

Scenes from La Vie Bohème

Inside the kaleidoscopic world of Broadway's *Moulin Rouge*!

By: David Barbour

The new Broadway season had barely begun when it got a walloping new hit in *Moulin Rouge!*, a show that, more than most musicals, earns its exclamation point. A colorful romantic melodrama powered by a century-spanning lineup of pop hits, it is based on Baz Luhrmann's 2001 film, which is widely credited with the revival the musical film genre. John Logan's

book is largely true to its source material, centering on a romantic triangle in which Christian, a starving artist, and decadent The Duke of Monroth compete for the attentions of Satine, the tempestuous, yet tubercular, queen of the 19th-century Parisian demimonde. Under the whip-crack direction of Alex Timbers and paced by the torrid choreography of Sonya Tayeh, *Moulin Rouge!* is a fourth wall-shattering spectacle that is drawing audiences in droves.

The show comes by its style honestly; Luhrmann's film is a madly excessive enterprise, a frantically edited, wildly overdecorated vision of bohemian Montmartre, realized on a film soundstage. It's an artificial universe in which characters in frilly gowns, top hats, and black tie, channel the sounds of everyone from Jule Styne to Sting. Timbers, who, in many of his previous outings—including *Rocky* and *Bloody Bloody Andrew Jackson*—displayed a taste for immersive theatre, has pulled out all the stops, encourag-

ing his team to create a production design that spills into the house at the Al Hirschfeld Theatre. From the moment one enters the auditorium, bathed in saturated red lighting, with members of the cast prowling the stage glaring at the patrons, it is clear that this is a production that sets a new standard for environmental stagecraft.

Much of the musical unfolds in the title venue, a real-life Paris institution now in its 130th year. An icon of the city's Montmartre district when it was the province of poets, painters, libertines, and revolutionaries of every stripe, it was present at the birth of the modern cabaret movement. As such, it launched the career of the famed singer Mistinguett, was the haunt of Toulouse-Lautrec (who immortalized such performers as Jane Avril and Yvette Guilbert and who is a character in the musical), and introduced the scandalous, leg-baring dance the can-can. Over the years—minus an interregnum for a fire—the Moulin Rouge has housed innumerable operettas and revues. Today, its name has become a watchword for splashy, champagne-soaked entertainment featuring elaborate scenery and semi-clad showgirls. The scenic and lighting designs of the Broadway production—by, respectively, Derek McLane and Justin Townsend—are solidly in the traditions of the Moulin Rouge's gaudy history and Luhrmann's expansive cinematic vision.

Left photo: Matthew Murphy; Right photo: Monique Carboni



Above: The preshow look features the heart-shaped portals, illuminated Moulin Rouge sign, and an all-compassing saturated red lighting wash. Note the coverings that help the left-and-right line arrays to blend in.



Certain looks are highly stripped-back, relying on Townsend's use of saturated side light to make an impact.

Montmartre à la mode

McLane's design significantly reimagines the Hirschfeld's interior, which resembles a cabinet of curiosities crossed with the contents of a jewelry box. A riot of Belle Époque design concepts rendered on a vast canvas, it begins with the addition of a passarelle that extends out into the audience. Located in the stage right box is a red windmill ("moulin rouge" in French) while the stage left box is occupied in an enormous elephant. Onstage is a curved electric sign, spelling out the show's title. Upstage is a series of concentric Valentine heart portals, many lined in tiny light bulbs. Indeed, the latter are seemingly arrayed on the perimeter of every available object, including the proscenium and the two tiny stage platforms, at left and right, which are reached by gilded stairways. A variety of grand-looking period chandeliers are hung overhead.

All this, and the show hasn't yet begun. When it does, we are transported from the stage of the Moulin Rouge, with its Austrian drapes and jeweled fleur-de-lis stage drops, to—among other locations—Satine's bric-à-brac filled boudoir, a starkly underfurnished garret with enor-

mous windows, a grand Parisian town house, and several grim-looking streetscapes. It's quite a panoply of looks.

"Alex and I talked about was how to capture the energy of the movie," McLane says. "A lot of it is done through music, but how to capture it visually? In the film, the camera moves often and very fast, panning over sets and zooming through windows." The discussion led them to two key concepts: "One was the idea of making the design as environmental as possible, which is fun: You're in a club, with all sorts of stuff happening around you. The other decision was to have as many things light up as possible. It allows you to create changes with scenery that doesn't move. You can create a lot of energy this way."

The designer notes that the makeover of the Hirschfeld's auditorium is more extensive than one may initially notice. "There's almost nothing there that is extant. We covered the walls in red velvet, added cherubs and lots of gold leaf, painted the ceiling of the auditorium red, and added many new lighting sconces. It's really a complete makeover." Interestingly, he adds that the Moulin Rouge sign "is actual neon," a form of illumination rarely



Lighting is embedded in much of the production's scenery, including the heart-shaped portals.

used in live performance these days. However, McLane says, "The sign is placed close to the audience, and it isn't on all the time. In this situation, LED neon—a typical choice—"wouldn't look right. In a way, it is most beautiful when off, and you can see it's delicate glass structure."

Certain environmental design decisions came during the show's Boston tryout at the newly restored Emerson Colonial Theatre. "When we looked at the Colonial, the walls were painted red," McLane notes. "A couple of months before we loaded in, however, they finished its renovation, painting the walls in their original historical color. We suddenly had a green theatre, which didn't make sense for the show. That's when we decided on the red velvet, which ended up feeling so good. It was one of those happy discoveries: The red velvet is so much better than paint."

With so many scenic elements—and with the side boxes extended to house the mill and elephant—he adds, "We worked really hard on sightlines, which were a challenge, as the show is so immersive. We had to do mockups in the theatre; we ultimately raised the seats in the first 12 rows of the orchestra by about 2" and also in the mezzanine, to

maximize sightlines."

To fashion a suitably stunning entrance for Satine—who, in her first entrance, flies in on a swing, delivering a themed medley that includes "Diamonds Are a Girl's Best Friend," "Diamonds Are Forever," and "Single Ladies"—the designer says it was necessary to install a new grid, with a catwalk, for leading lady Karen Olivo. "The grid also supports a lot of lighting and sound gear, the overhead drapes, and the chandeliers," he says.

In some cases, the scenery makes use of optical illusions. "Many people think there are eight heart-shaped portals, but there are only three," McLane says. "Their inside edges are made of filigree, which makes it seem as if more layers are there." The designer also makes stunning use of forced perspective, creating vistas of Paris that seemingly go on forever. "We have a number of miniature buildings, which we use in three sets: the sidewalk café in Montmartre [created by a series of sliders], Satine's boudoir, and Toulouse-Lautrec's garret. We add different things each time, in different configurations. The notion is that you always feel like you're in the same neighborhood,



Satine and Christian inside her boudoir. Note the Eiffel Tower, “L’Amour” sign, and moon, visible through the window.

but things are seen from a different angle.” The aforementioned objects include the Moulin Rouge and elephant exteriors, as well as the show’s (and film’s) iconic red “L’Amour” sign. There’s also the human-sized Eiffel Tower

that turns up during the first-act finale, a medley in which Christian and Satine fall in love.

To ground the action in the world of 19th-century Paris, McLane worked to make sure that each location has “a



Photo: Matthew Murphy

real sense of place. Nothing is abstracted.” At the same, he took care to avoid visual overload; he added more starkly realized locations, such as the aforementioned sidewalk café, set on a slate-gray streetscape of building exteriors; Toulouse-Lautrec’s garret; and the interior of the town house belonging to the Duke, a set that suggests

wealth and status without piling on the props. “It has that baroque architecture, but it’s like an S&M version, complete with the black leather chaise,” he says, noting that the design alludes to the Duke’s dissipated tastes. Speaking of the town house’s dark palette, he says, “I took a photograph of a French baroque room and did a negative and that’s how it was painted.” In the Act II sequence that includes the Moulin Rouge chorus rehearsing a sizzling dance to “Bad Romance,” and a darkly fatalistic tango set to “Roxanne,” the designer makes use of a palate-cleansing backstage look, aided by Townsend’s lighting design.

Other contributions include a watercolor picture-postcard view of the fashionable Boulevard Beaumarchais: “John Logan noted that it is the only time in the show that you see trees,” McLane says. “It also has a blue sky; during the rest of the show, the sky is gray.” He adds that the world of the Moulin Rouge is defined by red and gold—“It’s an artificial explosion of color”—that contrasts strongly with the monochromatic Paris streets. Also featured are two Toulouse-Lautrec-inspired drops. “One of them pulls up out of the floor at the end of ‘Rolling in the Deep,’” the designer says. “It’s only there for a moment, and it flies out, revealing the show-within-the-show [Christian’s play, written for Satine], which, according to the script, has been designed by Toulouse-Lautrec.”

The scenery was built by a number of shops, with PRG taking the lead and also providing automation using its Stage Command system; for example, two platforms in the center of the stage rise up, along with steps that link them with the deck. This effect is used several times, including in “Bad Romance” and the scene in which the Moulin Rouge’s latest production is being rehearsed. Showman Fabricators built the heart portals, which, McLane notes, “have a slightly complicated automation: The filigree is placed on tracks, to move on and off.” Proof Productions built the back wall of the Moulin Rouge stage, an old-fashioned affair covered with period stage gears and ropes; the scenic house also provided Toulouse-Lautrec’s garret and the small buildings used for the forced-perspective effects. Jennifer Tankleff, of iWeiss, notes that the company “provided all of the front-of-house fiber optic swags along with many layers of decorative drapery in the house. Many fabrics went into creating the tabbing curtain at the top of the show; the Austrian curtain; the diamond drop [seen during Satine’s “diamonds” medley] with the striking white and black pleats; many swags and drapery in Satine’s room; as well as a lot of black masking which you do not or should not see.”

The red-light district

Moulin Rouge requires a protean lighting design—ranging from the preshow red washes to chases, ballyhoos, side

lighting, up lighting, moonlight washes, gaslight effects, green washes (for a number built around the effects of absinthe, aka “the green fairy”), and the stunning use of single-beam looks in “Roxanne”—and Townsend says he relished the “chance to push the gas pedal to the floor.” As should be obvious by now, with so much lighting embedded in the scenic design, the designer worked even more closely than usual with McLane and Timbers. “We all have a shorthand,” he notes, adding, “I wanted to surprise them as much as I could.” Indeed, the director provided the key stylistic guidance that allowed Townsend to create many of his flamboyant effects: “Alex pushed for a mashup of monster electrics, letting Cathy [Zuber, the costume designer] and Derek’s work really drive the period feeling,” he says.

“The show needs to keep being surprising in terms of how it hangs together,” Townsend adds. “A lot of our work involved talking about what it means to be immersive. I followed the lead of Derek’s big, operatic sets while trying to keep a dynamic, nimble mood. The first act is a candy land of ornateness and baroque effects, but the second

act has a purer drive, becoming a mature love story. It can feel like we’re shifting styles, but I think of it as distillation and amplification. It’s definitely a more-is-more situation; I worked with Derek and the producers to electrify the entire room. We made a big investment in set electrics. [These includes MR16s and many other types of bulbs.] I constantly had to ask, ‘Is this equipment doing the most that it can do, or is there a better idea there?’” Not that everything the designer did constituted a grand gesture; for example, there is the gaslight look late in the second act: “I wasn’t trying so much to reproduce the quality of gaslight as to show that we are in the play-within-the-play. The stillness of the light is what surprises at that moment.”

As befits a show that frequently unfolds in a 19th-century theatre, the design is “riddled with footlights,” Townsend says, adding that he chose for this function Chroma-Q Color Force IIs, which he describes as “big, powerhouse” units that “drive much of the first act.” He was, he adds, careful to make sure that all conventional units built in the set retain a period quality. This includes a wall of scoops [from Altman Lighting], located upstage,



In keeping with the dissipated tastes of the Duke, McLane says the set depicting his town house “has that baroque architecture, but it’s like an S&M version, complete with the black leather chaise.”



Townsend's lighting adds to the sizzle in "Bad Romance."

that appears during certain numbers, including "Shut Up and Dance." They fulfill Timbers' requirement for a surprising effect without being jarringly modern.

With so much scenery everywhere, lighting positions were at a premium. Townsend, laughing, says, "When I saw the design, I said, 'It's a beautiful set; where are the lights?' And yet I love these problems and I love working with other designers." Among the challenges he faced, he notes, "The electrics need to trim at different heights; we need to light a lot of scenery and carve performers out from it. But Derek was really game. He knows that lighting will make the scenery look good and is willing to move things around. I'm so enamored of this production: Everyone was thoughtful, kind, and gave their maximum; it really stems from Alex's quality of leadership."

The first big challenge was lighting the auditorium, a task that required a special type of unit. "I can't stand the sound of automated lights," Townsend says. "It drives me crazy. But I needed something with real firepower. High End Systems has the SolaWash 2000; it is very bright and silent, which is essential in the theatre." These units certainly provide the needed coverage, also creating the right preshow mood. Onstage, he says, "[GLP] impression X4s do a lot of the work; the idea of vast lineup of LED units is changing how we design: With them, I can zoom in tight, almost like with focusing units. I also had some [Vari-Lite] VL3500s: I wanted to be smart—this is an expensive show—and it's a good, clear, sharp unit that does a lot of work; on a dark stage, it provides a beautiful shaft of light. I use it, along with the haze, to isolate people in 'Roxanne.' One of the neat things about the production is that each piece of equipment echoes a different style of lighting. The strips upstage [used prominently in 'Roxanne'] are taken from my memory of the film but amplified; it was Alex who had the idea of using them as audience blinders. They're Altman Zipstrips; they echo the

effect of the impression X4s and they give us a really clean geometry. In Boston, I had only the white strips; for New York, I added the red. They fly in and out on the bottom of a black drape."

The designer uses his gear combinations in a variety of ways. "For the Paris streets, the VL3500s pick out details while the impression X4s wash the background. There's no way to get side light into Satine's boudoir, so I have impression X4s on the deck downstage left and right, coming in and giving an undertone. I do have ladders with VL3500s at left and right for side light and also an impression X4 at right and left that goes up and down in one. It's a little untraditional; it's on a track, attached to a ladder that's bolted to the wall, with a motor. We really had to work hard to get these side positions."

Other strategies include the use of a ARRI 2K Fresnel upstage "with a lens bowl so it doesn't frost. It's just a metal housing with a 2K light and it acts as a beam projector. There's another right below it; if it burns out, the operator can slide the replacement up. I also have some [Claypaky] Sharpys to put beams in the air; you see them creating shafty looks in Satine's 'diamonds' medley." Also used in the rig are Martin by Harman MAC Auras; Color Kinetics ColorBlast and ColorBlaze units; ETC Source Fours, Source Four PARs, Source Four Lustr 2s; L&E Broad Cycs, Altman R40s, and Lycian 1295 followspots.

Lighting is controlled by an ETC Eos. "I'm thrilled that ETC continues to recreate this great product," he says. "It really works for me because I tend to be very granular in my cueing—but also very broad when I first start, to keep up with the director." Lighting gear was supplied by PRG.

Interestingly, Townsend says, "We went from Boston to Broadway with a pretty clean cue stack. A couple of things changed, including a few unit types, and there were some script changes at the end." Overall, he adds, he drew inspiration from the production's crossbreeding of periods



Toulouse-Lautrec's garret is dominated by a large upstage window through which one sees the Paris skyline. Compare this with the view from Satine's boudoir: McLane designed a number of miniature buildings that, used in different configurations, create the city as seen from various viewpoints.

and styles; "Each look needs to be iconic on its own; that's how the mashup works. Nothing can be too fuzzy; you want every moment to be a stunning photograph."

Pop sounds

For sound designer Peter Hylenski the challenge was creating a system that could effectively corral a score that ranges from Broadway show tunes of the postwar era to James Bond film themes to hits off the Billboard Hot 100—all of which makes his crisp, clear work all the more impressive. "It was a bit of a shock at first," he says of dealing with the eclectic playlist, "but everybody put their noses to the grindstone. A lot of the problem-solving was done by breaking the show down to smaller pieces, working them piece by piece, and then putting them together and assembling them into larger sections."

Given the immersive quality of the production design and the reworking of the auditorium, the designer says, "We did a little extra work on the theatre's acoustics, because we could: Derek's design allowed us to hide some acoustic treatment behind the drapery, and to pay a little more attention to how the room reacts, especially

upstairs, where there are two large parallel plaster walls that, in the past, have been very reflective. The addition of the scenic velour drapery also helps."

Another imperative was the effort to disguise loudspeakers whenever possible; for example, the large proscenium line arrays are covered with decorative treatments. "In Boston, we didn't have the coverings," Hylenski says. "We removed the grills, so you saw the inner workings of the speakers, which was interesting, but we still had these two black voids in a gold-and-red set. Finding something to cover the main loudspeaker system can be very tricky and compromising. I called Meyer Sound and we purchased the acoustic fabric mesh used as the inside layers of their speakers and had it sent to the scene shop to be dry-brush-painted. We then had frames custom-built to match the curvature of the line arrays. There was great collaboration between Derek's team and the audio team. It really helps bring the speakers into the visual world of the show."

Unsurprisingly, Meyer loudspeakers form the backbone of the audio rig, featuring LEOPARD line arrays with 900-LFC and 1100-LFC subs. "We also have the new Meyer

UPQ-D3 [ultra-wide coverage loudspeakers] and Ultra-X 40 [point sources], which are fantastic,” Hylenski says. “The system’s basic building blocks are larger Meyer products.” However, he adds, “The set is so unique that we needed to address each zone a little more precisely, choosing the exact speakers to fit into the sets and deliver the performance we needed. For example, the VIP zone [a set of cabaret tables arrayed around the passarelle] is its own unique space, out of the main PA zone, so it has its own set of speakers. One system has two tiny K-array loudspeakers in each table lamp. There are conventional Meyer units around the zone for front and side fill but, given the height of the stage and the fact that the tables are in two rows, we couldn’t get clean coverage without the table lamps. They give an immediacy and intelligibility. We also have a second set of front fills on the downstage passarelle, which has drawbridges that let the audience in and out: We have coverage for when the drawbridges are open and when they’re closed.” In addition, the surround system consists of d&b audiotechnik E6 and E8 boxes. “We use it pretty extensively, for the music mix, sound effects, and vocal effects,” the designer says. “It allows us to open up the mix and bring it off the stage and into the house.”

Overall, Hylenski says, “The single biggest design challenge was delivering the story, and often concert-style musical numbers, with cast members playing in a variety of additional spaces not confined to the stage proper. Practical side boxes, built for the show, are basically where our proscenium speakers would typically live. There are also side stages far left and right of the proscenium and, of course, the T-bar passarelle. Providing audible cues as to the location of the performers became important for connecting the audience with the characters. We designed a system, using a Meyer Sound Galaxy cross-point delay matrix, that allow us to give spatial information to where those performers are.”

The actors wear Sennheiser MKE1 mics on custom booms built “out of titanium and stainless steel” by Jonny Massena, the production’s A2. “He went to school to be a watchmaker,” Hylenski says. “It runs in his family. He made the booms by bending titanium rods and hardening parts of them with a torch. It results in a more specialized fit, so the mics fit under the wigs properly and gives us a cleaner look. Also, the principals wear two mics each. It’s a benefit for the show, although it’s certainly a lot more work.” The mics are equipped with Lectrosonics SSM transmitters and Venue 2 receivers.

Other pieces of the audio puzzle include an array of microphones from AEA, AKG, Beyerdynamic, Ear Trumpet Labs, Mojave Studio, Neumann, Radial Engineering, and Shure and additional loudspeakers from Anchor, EAW, and Yamaha. The production uses a Clear-Com communications system. Audio gear was supplied by PRG.

The show is mixed on two Avid S6L consoles. “It’s pretty much the same system that we used on [the recent Broadway production of] *King Kong*,” Hylenski says, “partly because of the nature of the music and because we have a live band plus an integrated Ableton system. The bus structure started adding up and I decided we needed two consoles, one for the band and one for the vocals. We mix the music down to stems that arrive at the production console. I like having two desks, which allows you to have the music mix as a separate entity. It’s great for the production, but you do have a single operator with eight or nine linear feet of faders to deal with.”

The key to the design, he adds, is that “we took time and care working with the music team, to craft how the music and vocals work together and how the mix of each song translates into the theatre.” He notes that a pop score requires more processing than one normally employs in musical theatre but adds that the production makes use of the same package of Waves plug-ins that he uses on other shows. “I might use them in different ways, to achieve a different sound, but didn’t change my normal workflow. There’s also quite a palette of reverbs and delays used to create space and dimension, both in the band mix and the vocals.” To keep everything coordinated, many of the sound and lighting cues are linked. “We take the time code from Ableton, which is driving the band,” Hylenski notes. “The conductor starts the click track and it



A close-up view of the enormous carved elephant.

comes into the audio system; we distribute it to lighting.”

Thanks to the immersive production design, most of the 14-piece orchestra is located in its own specially crafted studio space. “The show is designed with VIP seating occupying the space usually used as the orchestra pit,” Hylenski says, “but, given the nature of the music and style of show, it was actually advantageous to have them isolated. We designed and built custom studio rooms to house the band; complete structures of walls, ceilings, floors, HVAC, sprinklers...It was definitely a project, but it’s a comfortable environment for them and great-sounding for us.” He adds that an additional remote pit houses four musicians; in any case, all of them use Aviom personal monitoring mixers.

Other key personnel on *Moulin Rouge!* include Michael J. Passaro (production stage manager), Davin De Santis (stage manager), Julie Baldauff (assistant stage manager), Gypsy Snider from The 7 Fingers (aerial consultant), Markus Maurette (special effects designer), Erica Hemminger (associate scenic designer), Nick Solyom (associate lighting designer), Justin Stasiw (associate


sound designer), Brad Gray (moving light programmer), Simon Matthews and Phil Lojo (production sound), Chad Woerner (production carpenter), Jeremy Wahlers (production electrician), Jon Ramage (head electrician), Alex Brandwine (head carpenter), Jack Anderson (advance carpenter), T. J. King (assistant carpenter), Sean Furphy (assistant electrician), Antonio DiBernardo (scenic assistant), Katy Atwell (assistant lighting designer), Stephen Kolack (head props), Buist Bickley (production props), Chris Kavanah (assistant production props), and Jeremy McComish (assistant props). In addition to the vendors mentioned, props were fabricated and supplied by Behind the Mule Studio, Curtis Eller, Rachel Kenner, Nicholas Meloro, Anna Light, Props & Paint, Ramos Upholstery, Hat Rabbit, Paper Mache Monkey, Benbri Properties, Claire Kavanah, and Shiqi Huang. *Moulin Rouge!* instantly began posting blockbuster numbers and, as a sign of its likely longevity, the iconic “L’Amour” sign has been painted on the theatre’s exterior. One doubts that the Hirschfeld will be looking for another tenant anytime soon. 

Photo: Matthew Murphy

