

Playing with pluck

Lute expert strives for accuracy in Medieval technique

BY KATHLEEN CRAVEN

When it comes to historical music, Boise State music professor Joe Baldassarre really knows how to “pick” his instrument. He is one of the few experts on the playing technique of the Medieval (12th-15th century) European lute. The lute is a plucked-string guitar-like musical instrument with an oval shape and a deeply rounded back made out of thin strips of wood glued together edgewise. Having four to 14 courses, with each course containing one to three strings, the lute was plucked with a plectrum, or pick, fashioned from items such as quills or horn shards.

While lute-plucking technique may sound like a topic of little interest in a world of electric guitars and “anything goes” performance methods, classical musicians are dedicated to not only preserving historic musical scores, but also learning to perform them in the ways they were intended.

“There are a lot of people who are Renaissance and Baroque lute players,” says Baldassarre (above), “but there is a resurgence of interest in the medieval lute.”

A classical guitar player for most of his life, Baldassarre took up the lute about 20 years ago when he was a doctoral student at Case Western Reserve University in Ohio. Wanting to play the instrument correctly, he began poring over old manuscripts illus-



trated with paintings and illuminations of lute players.

“First I would look at those pictures and try to figure out if the painter was faithful to [the instrument],” he says. He studied the angle of the hand holding the lute, the angle at which the plectrum was being held and which direction the musician seemed to be stroking the strings. Then he compared what he’d learned with samples of Medieval repertoire that have survived the centuries.

Along the way he not only learned to play accurately, but also with relish.

“You can do more with the Medieval lute than people think you can,” he says. “When you have a live per-

formance, people are surprised at how versatile it is. There's a lot of freedom with the lute. Medieval music was composed like jazz — there's a lead sheet and you do a whole lot of improvisation on that."

Baldassarre enjoys that stylistic elbowroom, which allows him to experiment with how the right hand was used and what the final product may have sounded like. Since nobody really knows for sure, he's free to experiment with what is known about the style. Part of that style comes from the instrument itself, which in Baldassarre's case was made by his late father Antonio Baldassarre, an expert in instrument reproductions. The elder Baldassarre used plans supplied by his son, who researched them as one of his doctoral projects.

With no detailed plans available — what he found involved a simple description and measurements given as proportions (width to height) — much of his design was based on his studies of paintings, illustrations and the music itself. The BSU professor used his knowledge of Medieval instrument-building customs to add the artistic details.

"The rose (the center cutout detail) was often a copy of the stained glass window of the cathedral in the town where it was made," he says. "So I used the cathedral in Avila, Spain, as a model."

After further research on the types of wood available, as well as techniques used in creating other instruments, he had his lute crafted out of spruce, walnut and maple strips — three of each type because the number nine was important in medieval numerology as three times three (the number of members in the godhead).

The result is not only an accurate reproduction of a Medieval lute, but a work of art he can use to both support his research and hone his craft.

Baldassarre's expertise with the instrument was recently recognized by two renowned lute journals, both of which approached him on their own with the idea of writing about his research. *The Lute Society of America Quarterly* printed an article by Baldassarre on Medieval plectrum technique and *The (British) Lute Society's* journal *The Lute* published a three-part series of articles, pairing Baldassarre's research with that of David Van Edwards, a noted lute craftsman. Baldassarre has also been invited to speak to the society in London.

MICRON DONATION AIDS RESEARCH

A donation of lab equipment by Micron Technology is helping Boise State physics and engineering researchers investigate substances that will literally change the shape and function of engineering materials. The specialized X-ray equipment, magnetic oven, magneto-optical measurement tool and other instruments cost Micron \$1.7 million when new several years ago.

Materials science and engineering professor Peter Müllner is using some of the donated equipment to test shape-memory alloys — materials that literally change shape and mechanical properties in the presence of a magnetic field. Applications several years down the road might include ultra-fast valves in automotive engines, positioning tools for microsurgical procedures, or sensors to detect environmental contaminants.

In physics professor Alex Punnoose's lab, the new equipment helps with spintronics research, an innovative field that uses the magnetic property of electrons to sense, store and process information.

CENTER LAUNCHES 'IDAHO ISSUES ONLINE'

Boise State University's Center for Idaho History and Politics unveiled a new online public policy journal in late September. *Idaho Issues Online* is published twice yearly for general audiences and academics. The goal of the journal, which presents public policy and its impact as related to a specific theme, is to foster critical thinking about political and historical problems of vital importance to voters and policymakers. The center is administered by the College of Social Sciences and Public Affairs.

The first issue, available at www.idahoissues.com, looks at Idaho's five major Indian tribes — Coeur d'Alene, Kootenai, Nez Perce, Shoshone-Bannock and Shoshone Paiute — from both an historical and public policy perspective. The next issue, to be published in spring 2005, will examine Idaho prisons and the accompanying range of social problems that challenge state policymakers.

Idaho Issues Online features three or four feature articles written by scholars as well as short profiles of significant people working on or embroiled in the issues under discussion.

BSU SELECTED FOR FAA RESEARCH CENTER

Boise State was selected as a partner in a new Federal Aviation Administration research center to study cabin air quality and conduct an assessment of chemical and biological threats in airliners.

The team, led by Auburn University, will include researchers at Boise State, Harvard, Purdue, Kansas State, Cal Berkeley and the University of Medicine and Dentistry of New Jersey. Boise State electrical engineering professor Joe Hartman will lead Boise State's research.

The FAA Air Transportation Center of Excellence for Airliner Cabin Environment Research is considered a world-class partnership of academia, industry and government formed to identify solutions for existing and anticipated airliner cabin environment problems. It will receive at least \$1 million in funding the first year and \$500,000 in each of the second and third years. Matching funds will be provided by the private sector.