A Heinz Endowments artist-support program is the first note in a

Leonardo Balada, the Carnegie Mellon University composer and teacher of music composition, studies his notes just a few hours before the world premiere of his Symphony No. 5 *American* with the Pittsburgh Symphony Orchestra.

HIGH FIVE

long-time local composer's creation of his dream symphony. BY MICHELLE PILECKI PHOTOGRAPHY BY ANNIE O'NEILL

Composer Leonardo Balada shares notes with guest conductor Hans Graf, the Austrian-born music director of the Houston Symphony and the man who will lead the Pittsburgh Symphony through Balada's Symphony No. 5 in its premiere performance at Heinz Hall. The two are meeting for the first time at rehearsal, with little more than an hour reserved for playing Balada's piece.

The bundle of cables gaffer-taped down the right aisle of Heinz Hall requires some careful stepping from Pittsburgh Symphony–goers heading for their seats on the opening night of this fall weekend subscription concert. Some raise eyebrows as high-fashion stilettos step gingerly over the cable; others giggle as they skip over in sneakers. But that cable itself—running between a sound console in the back of the hall to 15 microphones and eight speakers on stage—represents an even bigger step for the symphony and a new program for The Heinz Endowments.

A world premiere is always cause for some high stepping. Symphony No. 5 *American*, by Pittsburgh-based composer Leonardo Balada, is the culmination of thousands of steps by hundreds of people during two years, crystallized into a performance of 22 minutes. This massive collaboration — like the mass of cables — is made necessary because the new symphony not only stretches the palette of sounds from the classical orchestra with modern playing techniques, but also goes beyond with the live, electronic manipulation of those sounds.

The *American* is something the PSO audience has never before heard or seen, starting with an angry cacophony marked by harsh strings and tumultuous percussion, punctuated by a wistful trumpet note that seems to split and blend in mid-air, then resolves into strings almost receding into a melody reminiscent of a Negro spiritual, echoed by a flute. This perks up with a lively square dance of a third movement, highlighted by a violin accompanied by what almost sounds like a banjo, though there's not a banjo to be seen.

The music evolves, as *Pittsburgh Post-Gazette* classical music critic Andrew Druckenbrod describes it, "from the panic of war to the solace of community to the joy of living." The path from inception to stage followed a similar evolution: while a transition not quite from panic, certainly one from difficulties into a joyful living art form by way of a communal effort. For the audience, the only clue of this effort is the program note: "Commissioned by the Pittsburgh Symphony Orchestra, with the support of The Heinz Endowments' Creative Heights artist residency program, in partnership with the Carnegie Mellon University School of Music." The story of how a new symphony comes to life rewinds from Heinz Hall's back stage to the Carnegie Mellon campus to the art-filled home of the composer, where music is penciled onto paper one note at a time.

Creating a new work of quality music is difficult and risky, but the 70-year-old Balada embraced the opportunity. A Creative Heights grant would cap his rewarding career as a teacher of music composition at Carnegie Mellon and as an internationally recognized composer. But his dream project presented special challenges.

His proposed piece would use technologies totally new to him; the very language of music itself would be more complex in this production. But Balada is a fixture at a university equally respected for its work in the arts and in computer technology.

Michelle Pilecki, former executive editor of Pittsburgh Magazine*, has covered the Pittsburgh Symphony Orchestra and the region's arts community for years. Her last story for* h *centered on an Endowments-funded community group fighting sprawl in the western suburbs.*

Tom Furey tends to a computerized sound board wired into Heinz Hall for the performance of Balada's work. Developed by an electronic processor, the new sounds produced by the board are supposed to complement symphonic sounds. Middle and right: Symphony musicians rehearse Balada's piece only a few hours before the evening performance.

"I THINK THE ORCHESTRA IS A FANTASTIC OF THE GREAT

"If I had not been at Carnegie Mellon, but at someplace else, I wouldn't have had that idea," says the Spanish-born Balada, who has been on the Oakland campus since 1970. "But knowing that I was in the right place, it came to me, this idea of using this cooperation."

Electronic-music composer Roger Dannenberg clarifies the scope of the challenges Balada chose for his new symphony. "The way you develop sonic images is, you listen to music, and you recreate the sounds," says Dannenberg, a senior research computer scientist and artist in Carnegie Mellon's School of Computer Science and School of Art. "With electronics, if you're creating new sounds that no one has ever created before, how can you imagine exactly what that's going to be?"

Dannenberg would help Balada create those sounds to add to his musical palette, building on the avant-garde and traditional playing techniques that he has used in his many orchestral works, chamber pieces and operas. But what of the editing and polishing of the final composition, given the typically tight rehearsal schedule of a world-class orchestra?

"Experimenting with a symphony orchestra is probably not a good idea," agrees Alan Fletcher, head of Carnegie Mellon's School of Music. So Balada suggested that the Carnegie Mellon Philharmonic play the piece first. It would be a win–win situation for everyone, Fletcher says, using the ensemble as "something of a laboratory for the composer," while the students "can see how a brand-new work evolves… the problems and the changes and the experiments and the adjustments."

Communicating all that is always a challenge given the abstract nature of music itself. For example, a prominent string passage in the *American*'s first movement is a tremolo (a fast, vibrating sound) played *col legno* (with the wood side of the bow) behind the bridge (on the short, high-pitched part of the strings). "Some people call it the Balada pizzicato," the composer says. "It's a very metallic sound. At one point, I had

all the strings — violins, violas, cello, bass — doing this takata takata takata. It's rather painful and angry, sounding something like how Picasso's *Guernica* looks."

That's neither hyperbole nor coincidence. The Spanish Civil War — the brutality of which is symbolized by the firebombing of the peaceful city of Guernica, immortalized in Picasso's masterpiece — is a predominant childhood memory of Balada's and a theme in several of his compositions, including his newest symphony. Barely a year after the destruction of Guernica in 1937, the then–4-year-old Balada was running to the subway with his grandmother to dodge the bombing of his native Barcelona. It was a memory that was re-awakened when Balada attended a music conference, Orchestra Tech, in New York, barely a month after the destruction of the World Trade Center. "It was terrible," Balada recalls of his visit to lower Manhattan. "The taxi driver was crying."

Technology, 9/11, Guernica — those ideas were brewing inside Balada when the Endowments' Arts & Culture Program staff was seeking proposals for a new program that would help artists produce a work in partnership with a professional arts organization (see "Creating Collaboration," p. 21). Several composers had approached the Pittsburgh Symphony, recalls artistic administrator Robert Moir, but Balada's ideas intrigued him the most.

The Creative Heights' panel was equally excited by the Pittsburgh Symphony's proposal to commission the Balada piece with electronic enhancement of live acoustic music. "As far as I know, [that's] pretty unheard of in the orchestra world," says Kerry Spindler, the Endowments' Arts & Culture Program officer. And since encouraging artistic partnerships is key, it was important to include the Philharmonic to "field test" the composition. "It so perfectly met all the goals set by the initiative," Spindler says.

The Balada partnership qualified for the program's highest grant, $40,000, "which certainly didn't cover the entire cost of the project," says Spindler, describing the symphony work as the most costly of the five inaugural projects announced in February 2002. She was referring to the Pittsburgh Symphony's financial investment in scheduling Balada's piece for the regular subscription season. While Balada describes the piece as a work that moves "from the abyss to the heavens," the bean counters needed the Creative Heights grant to make sure it would be paid for when it settled back to earth.

With the financing secure and the performance date scheduled, the next step was for Balada to get to work and begin adding to his sonic palette.

"We met in Roger's studio, talked about the effects we could get," Balada says. Most of the time was spent making sounds. Dannenberg set up a microphone and played a few notes on an instrument, then sent those notes through a sound processor, trying out such effects as delay, reverb, equalization and pitch change, separately and together. "An effect may work really well

INSTRUMENT. IT'S ONE ACHIEVEMENTS OF WESTERN CULTURE."

Leonardo Balada Composer

Left: Concert-goers who hear Balada's new symphony for the first time are treated to a sharp break from the two classical works on the evening's program. Below: Balada, calm and unassuming, acknowledges enthusiastic applause from conductor Graf and the audience at the conclusion of the world premiere performance.

with a trumpet, but you try that with a violin or a cello and it doesn't work," he continues. "He went into composition with a set of sounds that he knew he could use."

Balada had a lot of ideas about what he wanted: not electronic music, but music using electronics that could still work without electronics. "I didn't want to write a piece where technology was the end of the piece, but another inflection, another chord," he says. "I think the orchestra is a fantastic instrument. It's one of the great achievements of western culture. I like the way it sounds." So why add the technological element? "Because I want to try to think differently. I wanted to give a surrealistic quality to the orchestra."

But for all the layers of partnerships and collaborations of this symphony, the act of composition itself is solo. "I tell my students: Composition is like architecture. Nobody helps you. You have to build it note by note," Balada says. He spent the better part of a year, April 2002 to February 2003, struggling through the carpentry, drawing inspiration from a variety of musical sources, including his own.

"The first movement is more typical of what I did in the '60s, like 'Steel Symphony' and 'Guernica,' very abstract," he says. "Some sounds will recall bells, like funeral bells in a minor third, a sad sound." For the second movement, he drew upon Negro spirituals, as he had done for his 1968 "Sinfonìa en Negro: Homage to Martin Luther King," but there using African rhythms in an abstract way, here creating "an expression of hope that something good will happen," he continues. The final movement he calls "a surrealistic square dance," using a theme from his 1982 opera, *Hangman, Hangman!* as a motif. Putting "ethnic things on top of those avant garde sounds" to create a unified piece is "very dangerous," he admits, but it's a signature of Balada's third, and current, period.

Symphony No. 5 is scored for 93 instruments, 14 of them "enhanced": two violins, viola, cello, flute, trumpet, clarinet, piano, harpsichord, chimes, xylophone, vibraphone, harp and glockenspiel. That means 15 microphones, including two for the piano — to be placed for maximum sound quality, compounded by the delicacy of classical instruments. "We met three or four times at the recording studio at Carnegie Mellon to rehearse with different groups," says recording engineer Riccardo Schulz, instructor in recording technology and a specialist in recording, editing and mastering classical music. Preparing for the Philharmonic's September reading of the symphony in Carnegie Music Hall required several days and his entire crew of eight students. "We needed every hand we could get," Schulz remembers.

The Philharmonic's read-through is the first time anyone actually hears the new symphony — and when they make sure it's what Balada intends to hear. "We want to discover what the sound problems will be before we start the rehearsals with the Symphony so we're not hung up on technological problems," Dannenberg says. The process seems painfully slow as the orchestra plays six measures, or a dozen, then stops on command as the balance is checked, a microphone moved, an electronic effect adjusted. Then the passage is repeated. Maestro Juan Pablo Izquierdo, professor of music and director of orchestral studies, asks about tempo, and then checks with Balada on an interpretation. Balada, meanwhile, is up and down, following the music on his score and frequently waving his arms to stop. Sometimes the problem is obvious even to untrained ears: too loud, feedback, interference. Often, it's more subtle — not quite what he wants. If the problem can't be fixed immediately, Dannenberg makes a note.

About 100 students are involved in this experiment, says music school head Fletcher. "We have the luxury of a really first-rate orchestra and people who are themselves committed to this kind of work." The Symphony's Moir is here, too, thanking the students and inviting them to the world premiere. "The clock starts," he notes of the growing momentum. A Pittsburgh Symphony subscription concert has four days of rehearsal, total, and there are three other pieces on the program. "By the last rehearsal, it has to be right."

"We have to be super-prepared," explains Andrés Cárdenes, concertmaster and Rachel Mellon Walton chair, and violin soloist in the third movement. That means studying the score to troubleshoot problems early. It can also mean unusual preparation, as in the symphony's principal keyboardist, Patricia Prattis Jennings, using colored tape to mark piano strings that the music requires her to pluck directly on the soundboard.

The first "day" of rehearsal — actually one hour for the Balada symphony — brings together the composer and the conductor. Hans Graf, the Austrian-born music director of the Houston Symphony, Orchestre National Bordeaux Aquitaine and the Calgary Philharmonic, is appreciative of both the music and the challenges it offers.

With Balada is Lucas Richman, resident conductor for the Pittsburgh Symphony. He's the designated "middle man" when someone has a problem or a question. He and assistant conductor Daniel Meyer provide two more sets of expert ears during rehearsal. "We know how the orchestra sounds and what works and what will not work in the hall," Richman says.

Meyer is part of the three-man team at the console, following the score and reading the sound cues. "I can't expect the conductor in the front of the hall to turn around and cue us," Dannenberg says. Sound engineer Tom Furey operates the

mixer. "His job is getting the sounds from the microphones to me, and sounds from me back to the speakers," Dannenberg explains.

Using manually controlled off-the-shelf processors is, he admits, a relatively low-tech operation for a computer scientist, but failsafe. "The most important thing is to avoid catastrophe, and computers have the property that they're terrific at automation but they have catastrophic failure modes. If you're in the middle of a performance, all you can do is shut everything down. The effort to make sure that didn't happen would turn this into a huge engineering project," Dannenberg says. "In my own pieces, I'm highly dependent on computers, but I'm not working with 100 live musicians who will kill me if there's a catastrophe."

As with the Philharmonic, the first reading proceeds in fits and starts, replaying passages as speakers are moved, effects adjusted, more questions asked of the composer. The orchestra barely makes it to the end of the piece, and there still hasn't been a complete, continuous run-through, three days before the world premiere. As the musicians leave the stage for lunch, Balada, Graf and Dannenberg confer to prepare for the next — and final — rehearsal on the morning of the premiere.

The recording of the performance, overseen by Lucas Richman, "is quite good," says Balada, who hopes it can be used for a CD release.

"I'm looking forward to doing it again sometime, but I need a long rest," says Dannenberg. Toward the end, he was literally dreaming the piece, "and when the clock sounded, I thought it was a cell phone. I thought, 'Oh, no, a cell phone is going off during Leonardo's work.' "

Will Symphony No. 5 *American* stand the test of time? "It's not for us to decide," the Houston Symphony's Graf says. Concert schedules are often programmed years in advance, and whether Balada's newest symphony enters the repertoire is impossible to predict, he says. Nevertheless, "Leonardo has his well-deserved success." Contemporary music is always a hard sell for audiences, but more palatable when it's a concerto or solo piece for a star. "People would go for a 'star' more than the music. It takes much more courage to write a symphony."

And especially this symphony, says Cárdenes. "It's not Leonardo of 20 years ago or 10 years ago or 50 years ago," he says of Balada. "He's a mature composer. To write music that's somewhat controversial and pushing the envelope, I think that's a great thing for a man of his age and maturity and standing."

"IT'S IMPORTANT TO SUPPORT COMPOSERS AND ALLOW NEW MUSIC TO BE CREATED. THAT'S WHAT KEEPS ART ALIVE."

Lucas Richman Pittsburgh Symphony Resident Conductor

While the first hour of this rehearsal again includes frequent interruptions for questions and repetitions of various passages, the rise in the level of assurance is palpable. The performance is smooth, and after a short break, after only two hours total rehearsal time, the Pittsburgh Symphony Orchestra performs Balada's *American* symphony straight through for the first time.

It is flawless.

After the premiere performance that night, the final bows and standing ovations are greeted with various mixtures of satisfaction, relief and anticipation by the artistic team. "We were still working on it this morning, still adjusting," Balada notes in the pre-concert lecture on Friday. But he is pleased.

Post-Gazette critic Druckenbrod did not fall in love with the work, but he respects the piece and the choice of a local composer. "… Orchestras cut their own throats if they do not support new music, even if it upsets some patrons," he observes.

Educating audiences to the necessity of commissioning works is the answer, says the Pittsburgh Symphony's resident conductor, Richman. "It's important to support composers and allow new music to be created. That's what keeps art alive. If we're simply re-creating monuments of the past, then live performance would become a dead art, a tribute to dinosaurs." *h*