

WHEN YOU SAY VEGAS

Honeymoon in Vegas use new technology to deliver a classic-style Broadway musical

By: David Barbour





All photos:

Photo: Joan Marcus



Using a combination of LED imagery and constructed scenery, Louizos designed daytime and nighttime versions of Tommy's Hawaiian villa.



his season, Broadway got something it hasn't had in some time: a classic book musical comedy. Based on the 1992 Andrew Bergman film of the same name, *Honeymoon in Vegas* is a craftily constructed sex farce set to a bouncy, clever score by Jason Robert Brown, here unveiling an entirely new side of his formidable songwriting talent. It's the kind of show that once proliferated in the Times Square neighborhood, a lighthearted spree designed to give an adult audience an evening of carefree amusement. In such an endeavor, style is everything, and *Honeymoon in Vegas* has it in spades—not least in terms of its kinky production design.

As in the film, *Honeymoon in Vegas* focuses on Jack Singer, a nice, nebbishy guy who is permanently ambivalent about marriage, thanks to the promise to stay single that his mother, Bea, extracted from him on her deathbed. This is a problem because Jack is head over heels for the fetching Betsy Nolan, and, time and again, he can't quite bring himself to seal the deal. As a solution,

Jack and Betsy run off to Las Vegas for a spur-of-the-moment ceremony. Once there, however, they run into Tommy Korman, a gambler with a faintly made-man aura. Tommy is stunned at the sight of Betsy, for she is the living image of his late wife. Determined to get his hands on her, Tommy lures Jack into a poker game, promptly fleecing him for tens of thousands of dollars. Tommy then makes a proposal: If Betsy will spend a weekend with him—no strings attached, he swears—he will write off the debt.

Unsurprisingly, Betsy is none too pleased to find out that she has been used as a gambling marker—on her wedding day, no less—but she agrees to the plan, much to Jack's discomfort. When it looks like Betsy might be falling for Tommy, and when Tommy spirits her off to Hawaii, Jack follows in hot pursuit, getting caught in a series of increasingly mortifying situations: fighting off the advances of a frisky female Hawaiian tour guide, taking part in a bizarre ceremony designed to exorcise Bea's nagging ghost, and parachuting out of an airplane with a gang of Elvis impersonators.

The design team of *Honeymoon in Vegas* faced a



The showroom set contains an enormous picture window, allowing a view of the Vegas skyline on the upstage LED wall.

number of challenges, not least the realization of three distinct worlds—New York, Las Vegas, and Hawaii—in the less-than-expansive space of Broadway's Nederlander Theatre. In addition, the design is built for speed, a necessary element in a farce in which the hero rushes headlong from one disaster to the next. Perhaps most of all, Gary Griffin's staging is filled with little surprises to keep audiences on their toes; more than once, the design of *Honeymoon in Vegas* proves to be quicker than the eye.

Scenery, real and digital

When Anna Louizos designed the tryout production of *Honeymoon in Vegas* at Paper Mill Playhouse in Millburn, New Jersey, she employed conventional scenery. For Broadway, she rethought her approach, augmenting the stage looks with projected images. It was a decision dictated in part by practicality, she says: "The stage at Paper Mill has 14' more depth than the Nederlander. Also, at Paper Mill, the orchestra was present on stage throughout the show; it tracked up and downstage. After Paper Mill, we agreed that it would be nice not to see

them all the time—which meant I had to devise a way to make the orchestra go away without having a huge drop fly in and out." (On Broadway, the show begins with the orchestra on stage, playing the overture; after that, it tracks up stage and breaks into three pieces. It does this again at the top of the second act, after the entr'acte.)

Therefore, Louizos says, "I started to think that LED screens would solve the problem, but I didn't want a great big LED wall covering the entire band. I thought, What if we could find a wall that could track, with a height that could cover the band as needed, and also offer us the option of creating locations."

Thus, there are two sets of LED walls employed in the design. At midstage is a pair of 9' – 8" tracking LED walls, which serve to reveal and cover the band; upstage of the band hangs a 14' – 6" LED wall which is raised and lowered to fill in the stage picture and serve as a backdrop. The walls, built of 143 InfaLED 6mm black-face panels, demonstrate their flexibility in the opening number, "I Love Betsy." "We didn't have scenery for the opening number at Paper Mill," says Louizos. "We had a park

bench and a flower stand and that was it. Andrew Bergman wanted to evoke Brooklyn a little bit more.” The number now unfolds in front of the screens as they reveal a series of projected Brooklyn storefronts with upper floors made of dimensional scenery. At one point, the screen splits and a doorway flies in, through which Betsy makes her entrance.

This is the first production for which Louizos has used projections to such an extent. “I didn’t know what I was getting myself into,” she says. “I had to digitally create whatever scenery I would have normally built. That meant designing, painting, and lighting the architecture in the computer. First of all, you have to design the scenery—but then during a scene we might go from dusk to night; for example, Tommy’s Hawaiian house has a daytime look and a nighttime look. Normally, I depend on the lighting designer to use shadows and gobos and textures to light the scenery—but with a two-dimensional image, you have to do it all.” Also, she learned that a projection designer’s work is never done: “It’s very cool to be able to put multiple locations on one surface, but it is also a Pandora’s box, because of the endless possibilities; the director can say, ‘Can we change this or try that that?’, and you actually can—while sitting in the theatre. But it can be very time-consuming.”

Louizos says that her process began with taking pencil sketches and color elevations inspired by the Paper Mill production and used them to compose the LED images, working with her associate designer, Jeremy W. Foil, and studio assistant, Kayla Nault, both of whom are skilled at working in Photoshop. Todd Potter was also part of the design team. The video programming was done by Ian Crawford, who previously worked with Louizos on a much smaller projection design for the Off Broadway show *Just Jim Dale*.

Louizos notes that she learned a great deal from this experience: “I tried to create as many layers as I could, so the images didn’t exist by themselves.” She makes use of the two walls’ differing heights. For example, Tommy’s Hawaiian house is projected on the lower screen with the sky projected on the upstage wall. The roof of the building, however, is a dimensional piece. “I play tricks with the palm tree trunk on the LED screen and a real palm that extends it,” she says. “I also added a planter with foliage downstage. I always wanted something to break up the image.” Also, she says, it was important, given the power of today’s LED screens, “to tone down the brightness,” to not steal focus from the actors. “I made images that behave like scenery,” she adds. There are instances, such as the house in Hawaii, when it isn’t obvious where the LED image ends and the paint and plaster begin.

The LED walls are particularly useful in some of the Vegas scenes. Louizos notes that the film, which is more than 20 years old, is redolent of the old Vegas, of the Rat

Pack, professional gamblers, and showrooms filled with cigarette smoke, not the bright, shiny playground of today, with a celebrity chef and Cirque du Soleil attraction on virtually every block. For this show, however, “we wanted both Vegas, because that is how the script was written.” (Much of the action unfolds at a fictional hotel called the Milano, which looks like a glamorous Steve Wynn property.) Two locations—Tommy’s high-roller suite and the hotel’s showroom—feature enormous picture windows, revealing the city’s skyline. Strictly speaking, showrooms on the Vegas Strip don’t have windows; however, Louizos says, it serves as an alternative to the parking lot specified in the script for the climactic scene, in which a team of Elvis impersonators parachute into town—an effect that is rendered with a traditional theatrical device of flat cut-outs that zip along a cable in front of the upstage LED wall.

Several scenes set in the hotel’s lobby are backed by a set of wood panels with brass accents, arranged in a kind of Mondrian pattern. Matching it is a show proscenium, made of wood with brass accents, which, Louizos says, also blends in well with the Hawaii scenes; embedded in the wood is a series of narrow lines containing LEDs. Among other things, the proscenium provides the lighting designer, Howell Binkley, with a downstage overhead lighting position. The proscenium also plays a visual trick: a pair of potted palms located at floor level gradually rise up until they occupy places on the mid-levels of the right and left proscenium. The proscenium portal and the portal behind it are both lined in 442’ of Vivid RGB Lighting Ribbon X1 flexible pixel strips; Vivid also provided two custom Vivid Pixel Drive controllers and 16 Vivid Data Bridge voltage extenders. Nested in the second portal are columns that track and revolve—wood on one side, stone on the other—that are used variously in different scenes. They, too, are fitted with lightboxes of Vivid RGB Lighting Ribbon X1, which create arrival/departure screens in the airport scenes and posters for Buddy Rocky, the lounge singer at the Milano.

One especially useful device is a downstage elevator. Dressed as a subway entrance, it provides the entryway for the first appearance of Rob McClure, who plays Jack. Tony Danza, as Tommy, also makes his entrance using it. Later, it reveals Jack in the coach section of an airplane, trapped between two unattractive fellow passengers, and in a jeep manned by Mahi, Jack’s island tour guide. “Because we made the choice to have the orchestra on stage, we could cover the pit and bring the action all the way downstage,” Louizos says, adding that the first row of seats in the *Nederlander* has also been removed. This decision “brings the show closer to the theatre and it’s a wonderful storytelling device,” she adds. Several of the show’s most memorable moments involve surprise appearances made by the vengeful spirit of Bea. When Jack and Betsy are at Tiffany’s, shopping for rings, a



Like the showroom, Tommy's high-roller suite offers a view of Vegas and its surrounding mountains. This shot shows one of the LED portals used in the set design.

jewelry counter is transformed into a hospital bed containing the actress Nancy Opel, who plays Bea. Louizos explains, "Nancy is hidden in the counter. Her legs touch the floor and she lies back, covered with a black schmatte. The bed has a spring back. She pushes on it and also pushes out the front section of the counter, which has fake legs in it. The top of the counter slips down and the hospital tray, with the sippy cup and IV pole, flies up."

Another trompe l'oeil moment comes during arguably the play's wildest scene, when Mahi, seeking to help Jack free himself from Bea's influence, takes him to The Garden of the Disappointed Mothers. "When I read the script, I said, 'That's definitely not in the movie,'" Louizos says, laughing. Interestingly, it features the one totally traditional piece of scenery in the production, relying on a painted, soft cut portal and translucent drop. The garden is filled with Tiki statues depicting the aforementioned mothers; these were turned over to the costume designer Brian Hemesath. Naturally, one of them turns out to be Bea.

In the show's climax, Jack, frantic to break up Tommy and Betsy's impending nuptials, hops a plane back to

Vegas from Hawaii, populated by The Flying Elvises, who jump from planes dressed as The King. "Trying to fit an airplane on stage is quite a trick," says the designer, in what may be the understatement of the year. "At Paper Mill, it was a 10' piece of scenery, a section of the airplane interior that flew in front of a blue void." On Broadway, a good chunk of the plane's exterior stretches across the stage; it is covered in red, white, and blue LEDs. In the center is the Flying Elvises logo; this is a scrim that, when backlit, reveals Jack and the Elvises. The scrim parts for the actors to play the scene.

The big question, Louizos notes, involved "trying to figure out how to have Jack jump out of the plane. We toyed with the idea of having him dive into the elevator pit, but Gary and I slowly narrowed it down to the idea of Jack and the Elvises jumping upstage [through a doorway] and walking off. Jack is hanging on to the airplane's doorway and someone clips him onto the parachute harness; the LED screen upstage features images of moving clouds. He jumps and we see him floating in front of the screen." Bea also makes one of her most spectacular appearances in

this scene, which features Flying by Foy.

Other locations include the New York subway (a pair of curved metal bars in front of the image of a subway car on the low-rise screen); Prospect Park (a bench backed by the boathouse on the low-rise screen, a dimensional roof, and, on the high-rise screen, trees and sky); and a chic Vegas shop (projected), where Betsy, shopping for a wedding outfit, sings “Betsy’s Getting Married:”

Scenery for the Broadway production was built by Hudson Scenic Studio, with some pieces, built by PRG, retained from Paper Mill. Props were made by Cigar Box Studios and Prop Star. Rose Brand supplied a variety of soft goods, most notably the show curtain, composed of metallic knit boucle in FR white gold. It is 24' high and 40' wide, with 100% fullness via box pleats, and is lined in Avora 56 in IFR black. Video gear was supplied by Sound Associates. A QLab 3 playback unit is the production’s media server, controlled by the lighting console.

Lighting

Even working with Louizos’ scenery, which had its own lighting built-in to a certain degree, Binkley had his work cut out for him. Somewhat unusually, he notes, the show follows all three lead characters—Jack, Betsy, and Tommy—treating their character arcs in equal fashion. “A lot of the storytelling involves getting into the character’s heads. Also, there’s a ton of layering to be done. Nancy Opel makes five entrances—how do you get out of reality and into those scenes? Also, Tommy and Betsy—how much of a scam is it? How true is it? In our first meeting, Gary Griffin said, ‘We’re going to have to layer this show in

an unusual way, and it’s hard to describe until you see it in rehearsal’.”

As a result, a certain amount of Binkley’s work involved creating freeze-frame looks that would allow for fast transitions from reality to, for example, Jack’s fantasy encounters with Bea. Another moment comes when Tommy first lays eyes on Betsy. The designer adds that he created visual diversions that would allow Opel’s appearances to be set up. In some cases, these involve color chases using the LEDs built into the proscenium.

One challenge posed by fitting the show in the Nederlander Theatre was that Binkley lost most of his overhead lighting positions. “There’s not a lot of room above,” he notes, adding that Louizos got creative to help him out. “The airplane is where the number one electric would normally be, so we have a cove—or a trough—built under the plane. There’s another electric upstage above the band, and a nice spot built into the proscenium; it’s an apron truss electric, which is useful because so much of the show is played so far downstage.” The designer makes very good use of his side towers, which provide much of the design’s power.

Interestingly, Binkley says that working with the LED screens wasn’t an issue. “LEDs have become so powerful that I actually enjoy working with them. They make a great background—strong images with detail and dimension. The lighting can scrape the screens and you’d never know it.” He notes that projections allow the show to move quickly. Lighting also plays a role in the transitions, focusing on Buddy Rocky and his showgirls, who cross the stage singing during certain scene changes; lighting



The number “Betsy’s Getting Married” takes place in a shop rendered almost entirely through video imagery.

Photo: Anna Louizos



Binkley's lighting paces and builds excitement in numbers such as "I Love Betsy," which is set against a line of Brooklyn storefronts.

also draws the audience's attention to the downstage elevator while scene changes unfold upstage.

Binkley also has a considerable number of LEDs in his lighting rig, beginning with 23 Martin Professional MAC Viper Profiles and 27 MAC Viper Performances, which provided many stage wash looks. "I normally go with the [Philips Vari*Lite] VL3500, but the Viper is a fantastic unit; it's extremely quiet and if you put it besides a VL3500, it isn't that much different. I used the Vipers because I needed something small, that would change color quickly, and wouldn't need a scroller. They have a great color range. Also, when working with that kind of fixture, it also comes down to the programmer. David Arch did great things with them and with the LEDs in the portal." He adds that the portal lighting "took on a life of its own," especially when pulling focus during some of the staging's sleight-of-hand moments.

Another slightly unusual gear choice was a set of 37 Elation Professional ELAR 108 Par RGBW units, which are generally used for Opel's surprise appearances, to help create rain effects, and for lighting the orchestra.

The rig also includes 16 Martin Professional MAC 700s, 20 Martin Mac Auras, 13 Elation Platinum Beam 5Rs, 24 Altman Lighting Q-Lite 1,000W floods, 11 Chroma-Q Color Force 72s, 12 Philips Color Kinetics ColorBlast 12 TR 23s, 133 ETC Source Fours, 24 Source Four PARs, five PAR 64s, 38 Wybron scrollers, and three MDG Atmosphere hazers, all controlled by an ETC Eos console. "David Arch has always been a grandMA guy, but lately he has begun working with the Eos," says Binkley, adding that the choice of the ETC console frees up the lighting in other ways: "We can get 20 more lights with it." Also used was City Theatrical's SHoW DMX system for wireless lighting control. The gear was supplied by Christie Lites.

This production is also a fine demonstration of Binkley's skill at using lighting to build excitement in a musical number. "When You Say Vegas," Buddy Rocky's theme song; "Higher Love," the Flying Elvis anthem; and the ebullient finale are just three of the songs that benefit from his technique. "There's a lot of underlying story, but also a lot of comedy and fun," he says. "All three characters go through a range of emotions."



The exterior of the Flying Elvises' airplane is dotted with LED units.



The plane's interior. Lehrer and Levy's team worked closely with the wardrobe department to find appropriate mic positions for cast members who change costumes repeatedly.

Sound

Brown's score is marked by witty, character-revealing lyrics; his music is delivered by the hottest band on Broadway. Fortunately, the sound design, by Scott Lehrer and Drew Levy, allows both words and music to be delivered with maximum impact.

Asked about their biggest challenge, the designers both mention the upstage placement of the orchestra, a decision that could potentially complicate the layout of the audio system. "We came up with a solution that, I think, works fairly well," says Lehrer, adding that it is similar to a solution they devised for the 2012 Broadway musical *Chaplin*. It involved placing loudspeakers in the set, to provide an alternate mode of amplification when the orchestra is totally covered by the upstage video wall. "We have three [d&b audiotechnik] Q1 speakers in the upstage portal and two [d&b] E12s in the midstage portal," says Lehrer, adding, "It helped that we had a wonderful set designer who understood our problems."

Thus, says Levy, "We have a separate mix for the on-stage loudspeakers, which is always present. When the band is fully exposed, you're not aware of it, because it is at a level at which it blends in. Kurt Fischer, who mixes the show, has one VCA, which is a master band control, and a totally separate VCA that covers the upstage mix. It's like a monitor mix; it adds everything that we need that you don't hear when the band is covered by the wall."

Interestingly, in a time when many designers like to mix and match brands when building a loudspeaker rig, Lehrer and Levy have gone entirely with gear from d&b audiotechnik. Speaking of the proscenium, Lehrer says, "We have two C7-TOPs per side at left and right and a cluster that consists of V8s and V12s." He adds that the placement and makeup of the center cluster was carefully considered because the front of the mezzanine is so close

to the stage that the sound can be too loud for those sitting in the first few rows.

At the same time, says Levy, "There are real issues with the Nederlander's mezzanine because of air-conditioner noise, so we had to get a lot more energy up there. Our solution is similar to what [sound designer] Ken Travis did for *Newsies* [the theatre's previous tenant], with separate left and right hangs to push sound back into the mezzanine." The solution includes two Q1 arrays (four boxes each) as an upper left/right system to get to the rear of the balcony. "We also have three Q7s, overhung on the front-of-house lighting truss, acting as fill for the very last rows in the balcony," says Levy. The underbalcony system consists of one ring of seven E6 boxes and one of nine E0 boxes, and the surround system, which, among other things, delivers airplane sound effects and (when needed) vocal reverb, includes E6s, E5s, and E0s. In addition to the on-stage speakers, there is also a foldback system that consists of E8s on Binkley's light ladders, and E0s and E3s in the deck.

Honeymoon in Vegas is the kind of show in which the chorus is constantly popping in and out of all sorts of wild costumes: showgirls dressed as playing cards, living Tiki statues, and the flying Elvises—and, of course, Nancy Opel, making ever-more outrageous appearances, making mic placement something of a challenge. "Lucas Indelicato and Aaron Strauss [IA stagehands] wangled it all seamlessly," Levy says. "There were a couple of instances where we had to experiment with particular placements, but they made it all work." One challenge involved the actress Catherine Ricafort, who plays Mahi. She and Jack share a number, "Friki-Friki," in which she amorously attacks him in her jeep. "We tried putting mics on every part of her face, but we couldn't get it right, so she has a mic in her cap." The entire cast sports DPA 4061s, except

for Rob McClure; he is doubled miked with Sennheiser MKE1s.

One singular challenge involved the number “A Little Luck,” in which Tommy breaks into a tap routine. “Tony Danza didn’t want to wear a tap mic,” says Lehrer, noting the actor has only one brief moment of tap. “He’s dancing on the trap, so we put a Sennheiser MD 441-U mic on a film boom and Lucas goes under the stage during the number and follows him around.”

The cast members are also outfitted with Sennheiser 5212 body-pack transmitters and 3732 receivers, and, Lehrer says, “For the first time, I think, we did digital out of the receiver and all the way through the system. All of the

TiMax works better, especially in terms of the time relationship with the orchestra. We broke the orchestra down to left, center, and right locations, and also strings, reeds, brass, piano, rhythm, and drums, and send separate inputs from each of them to TiMax, and then specific amounts of each, as needed, to the speakers on stage. We were able to set different balances of each group of instruments by location, and could set the time and level of each group.”

The production’s sound is controlled by a DiGiCo SD7T. The designers discussed using a Studer console, but ultimately concluded, says Lehrer, that the SD7T “is the right console for this show. It has an auto-update mode, which is a powerful tool in a complicated show like this. It allowed us to do a lot of complicated programming on the fly.” For example, says Levy, “We do a lot of pushing in and out of reverb, for example, with Buddy Rocky and his handheld mic, and we push out of it very quickly. It involves a routing into the PA that is different from the other vocals. We were able to make individual parameter changes for him. Also, if we wanted to make some onstage monitor adjustments for one particular number, we could style it for just that cue without having to hold anyone up; we could make adjustments on the fly for that particular actor.” A Lexicon 960L effects engine is used, along with the console’s on-board effects. The audio gear was supplied by Sound Associates.

Other key personnel include Aurora Productions (production management); Matthew DiCarlo (production stage manager); Rachel Bauder (stage manager); Andrea Cibelli (assistant stage manager); Ryan O’Gara (associate lighting designer); Will Pickens (associate sound designer); David Elmer (production carpenter); Colin McNamara (fly automation); Pete Malbuisson (deck automation); Nick Flinn (assistant lighting designer); Randall Zaibek and Jimmy Fedigan (production electricians); Steve Long (head electrician); Nick Troccoli (lead front light operator); Nick Partin (moving light tech); Joseph Ferreri (house carpenter); Richard Poutin (house electrician); William Wright (house props); John Estep and Michael Billings (associate props supervisors); and Gabrielle D’Entremont, Eric Reynolds, Cathy Small, and Daniel Moss (props artisans).

Altogether, Lehrer and Levy describe their work as “both very old-school and new school,” a description that could apply to all parts of *Honeymoon in Vegas*’ design. In a show that updates the classic Broadway musical approach, all the designers have employed the latest technologies to support the show. The result is both familiar and state-of-the-art. 📶



The airport in Hawaii. The two columns, displaying arrival and departure times at left and right, can track and revolve.

AES outputs of the 3732 go to a Direct Out Technologies Andiamo [MADI AD/DA converter], which converts the signal from AES to MADI. You usually have a patchbay backstage with 30 male XLR connectors and a set of tails that you can patch in, allowing you to patch any outputs to any channel on the console. It’s a lot of splitting and going from analog to digital and digital to analog for no reason. It’s a big, messy setup. One Andiamo is used for the RF conversion to MADI and patching via software. Another Andiamo converts the MADI output of the TiMax unit to AES to send to the d&b amplifiers.”

As the above comment indicates, the designers use the TiMax 2 SoundHub delay matrix to achieve continuous audio localization of the actors’ radio mics as they move around the stage. Lehrer says that, previously, he and Levy have used the Yamaha DME-N Series, “which served us well, although it wasn’t designed for that purpose. We’ve been stretching the limits of the DME system for a while.