Schavernoch, Kupfer, and Bayreuth lighting master, Manfred Voss, added three laser beams to create *Ring* effects. Two were in the opposing tormentors, at a height of about 3 meters, and were not struck from position when other operas appeared on the same stage. Beams bounced off one hundred mirrors, permanently fixed for the summer season. The third laser was positioned upstage at the end of the road.

"This laser created the effect of the Rhine at the beginning and the end," Schavernoch notes, "but it had to be removed every time and reset when other operas in the repertory were played.

"These lasers are used for the two elements of water and fire. But fire has to distinguished," explains Schavernoch. "Magic Fire isn't like ordinary fire. For instance, Siegfried's funeral pyre burns with the effect of ordinary fire, but when the flames reach Valhalla, then it becomes laser fire. That's also the sort of fire you get in *Walküre III* and *Siegfried III*, an immaterial shimmering and glowing."

When Brunnhilde, the Valkyrie closest to Wotan's heart, disobeys him, he surrounds her with a new kind of Magic Fire, enclosing her in a neon cube, with firelike lasers to heighten the effect. "When Wotan strikes his spear three times in *Walküre* to surround Brunnhilde with Magic Fire," Schavernoch continues, "all three laser beams are instantly instituted. Then there's an accumulation of additional beams, which are given a higher speed by a computer program so they seem to vibrate. They change direction quickly, shooting over the hundred mirrors. So we have fire by technical means, but also with fog and masses of red light.

"Upstage, in a space 13 meters high and 12 meters wide, any light on the open rear stage doors created a sharp image. Like three rooms in

"...booed lustily at the end of the cycle's premiere."

a row, which was very bad. So we used Xenon lights in the main tower. Early on it was clear the actors would need very strong light on the stage, uniform lighting as they moved. So we banked a lot of low-voltage lamps at the sides of the stage. They give a very sharp, concentrated light, making those parabolas of light on stage.

"It's a rude, aggressive light, in line with the aggressive concept. It also brought the relief of the road - which is only two or three centimeters high - to a certain life. We built many devices into the road, so every line would have shown with overhead light. This light gives us a good combination of light and shadow."

Reinhard Heinrich, who once designed costumes for Bertolt Brecht's Berliner Ensemble, also designed the costumes for Harry Kupfer's now legendary Bayreuth *Flying Dutchman*. He points out that the Bayreuth *Ring* team had already worked out a concept for a production of the work at the Vienna Staatsoper. Both Kupfer and Heinrich insist that it was too modern for Vienna, so it was cancelled. Then they were invited to create a new *Ring* for the new Amsterdam opera house. When the Bayreuth commission arrived, however, they were generously freed from the Dutch assignment. Kupfer notes that these earlier ideas do not surface at Bayreuth, because they themselves are a bit older and all has been rethought.

"Early on, I had some historical details in the costumes for Bayreuth," says Heinrich. "But in rehearsals I cut all that out. Instead of customary materials, we used things which were-or lookedartificial. This supported our desire for stage-like visual signals. The weapons and other props are all clear plastic; Siegfried's sword, the Valkyries' spears, even the gods' suitcases are acrylic. We wanted to use the props defined in Wagner's libretto, but make them out of modern materials.

"The forms or silhouettes of the costumes are precise and realistic, but the materials are artificial. Harry Kupfer uses very unpleasant lighting. Aggressive lighting. Contrasts of black and white are very hard, extreme. Sometimes in this light, a moving plastic spear looks only like a flash of light. They lose their substance. We wanted a sense of becoming immaterial. Very far from Romantic Realism.

"For the costumes, it's very hard to find a line, or image, through all four operas. So I thought about Chicago's gangster bosses," Heinrich continues, referring to the Brechtian imagery found in this *Ring*.

"These operas begin in 1930 and end today," explains Heinrich-although Kupfer has suggested they may actually end tomorrow. "So we chose a kind of trenchcoat, cut like the 1930's but longer, to symbolize the gangster gods. All the god's wear hats, real felt, and sunglasses. Wotan has one lens blacked out because he is blind in one eye. Hagen wears a black leather coat, and sunglasses, so that you never see his eyes. The shapes of the costumes were easy, but materials weren't so easy to find or maintain. We've used a reflecting chintz, for instance. But the costumes have to be very practical, sturdy. The performers hardly ever stand. There's a lot of acting on the floor. "In the *Ring*, aesthetics aren't important," says Heinrich. "We aren't concerned with it looking pretty. If you make things right and true, then they will be beautiful. It's a special kind of beauty. I even thought about costumes so uninteresting that you wouldn't know anyone had designed

"...to take into consideration these many advances."

them. I don't care about calling attention to myself. You could say the sets are ugly, the costumes are ugly. Look, the entire set is a street, a road, coming from nowhere and leading to nowhere. Or coming from yesterday, if you like, and going to tomorrow."

Kupfer and his *Ring* team began planning three years before the premiere, with initial rehearsals beginning in summer of 1987, one year in advance. In April 1988, rehearsals began again, and Heinrich had costume mockups ready so the cast could get accustomed to the movements possible. There had already been a tryout of the sets in winter, with *Ring* conductor Daniel Barenboim on hand for that and for many early planning sessions and piano rehearsals. Costumes and sets had to be ready almost a month and a half before the premiere, for the final weeks of rehearsal. Bayreuth, with its extensive shops and capable technicians, is one of the few festivals that can meet such deadlines.

The efforts of Kupfer and company were booed lustily at the end of the cycle's premiere. But in spite of their *Ring*'s bleakness, the human emotions in it are powerful. And at the close, it offers hope amidst catastrophe as two children walk toward the future. Their torch, however, is only a flashlight.

Glenn Loney reports on performing arts for Theatre Crafts, Opera News, Dance, and other magazines. He is professor of theatre of Brooklyn College and CUNY Graduate Center in Manhattan.