

THE SONDHEIM PUZZLE

Assembling the pieces of *Sondheim on Sondheim* was a brain-teasing task

By: David Barbour

“I know what we’ll do/We’ll do a revue.” Show fans will recognize these lines from “Opening Doors,” in the Stephen Sondheim/George Furth musical *Merrily We Roll Along*. They’re words that theatre people have taken to heart; ever since 1977’s *Side by Side by Sondheim*, revues based on the songwriter’s catalog have proliferated. Some, like *Opening Doors*, are linked to events in Sondheim’s life; others, like *Putting it Together* and *Marry Me a Little*, place the songs in a loose narrative context. In addition, many benefit performances, beginning with 1973’s *Sondheim: A Musical Tribute*, have been recorded.

Given these—and given the fact that not a season goes by without a major Sondheim revival—one might wonder about the necessity of a new Sondheim revue. The question seemed particularly urgent this year, when his 80th birthday triggered an unprecedented number of musical salutes. Thanks to the Encores! at City Center program of concert productions of musical shows, New Yorkers even got to see the rarely seen 1964 flop, *Anyone Can Whistle*. Really, what more was there to say?

But *Sondheim on Sondheim*, as conceived and directed by James Lapine and presented by the Roundabout Theatre Company at Studio 54, sheds new light on the subject. Originally titled *iSondheim*, the program of songs is linked to a series of video interviews with Sondheim, tracing the events of his

life and examining the pains, pleasures, and problems of writing for the musical theatre. It’s filled with stimulating and/or revelatory nuggets of information. A sequence combining three totally different opening numbers written for *A Funny Thing Happened on the Way to the Forum* opens a window on that show’s troubled out-of-town tryout. The juxtaposition of two closing numbers from *Company* reveals how Sondheim adjusted his work to fit changes in the show’s libretto. And even hardcore fans may not have heard “Smile, Girls,” which lasted one night only during *Gypsy*’s Philadelphia tryout.

The interviews also examine key aspects of Sondheim’s personal life, including his chilly, unloving mother; his close relationship with Oscar Hammerstein II; and the confession that he first fell in love only in his 60s. He shies away from very little, offering a ribald account of Ethel Merman’s filthy mouth, brusquely dismissing *Do I Hear a Waltz?* as the only show he regrets, and spoofing his own godlike status among musical-theatre fans.

The juxtaposition of these video sequences with first-rate performances of Sondheim’s songs by the likes of Vanessa Williams, Tom Wopat, and the great Barbara Cook results in a kind of dramatic tension that makes *Sondheim on Sondheim* unique. The contrast between this blunt, funny, analytical man and his songs, which overflow with feeling, is fascinating—and, arguably, more revealing than anyone intended.

Stephen Sondheim was at the forefront of artists who reinvented the musical with a modernist sensibility. What Picasso and cubism were to painting, Sondheim is to the musical. *Sondheim on Sondheim* helps to explain why.

Onstage, *Sondheim on Sondheim* unfolds with such elegant simplicity that one might not guess that its creation proved to be a brain-teasing challenge for the members of its design team. In essence, they weren’t just putting together a show; they were inventing a new format.

Defining the format

“We started out not really knowing what we were doing,” says the show’s scenic designer, Beowulf Boritt, who worked with director Lapine and Peter Flaherty, the video/projection designer, to figure out the basic components of *Sondheim on Sondheim*. “We knew it would be video clips and songs,” Boritt adds, “but we didn’t know what the songs were, and we didn’t have the video. There was no structure, just a basic idea; the possibilities were wide open, which made it hard to design.” As a result, “We went through three or four months of idea after idea.”

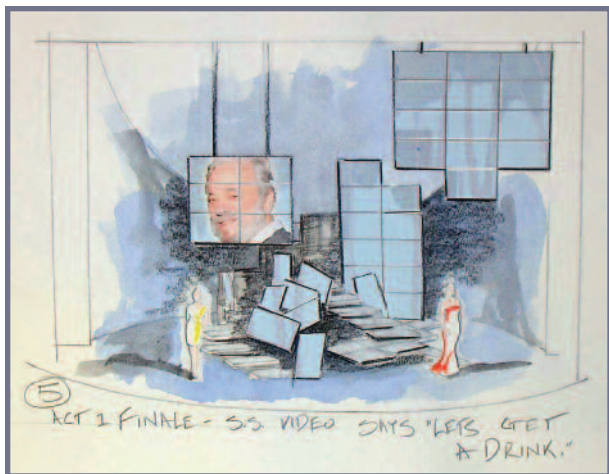
Eventually, recalls Boritt, “I came up with the idea of a structural revolve with RP screen placed behind it.” But this proved impractical; at the time, the production was to be staged at the Alliance Theatre in Atlanta, with a national tour after-



In an especially witty stage look, the video wall, bearing an image of the young Sondheim, splits to reveal part of the cast.



Above left: Vanessa Williams, in a wash of saturated colors, smolders in the number "Ah, But Underneath." Above, right: Images of Ethel Merman in "Smile, Girls." This is the broken-tile look that, Flaherty says, "offered so much compositional fun."



A sketch by Boritt shows the broken-tile look, with the video wall also in a fragmented state.

wards; working with Sam Ellis, of Hudson Scenic Studio, Boritt says, "We realized that, on a normal Broadway touring schedule, there wasn't time to get four or five projectors focused on bizarre shapes during an eight-hour load-in. We were four or five months out from production, and we had to rethink it."

It was at this point that "the idea of LCD screens came up," says Boritt. "James was doing the first workshop of the show. I was watching a performance, and it was one of the few times in my life when I've had a 'Eureka' moment; I suddenly knew

of LCD screens, which can break apart in various ways, offering various shapes and configurations. Behind the wall is a turntable. From the front, it provides a second level for the performers; it also spins around to reveal two staircases and more LCD screens—a slightly askew pair of columns of screens plus screens scattered about in apparently random fashion, like so many broken tiles. It looks rather like a ruin, and, indeed, Boritt says it was partly inspired by *The Sea of Ice*, a painting by Casper David Friedrich depicting a shipwreck in the arctic. (He adds that he studied

what the set should be. We went into more meetings with Peter, making a series of 1/4" models and considering how we would stage the show on it. At the end, we had the thing we have on stage."

That "thing" consists of a five-wide-by-seven-high wall

the work of Boris Aronson, scenic designer for such Sondheim works as *Company*, *Follies*, and *Pacific Overtures*; the design of Sondheim on Sondheim does allude to Aronson's highly sculptural approach.)

"I was always interested in starting with a box that we would shatter—a simple rectilinear space that is broken into pieces," says Boritt, who notes that the idea is a reflection of the way Sondheim "took an established format and remade it." Also, he says, the set design allows for extra visual variety. "The lead actor in the show is Sondheim, and the scenery and video have to represent him. Just popping him onto a normal ratio screen would be dreadfully dull. This way, we can keep changing how you see him."

And it's true that Boritt and Flaherty have an almost infinite number of ways to use their scenic/video concept. (The design's puzzle-like aspects are all too appropriate for a show about Sondheim, who is famously addicted to puzzles and games of all kinds.) One of the production's wittiest images features a black-and-white photo of the young Sondheim, looking every inch the cocky Broadway comer, with a cigarette dangling between his lips. It

is broken in half, along jagged lines; sitting between the two halves of the image are four members of the cast. For "The Gun Song," from *Assassins*, the wall assembles behind the cast, as each screen reveals the likes of John Kennedy, Abraham Lincoln, Malcolm X, John David Hinckley, and Benazir Bhutto. Sondheim's parents are seen in two vertical photos, separated by blackness to reflect the end of their marriage. "Epiphany," the soul-shattering solo from *Sweeney Todd*, gains in power from being staged in front the scattered-tile turntable, the screens filled with images of splattered blood; this number also makes use of a small quadrant of the video wall, as does "Smile Girls," which features images of Ethel Merman, both on the quadrant and the scattered tiles. "Opening Doors," that lengthy musical sequence from *Merrily*, features singers moving up and down the turntable's stairs as it spins; on the screens, one sees animations depicting images of New York, which the characters dream of conquering.

Such visual variety came at a price, however. "Tracking this show was one of the biggest nightmares I've ever had," Boritt says. "There are only four moving pieces, but they can go together in a million ways. And the set list kept changing; there was so much to do in integrating lighting, video, and automation."

That integration only came together conceptually a few months before previews began. "Right before Christmas, we had a rough running order," says Boritt. "Peter had a plan for the images, I took pictures of the model, and we did a flow chart. We went through the show, beat by beat, and got a basic idea of how it would work. If we had a clear idea for a scene—like the broken proscenium arch we use in the *Follies* sequence—we put it in. Also, there was what Peter calls 'the glue,' meaning amorphous imagery used in some numbers. In this way, we got the general idea of the

charting of the show."

Next, he says, "One of my assistants built a virtual model of the set, and I started churning out storyboards, which were turned into a PowerPoint file by one of James' assistants. That became our visual script; it was about 100 slides long—but, each day, there would be a change, and we'd have to adjust. The paperwork was exhausting; every change in a number would mean a change in tracking."

Such changes proved labor-intensive. For example, Boritt says, "There are so many cables built into the turntable, it couldn't rotate forever without wrecking the cabling. We could have built a commutator into it"—this would have allowed for endless revolutions—"but it would have been very expensive. It was a major problem dealing with the cabling; a couple of times, we had to reprogram an entire act to accommodate a seemingly minor revolve change." The dry tech took two weeks, with ten more days for tech.

Dealing with the many moving parts created endless challenges. As an example, Boritt cites a sequence of songs from *Passion*. "Going into it, we do a 360° turn of the turntable; on the screens is footage from *Passion d'amore* [the film on which *Passion*, the musical, is based]; it was very complicated to work out the flying of the screen with the movement of the turntable; they just barely miss each other. It was our nightmare that the screens might crash into each other; the wrong move would be a \$3,000 mistake at best," he adds, citing the cost of an individual screen

PRG fabricated the show's scenery, and Boritt says the automation system is run using the latest version of the company's StageCommand system. Precision was the key at all times. "We were cueing things down to a tenth of an inch," he adds, citing in particular the contributions of Steve Beers, Roundabout's production manager, and Dan Hoffman, the master

carpenter, in making it all work.

The rest of the set includes an upstage drop with a semi-circular swoop cut out to reveal the band members sitting on platforms. Behind the band is a white cyc with a blackout drop in front of it. There's a painted scrim that comes in directly behind the turntable for certain numbers, like "Smile, Girls." It's transparent and makes a good surface for lighting effects. Boritt calls it "the watery drop" and adds, "It's a way of getting some old-school feeling into a set with so much technology." (Global Scenic Services, working with Rose Brand, provided the drops, using Navy Memorable velour for the semi-circular band drop, as well as painted sharktooth and Leno filled scrim.) Also, the designer says, "Steve Beers had the crew put in a custom-built catwalk system that mirrored the shape of the cyc, with access panels for getting to the moving lights. It was a big help, because, once the set was built, there was no access to those lighting positions."

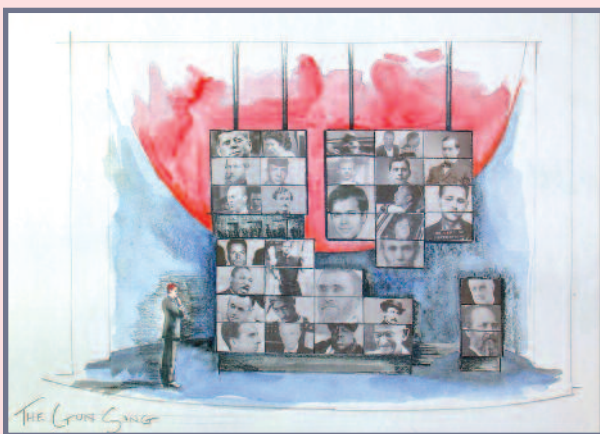
Boritt says that Jo Winiarski, his associate set designer, made a crucial contribution ("I can't praise her enough"), as did Jason Lajka, an assistant set designer, who drafted the set in all its configurations. "What was hard about it from the beginning," Boritt adds, "is the fact that, when you describe it, it doesn't sound that compelling. It seemed simple, because there are relatively few pieces—but then you saw all the connections," and, suddenly, the task wasn't simple at all.

The video star

While Boritt was working on the scenic concept, Peter Flaherty was shooting footage of Sondheim, first at his town house on the East Side of Manhattan, and, later, at his country house in Connecticut. A third shoot took place at Playwrights Horizons, with a fourth taking place during tech, to create footage for a new number that spoofs the reverence for



A suite of numbers from *Assassins* features images of Benazir Bhutto, Robert Kennedy, and Abraham Lincoln, among others.



Boritt's sketch shows the video wall assembling into one unit.

Sondheim among theatre folk.

Like Boritt, Flaherty notes that the beginning of the project was daunting to the point of paralysis. "We had no frame of reference for the budget or where it was going," he says. "We didn't need a traditional set, because we didn't need locations or props, and we didn't want any awards-show set dressing. It dawned on me that

idea of conventional rear or front projection was abandoned "because we needed so many surfaces, and, at the time, we thought we were going to tour the show before coming to Broadway. That's when I got excited about LCD screens. Other technologies were proposed, including LED walls, but I felt that, if we were doing a portrait of the man,

what we wanted was to make a website, where you could access pods of information. In this format, we had the license to dip in and out, rather than writing the definitive biography of the man."

Echoing Boritt, Flaherty says the

it needed to be shot in full HD.

Roundabout understood that need, and followed through with the budget. There were many corners they could have cut, but didn't."

The designer notes that the LCDs "bring two main things to the show: One is resolution and the other is luminosity. You can't get a look like we have—which is like a computer screen that segments and recomposes itself—with refracted light; it's never going to be that sharp or that bright." The screens were purchased directly from NEC Display Solutions.

Flaherty says he was enthusiastic about Boritt's final concept. "Honestly," he says, "my favorite part of the whole thing is the back side of the turntable [with the scattered tile look]. I love non-traditional surfaces and atypical aspect ratios. Four to three is death, and 16:9 is not much better. People are acclimatized to those ratios, and, if you put them on

stage, the audience feels like it's watching TV. You have to find ways to organically change the ratio."

Thanks to the LCDs' brightness, he adds, the days of worrying about the lighting rig are over: "Now, it's the other way around; I have to turn down the brightness. We have so much luminosity up there that it's difficult for the lighting department to compete." This poses other challenges, however: "In certain numbers, if I turned my intensity down past a certain level, we started to lose punch and felt washed out. This was a problem in some of the moodier numbers, because some of the footage of Steve in Connecticut was very bright. We tried to use each piece of video to its strength in the way that we framed it. With a 16:9 image shot in 4K using the RED camera [used for the majority of the footage], we could move in as we needed," thus focusing on Sondheim's face and eliminating any distractingly bright background information.

Through it all, Flaherty adds he and Boritt continued to "play with the shapes of the screens. He'd configure pieces, and we'd walk through different numbers in James' office. The front screen is trickier; the back of the turntable offered so much compositional fun. But, honestly, it was a guessing game, and the truth is that the set was being bid before we had a full understanding of what the song list would be." The process could have been terrifying; instead, says Flaherty, "When everything is up for grabs, it's liberating. With the screens, we had an aesthetic. Sondheim is the puzzle man; I've always thought of the set as a physical representation of that interest."

In addition to the Sondheim interviews, Flaherty had to source other material—including interviews with Mike Douglas and Diane Sawyer, personal photos from Sondheim's collection, and an amusing YouTube montage of various singers taking a pass at "Send in the Clowns." He also created animations for the *Forum* sequence and "Opening Doors." And there was the

"glue"—blocks of color and abstract designs used in certain numbers.

"The *Forum* animation was a complicated one to get started," the designer comments. "We always knew that the 'Opening Doors' animation was going to be a Saul Bass kind of black-and-color silhouette look, with a lot of spinning. And we knew that the first-act finale, with 'Sunday' and 'A Weekend in the Country,' required a complicated animation." Working on the fully assembled wall, he notes, involved making an image in a 3800 x 4400 pixel configuration. "In some cases, it was four or six times the highest HD that anyone typically renders. Using such a variety of HD elements in our animations, it took a long time to lock that system in place, with proxies and workarounds. We figured out the animations that were song-specific, and then we filled in the blanks. We didn't lock it until the week before we opened; little embellishments were added each day."

The images are controlled by a Dataton Watchout system, chosen because, he says, "I realized that we wanted to deliver so much resolution—and, given the math of the tile wall, we had to have a large number of servers to drive it. Also, looking at the number of songs that accumulated, I knew that, if I went with something that was less timeline-oriented, I'd be in big trouble. It was clear that the song order would be shifted; if I had to use a server that needed to be programmed by a proxy device, like a lighting console, I'd be in trouble." As a result, he has an 11-display Watchout system, each for both the main and backup systems. Aside from the screens, video gear was supplied by Sound Associates.

Flaherty adds, "We have really long runs of cable sending DVI to the wall; it's 100% digital signal and it hits a distribution amplifier, which amplifies and splits the signal just before it hits the screens. If you divide the wall into three-by-three clusters, each is getting one Watchout signal, but the screens

do all the internal image splitting. I'm responsible for getting my 11 synchronized signals to their destination, and the NEC technology does the rest."

The video cues are triggered from the show's lighting board, an ETC Obsession II. "The new version of Watchout has integrated MIDI," says Flaherty. "You get a MIDI input device, put the USB into the computer, and the light board sends the control cue number. It's super-simple now; all the video sound is driven out of the Watchout system. There's no SMPTE link; it's all in the computer on Quicktime files. There's a lot of redundant sound; if all else fails, the show could go on with sound only."

Lighting for video

Ken Billington, the show's lighting designer, who has worked on many shows with complex video and/or projection designs, concurs that the use of LCD screens has made his life easier. "The monitors don't reflect light," he notes. "I can put light right on them—even from followspots—and it doesn't mean a thing. In January, we set up six screens in the theatre and focused lighting units on them, to see what they would look like, if they looked bad, or if I could put a gobo on them. That relieved me of a great tension."

Of course, he adds, "I was concerned about the brightness of the screens. During the dry tech, I kept asking have them pulled down. If they got too bright, I had to use too much stage light to pop the actors, and it became annoying. I was the bright police. They'd groan and take it down. We dealt with it, but it's not easy, because the screens fade differently from LEDs. We have all sorts of brightness levels—the screens go up and down all night long."

In many ways, the main challenge for Billington had to do with the revue format. "There are 30-something songs and a few medleys," he says. "Basically, it consists of set pieces,

and it got to the point of, how do I end each of these numbers so they don't all look the same? It wasn't easy coming up with different looks so it didn't seem like we were doing the same thing all night long." Throughout the project, he says his watchword was restraint. "You don't need a cue on every modulation. I kept thinking, What would Tharon [Musser] do?," referring to the great theatre lighting designer and his mentor, who was known for her laser-like precision and lack of fussy detail.

And, of course, Billington had to deal with a set that was frequently in motion, especially in "Opening Doors," a number that, he says, "was a brain twister. First of all, jumping on a moving object is not easy for the cast. It took a long time to get everyone to do it in work light. They can't grab onto the LCD screens; they're not handrails." Then he worked to integrate his lighting cues, keeping the in-motion performers and the set well-lit at all times.

Sondheim on Sondheim is an intimate show and, Billington says, "The other thing I was conscious of—especially with Stephen Sondheim songs and a nine-piece orchestra—was fan noise. That drove the design. I knew that any fan noise would defeat this event. What many lighting designers forget is that this is our job—fan noise is part of our territory, and we have to resolve it." His approach: "For the washes I used [Vari*Lite] VL5s, which don't have fans. I also used VL3500Qs because they're quiet and I needed the zoom. The rest of the moving light rig uses Clay Paky Alpha Profile 1200s, because, for my money, they're the quietest moving lights ever made. Where I didn't have room for them, I used [Martin] MAC 700 Profiles because, when you put them in studio mode, you can't hear the fans. I also had [City Theatrical] AutoYokes on the front truss. In the case of the [Wybron Coloram] scrollers on the sidelight, the fans were turned off. I

really went out of my way to make that happen." The conventional units are controlled by an ETC Obsession II; it is linked to the PRG Virtuoso, which controls the moving units. (Also in the rig, supplied by PRG, are approximately 255 ETC Source Fours of varying types, two Lycian 1290 followspots, a selection of PAR 64s, single-cell L&E Broad Cycs, ETC MultiPar striplights, an MDG Atmosphere hazer, a Jem fan, and 30 LED panels from LightWild.)

Billington notes that overhead he has moving lights only, with conventional units deployed only in side light positions. He worked to find the right colors to work with the blue upstage drop, even turning it a bloody red for the *Sweeney Todd* sequence. Most of all, he subtly reshapes the stage, song by song, creating an atmosphere that allows the songs to soar.

Do I hear a waltz?

Also helping the music to soar is Dan Moses Schreier, the sound designer, who, thanks to his familiarity with both Sondheim's oeuvre and the acoustics of Studio 54, skillfully produces the right intimate audio environment. This time, however, he is working with the band in the upstage position, as opposed to sitting in the house right and left balconies. To deal with this change, he says, he "approached it like a recording studio, as opposed to letting the acoustics lead you."

The placement of the band "affected which loudspeakers I used," he adds. "When the orchestra is out front, I use d&b [audiotechnik] E3s, which are small boxes and are used only for fill. When the band is upstage behind a wall, you need larger cabinets, so I went with d&b E10s." He placed them in a left/right/center configuration on the proscenium; they are, he adds, "the best positions in the house, no matter what." In the underbalcony position, Schreier says the Roundabout "has a permanent install of EAW JF80s. Upstairs, I had

E3s all over the place."

Again, with the band upstage—"When the video wall is in place, they're completely cut off," he says—Schreier needed to supply foldback for the singers. The system he assembled included E3s in side positions and Meyer Sound UPMs overhead. Interestingly, the musicians don't use a personal monitoring system. "They wanted to keep it as acoustic and chamber-like as possible," the designer adds. He adds that Michael Starobin's transparent orchestrations made his life easier, getting the most of a band that consists of a piano, keyboards, violin, cello, two woodwinds, one French horn, and one bass.

In some ways, the major challenge for Schreier wasn't the live sound, but the sound coming from the video. "The footage of Sondheim was taken from different locations and times, and the room tone is different in every clip," he says. "We spent an enormous amount of time to make it sound as similar as possible. David Bullard [the associate sound designer] sat at a ProTools rig at the back of the house, EQ-ing, de-essing, and cleaning up everything." The same was done with the older archival footage and the "Send in the Clowns" montage. "After we did our first pass on everything," he adds, "we got an audience reaction, then went back in and made more changes."

In any event, the performers wear DPA 4061 capsules with Sennheiser SK5212 transmitters, a typical choice for the designer. Most of the band members are also miked with various DPA models that were available from Sound Associates, the house that provided the sound gear.

Recently, Schreier has been using Studer consoles on musicals, but, this time out, he went with a Vi6 board from Soundcraft, which is allied with Studer. The budget didn't allow for a Studer console, but, the designer says, "Studer is putting a lot of its great stuff into the Soundcraft boards.

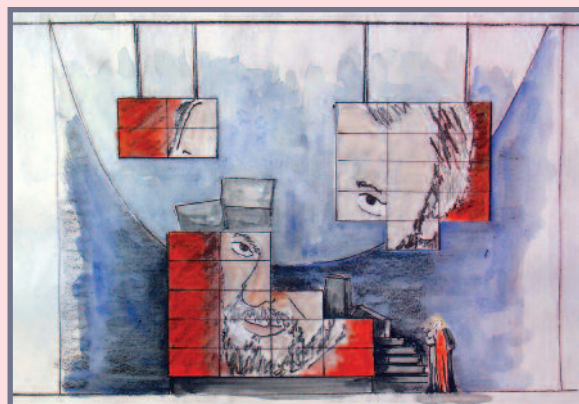
If you're looking for a good mid-level digital console, this one is really good." (Katy Templeman-Holmes, from Soundcraft-Studer, says that the company, having noticed an opening, has targeted Broadway and the West End, using discussions with Schreier and other designers to develop products that are now aimed at every level of the theatre market.)

Schreier comments on the pleasure of working with such blue-chip vocal talents as Williams and Cook, and notes that the challenge for Scott Anderson, the show's production sound engineer, is to present Sondheim's songs in as perfect a setting as possible: "You have to concentrate on the mix to make sure the words are right in the middle. It's a tricky job; the listening is really intense. You don't want to miss a single word. In a number like 'Now You Know' [from *Merrily*], the phrases just come tumbling out—and every single phrase is fantastic."

Also involved were John Demous (associate lighting designer), Austin Switser (associate video designer/programmer), Michael Bell-Smith (lead video animator), Joshua Higgason (video associate), Timothy F. Rogers (moving light programmer), Jessica Morton (conventional lighting programmer), Chad Woerner (assistant technical supervisor), John Wooding (production electrician), Ann Cavanagh (automation carpenter), Steve Jones (flyman), Paul Coltoff and Jenn Fagant (followspot operators), T. J. McEvoy (deck sound), Maiko Chii (assistant set designer), Jeremy Cunningham (assistant lighting designer), Daniel Brodie (assistant video designer),

Buist Bickley (production properties coordinator), and Lawrence Jennino (house properties).

During previews, the show opened with a video montage of games and puzzles, reflecting Sondheim's fascination with them. The idea was eventually dropped, but it's safe to say that the creative team solved their own Sondheim puzzle, finding a way of presenting him and his work in an altogether fresh light. 📡



Above: Boritt and Flaherty say the many screen configurations provide visual variety. Below: The cast with their star.

