Multi-Axis Turning

BY MARK SFIRRI

I was quite amused several years ago when, after finishing a demonstration of multi-axis turning, an observer came up to me and asked if I had invented the process. I said that, although I did my first turning with more than one axis in 1976, the invention of multi-axis turning predated that by about three hundred years.

In the 1680's, the upper section of the leg of the cane back chair was turned on one axis and the lower portion turned on another. It was a technique employed to give the chair comfort and to give the illusion of a bent leg. Another example, from around 1700 in this country, was the pad foot turned leg, also turned on two axes. In that case, the turned tapered portion of the leg spills out into a pad with a wonderful sweeping line that defines the form and is a result of the intersection of the two axes and the imposed form. While the cane back chair has a leg that was engineered primarily to fulfill a functional requirement, the pad foot was a creative solution to an aesthetic concern.

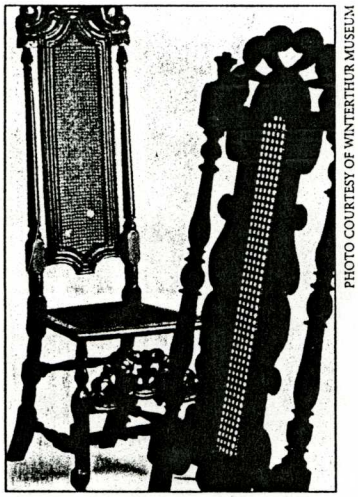
Then there were centuries of multi-axis silence—this amazes me. Whoever figured out the pad foot was ingenious, but why stop there? To me, it was the tip of an enormous iceberg of possibilities of form.

At this point, I should probably say that the study of these historic forms was what led me to turning the legs that I turn, but that couldn't be further from the truth. As a student of Tage Frid in the 1970's, I really wasn't interested in furniture history. I was influenced by my study of fine art, particularly modern art, but not by much that had happened in furniture before Art Nouveau. My interest in organic forms inspired by Art Nouveau fueled my carving, and I developed a great interest in turning as a carving technique. I have spent the better part of the past twenty-five years exploring possibilities of shape and effect by combining turning, carving, and split-turning in furniture, and in the 1990's, a lot of multi-axis turning for both sculptural objects and furniture. While experimenting one day, I happened on a form that looked remarkably like a pad foot detail. I remember exclaiming: "So that's how they did that!" I had never really given it much thought before that.

There is a connection between my "Spider Table" and a pad foot table. Although the similarity may not be all that apparent, both have two sets of axes that are not parallel but exist in the same plane. What does that mean? If you looked at both legs from a 45° angle, they would both be bilaterally symmetrical. In addition, there is a detail created at the intersection of the forms from one axis to the other. The details occur at different places and the forms are totally different, but they do have this connection. Both of them can be contrasted to my "Walking Table," in which the legs are turned on two non-parallel axes that are not in the same plane. The visual difference is that the piece takes on a certain animated quality, or put another way, it lacks the order that the other two share.

There has been a rediscovery of multi-axis turning over the past fifteen years or so, led by people like Stoney Lamar and Jean-François Escoulen, who turn sculptural objects. In the furniture world, Craig Nutt and Richard Scott Newman have experimented with multi-axis turning with strikingly different results. I find the challenge of figuring out the effects achieved by changing axes to be a source of continual inspiration.

Mark Sfirri makes sculpture and furniture. He lives in New Hope, Pennsylvania.



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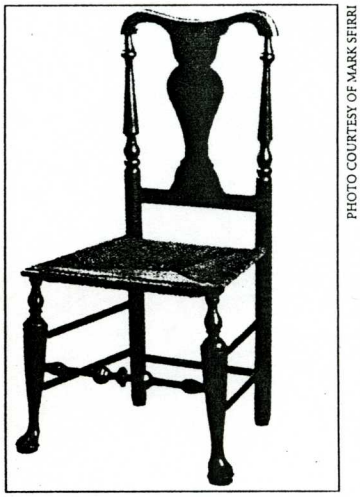

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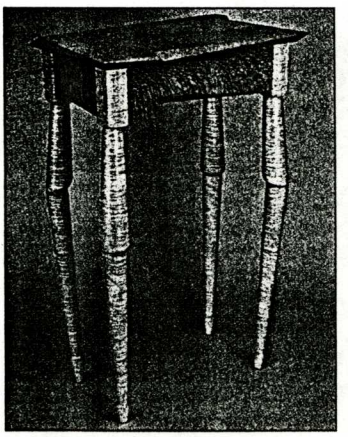

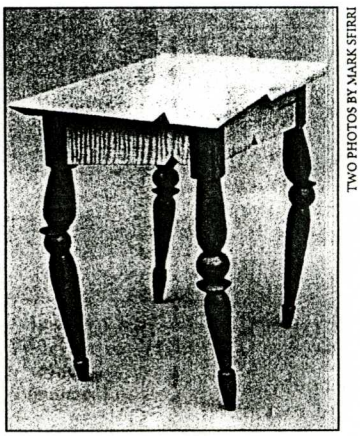

TWO PHOTOS BY MARK SFIRRI

CLOCKWISE FROM UPPER LEFT—
"Caned Chairs"; foreground: (1690-1710) Eastern Massachusetts; at rear: (1670-1690) England.
"Queen Anne Side Chair" (1780), New York.
"Walking Table" (1995), Mark Sfirri.
"Spider Table" (1993), Mark Sfirri.