

# UP FRONT



## NEIGHBORHOOD STORIES

By Bette McDevitt

### Geniuses and Acrobats

Most of us know of the national treasure in our midst, St. Nicholas Croatian Catholic Church in Millvale. We've heard of Maxo Vanka, the Croatian artist who created, in two intense sessions, 25 murals that cover the walls and ceiling of the church. "My Gift to America" as he called them. The murals encompass religion, life in the New and the Old Word, the dignity of labor, and the ravages of war. As a National Historic Landmark it has quite a story: a church built by immigrant families with artwork that draws worldwide respect and admiration.

The story has a sequel (it might be called a rescue effort) with people scampering all over the church to work on the murals. "Geniuses and acrobats," they have been called. In the 1990s, the congregation engaged workmen to repair a leaking roof and a conservator to do restoration work on the murals, as a result of water damage. Churchgoers assumed they

were safe for the future, and so they were, until Hurricanes Ivan and Frances roared through Millvale in 2004 and caused damage, which was not realized until 2006. Water had seeped in quietly, and partnered with dirt, pollution, and building materials to form salts on the surface of some of the murals, especially on *The Pieta* and *Mati* (Mother). The cost to repair the murals this time was beyond the means of the congregation, so the wider Pittsburgh community, realizing that the church housed a national treasure, joined in a fundraising

effort that allowed a team of conservators and lighting experts to get to work.

The first member of the conservators' team was Rikke Foulke, who holds impressive credentials in fine art conservation. Rikke contacted Patricia Buss, another highly skilled conservator, who had worked in Florence, Italy. The team grew, with the addition of Rhonda Wozniak, Cynthia Fiorini, and now a fifth person, Teresa Duff. "We could have used willing volunteers," said Rikke, "but this calls for highly skilled work, and these women all



Conservators  
Rikke Foulke  
and Teresa Duff  
examining *The Capitalist*  
Patricia Buss.



Before and after  
photos of a  
damaged area of  
the *Pieta* mural.

The Society to Preserve the Mill-  
vale Murals of Maxo Vanka.



bring different experience to the task.” Two other conservators, Anna Alba and Rachel Ward, will be joining the effort, and Rikke looks forward to working with them.

Rikke searched for something beyond the traditional methods of conservation used in this country. “The previous restoration, using the best known methods at the time, was not able to withstand the test of time, despite its conservation-quality properties.” Here’s where the varied experience of all the conservators came into play: Patricia Buss knew of a technique used in Italy and put Rikke in touch with Dr. Piero Baglioni, an Italian chemist interested in art restoration. Dr. Baglioni came to St. Nicholas and introduced the women to the Ferroni-Dini treatment, which converts sulfates into healthy plaster. Dr. Baglioni offered a further innovation, the use of barium and calcium in the form of nanoparticles (microscopic-sized particles) for the conversion process. The restoration at St. Nicholas is the first use of this technique in the United States.

Rikke gave an animated demonstration of the technique, using a very small section of a wall as a model for the damaged area of the mural. “First, we apply a piece of Japanese tissue to the surface, to keep things in place, then we brush the surface with alcohol, saturating the surface, then we brush



**Mary, Queen of Croats, 1937.** The large altar painting portrays Mary in traditional Croatian colors and with large, working hands. Above her is “Mary, Queen of Croats, Pray For Us.”  
The Society to Preserve the Millvale Murals of Maxo Vanka.



# UP FRONT



Lead conservator Rikke Foulke working with Piero Baglioni, Director of CSGI (translation: Center for Colloid and Surface Science), University of Florence, Italy.  
Patricia Buss.




Conservators cleaning the surface of *Justice*.  
The Society to Preserve the Millvale Murals of Maxo Vanka.

the surface again with the nanoparticles [containing the chemicals] in a solution of alcohol, then more alcohol again. Now it goes into the wall,” she said, pressing on the surface, “and it is saturated, delivering the medicine! Then we apply a poultice of water, forcing the nanoparticles to remain in the wall and convert the salts into healthy plaster!” It takes a long time to dry, Rikke explains, and may need a second application. Each mural takes six to eight weeks to restore, the length of time in which Vanka painted the first set of murals.

After the salt damage is removed, the conservators clean the murals of dirt and pollution, and restore the original color. “We’re very familiar with Vanka’s palette by now,” said Rikke, “and we just dab on small amounts of the pigment in powder form, with a tiny soft sponge.” The women have restored 10 of Vanka’s murals, and the next murals, *The Battlefield Scenes*, below the choir loft, calls for a horizontal scaffolding. “That will be a challenge,” Rikke said with a smile. “We have our concerns. We will be working against gravity to administer our materials.”

Each mural will also be individually lit, a process in the works right now. Rob Long and his company Clear Story is doing the work, along with Buch Electric. Up until 2010, the docents carried flashlights while giving tours of the murals. Since then, they have employed a set of klieg lights, a step up from flashlights but cumbersome to maneuver. So far, *Justice*, *Injustice*, *Prudence*, and *Mati* have been lighted and four more will be completed by September. It was Long who called his employees “geniuses and acrobats.” You could also call these workers elves, slipping in and making magic. “When we have finished our work,” said Rikke, “no one should know that

we were here.” If Maxo Vanka knew, he would be pleased with these geniuses and acrobats—and the congregation—who have honored his work with this ongoing restoration. 

## Note:

St. Nicholas is an active church and is not open for mural tours except on Saturdays, 11:00 a.m.–2:00 p.m., and escorted visits. Weekend masses are at 6:00 p.m. on Saturday and noon on Sunday. Docent hours may be delayed or cancelled due to church activities. Please check Facebook and the church website for change or cancellation notices before arriving.

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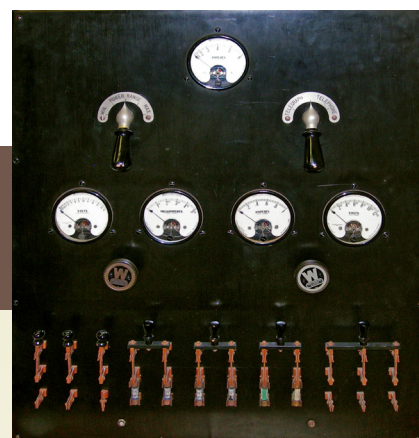


**The original colors of the murals begin to come back to life as a conservator works across the surface.**

The Society to Preserve the Millvale Murals of Maxo Vanka.



## Smithsonian Connection



**This replica transmitter retains some of the parts from the KDKA original.**

Smithsonian Institution, National Museum of American History, Bering Center, L2007.33.3.

## KDKA transmitter, c. 1921

**By Emily Ruby, Curator**

In the early days of radio, people experimented with broadcasting by communicating via Morse code with a spark-gap transmitter. Amateur radio enthusiasts built homemade receivers to listen to these early radio wave communications. World War I put a temporary stop to this amateur communication, but war research also produced improved transmissions and by the end of the war, enhanced radio transmitters enabled audio to be broadcast via the radio.

When Frank Conrad, a Westinghouse engineer, set up shop in his Pittsburgh garage, he used the improved vacuum tube transmitter and began talking and playing phonographs over the air on his amateur station 8XK. It soon became apparent that he had tapped a new communication and entertainment market, and his transmissions became so popular that locals started to request songs. When

Conrad's bosses at Westinghouse heard of his hobby, they encouraged it as a way to sell more receivers and applied for the first commercial radio license. On October 27, 1920, they received the call letters KDKA.

The studio in Westinghouse's East Pittsburgh Works broadcast the presidential election results between Harding and Cox on November 2 of that year. A *Pittsburgh Post* reporter called in the results to the Westinghouse office and they were read over the air while music played between the updates. The broadcast, transmitted on this machine, is credited as the first commercial radio broadcast. Within a few short years, the radio business grew and radios became an essential feature in American homes. Conrad remained with Westinghouse for 37 years and held more than 200 patents when he retired.