

JOSIAH MCELHENY

Talks About *An End to Modernity* and *Conceptual Drawings for a Chandelier, 1965*, both 2005

SEVERAL YEARS AGO I started going to the Metropolitan Opera with friends and I was struck by the decor. It's an odd building in that it combines precepts of modern architecture with remnants of the nineteenth century, like lots of red velvet and gold leaf. I was particularly fascinated with the chandeliers, in part because I knew that they were perhaps the last great achievement of J. & L. Lobmeyr, the first glass company to work with modernist architects and designers like Adolf Loos. They're kind of Gilded Age/space-age objects, and they immediately looked to me like a galaxy or an explosion—a Pop image of the big bang. And just like the theater itself, they seem to have come from this weird transitional moment where modernism became infected with other influences. The spherical crystals feel of their time, for example, but they're also faceted and prismatic, which lends them a nineteenth-century opulence.

My initial thought was that it would be amazing to remake this object as a sculpture that had literally fallen from its normal space so that you could look at it up close, but also to modernize it by toning down its highly sparkling quality. In a way it would be like modernizing the end of modernism—but also creating an image of its explosive demise. Since the original chandelier already suggested the idea of the big bang, it led me to ask, "What if I remade the chandelier so that instead of it being a gloss on the theory, all of the decisions were determined by the actual science of the origin of the universe?"

About five years ago I began to discuss this idea with people at MIT, but the project really moved forward when I met the cosmologist David Weinberg. We ultimately realized that the sculpture could make a correlation between two important things. One is

that the history of the big bang is just that, a history, and although it's impossible to really draw a picture of the universe at any given moment, it is possible to ask what kinds of basic structures were being formed two, or seven, or ten billion years ago. So the first decision we made was that the length of each rod would represent a certain amount of time, and at the end of each one the arrangement of the glass pieces would show what kinds of galaxy formations were happening at the corresponding moment.

The second thing that the sculpture depicts in terms of science is the beautiful idea of the isotropic nature of the universe, which essentially means that any one place in the universe is just as likely to be as interesting or boring as any other. That's why it became important that the rods not come out in some kind of pattern but in a random way. A computer would randomly pick a point on the sphere, a length of rod, and then a rule-based version of the galactic cluster formations that would have appeared at that time. So the sculpture is like a 1960s manufactured object with its high-finish chrome surface, but it has a different level of complication and asymmetry—a specificity in terms of the lack of patterning—that's part of the atmosphere of the piece. The idea is not that the science would be legible to the viewer, but that injecting so much information would create more vectors for the audience to use and result in an altogether new kind of hybrid object.

To execute the sculpture, I fabricated around one thousand glass pieces by hand and collaborated with a company in California that figured out a way to create the roughly five thousand metal parts. I also went to Vienna and the Czech Republic to research Lobmeyr. As it turns out, Hans Harald Rath, the owner of the

company, came to New York in 1965 to present a set of designs for the chandeliers to Wallace K. Harrison, the Met's architect. Harrison rejected them all and handed him a book about galaxies and said, "I want something connected to this." And so Rath went back to his hotel and over the weekend came up with the basic design. There's even a picture in the Lobmeyr archive of a potato with toothpicks sticking out of it hanging in Harrison's model of the lobby. I didn't know any of this at the time I began my project, but one of the things that my work is most involved with is the way that ideas end up influencing all areas of cultural production, consciously or not. And it just so happens that 1965 was also the year of the discovery of cosmic background radiation, the first physical evidence of the big bang, which made front-page news.

The related film, *Conceptual Drawings for a Chandelier, 1965*, was shot in Super 16 at the Met and then the footage was combined with a series of animated drawings based on scientific attempts to diagram the big bang. What's interesting is that the drawings from these sources look almost like conceptualizations of the chandelier, so there's kind of a story arc to the film and you end up seeing the same idea from two sides. You can take the design milieu, and the more abstractly you look at it, the more complicated and full of content it becomes. On the other hand, you can also see that very sophisticated scientific notions result in visual abstractions with independent content of their own. Basically, the whole project exists at the intersection of specific concepts and abstract ones, of intentional and unintentional cultural products. And, finally, it's about how they all become interconnected and confused. □

