol van Genuchten, Cirque du Soleil

Multi-media design: Sakchin Bessette, Moment Factory

Interactive tables: Bill Keays, Vertango and Associates

Musical director: Alain Vinet

Operator: INK

Products used:

Lighting control: AMX show control system, Pharos LPC2,

ETC Unison control system, ETC sensor 48 dimmer rack

Lighting fixtures: Illumivision Robbielight, Illumivision Lightwave bar, Illumivision Smartcove, Times Square Lighting 2-circuit Nordic track, Juno TC44R recessed MR16, Denalite XF3 series, Pioneer Rm T5 fluorescent strip, Tokistar RC-series cable light, Ultrasons Custom LED portholes

Video display/interactive video: digital projection Ivision SX+,

SACO custom porthole video to LED processor, SACD porthole

LED matrix display module, Mitsubishi XD460 video projector,

Panasonic PT-DW5000U video projector

