

School for Blind Children

I N S I G H T S

Art Students Get a Feel For Botai Culture

A long time ago, more than 5,000 years ago, a group of people known as the Botai built their villages on a vast Eurasian steppe. They dug their homes into the earth of this cold, dry place and created villages that ranged from about 45 houses to as many as 160. Their pithouses were filled with the bones of horses, and some of these bones were incised with geometric designs. They made clay pots and added designs. And they shaped horse jaws into thong smoothers to work their leather. Now some of these Botai artifacts—or ones that look just like them—have made their way into an art room at the School for Blind Children. Just how did it happen?

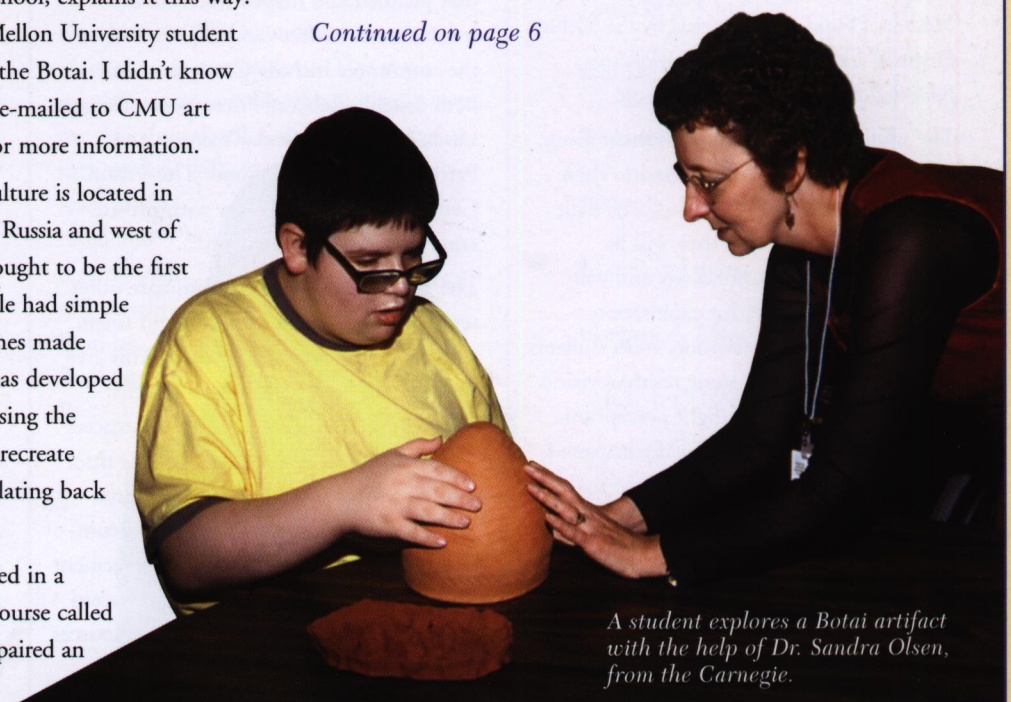
Carol Kreiser, art teacher at the School, explains it this way: “I got a request from a Carnegie Mellon University student to present a workshop here about the Botai. I didn’t know anything about that culture.” She e-mailed to CMU art student Amanda Amodio to ask for more information.

Amodio responded: “The Botai culture is located in northern Kazakhstan, just south of Russia and west of China. The Botai civilization is thought to be the first to domesticate horses... The people had simple weaving techniques and wore clothes made mainly from horses. So our class has developed an artistic spin from these ideas, using the Botai carving designs as a basis to recreate clothing, artifacts and a website relating back to that era.”

The students at CMU were enrolled in a highly unusual multidisciplinary course called “Human Algorithms.” The course paired an

archaeologist from the Carnegie Museum of Natural History, Dr. Sandra Olsen, with a CMU computer science professor, Dr. Yang Cai, who is also an artist. The class was listed as an art class. The students used Botai designs to create their own, highly tactual art work. Now they wanted to see how visually impaired people would respond to their work and if they could recreate the designs based on their tactual explorations. Hence, the request to present a workshop at the School. (An algorithm, by the way, is a process or set of rules to be followed in problem-solving operations. Although it usually refers to computers, in this class it referred to human behaviors.)

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A student explores a Botai artifact with the help of Dr. Sandra Olsen, from the Carnegie.

BOTAI ARTIFACTS

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11 a.m., Nov. 3: The group arrives in the art room. Among the group are seven or so CMU students, enrolled in the Human Algorithm class, and their teachers. Dr. Sandra Olsen, the archaeologist, is present and smiling widely, enjoying the art room surroundings and the group of young, visually impaired people handling Botai artifacts. Olsen is curator, Section of Anthropology, at the Carnegie. She has been studying the Botai since 1993 as part of her interest in the domestication of horses. Under her direction, one Botai pithouse has been excavated. Around the village numerous artifacts, including horse bones, stone tools, scrapers and small pottery shards, were uncovered. The Botai people impress all kinds of materials into their pots, including fiber, cloth, cordage and baskets. The incising makes interesting designs on the pots and the textures make them less likely to slip out of someone's hands.

Dr. Yang Cai, from the School of Computer Science at CMU, is thrilled by this amalgam of the arts, archaeology, social sciences and psychology. He has long been interested in how humans have different sensing abilities and he values his association with a blind faculty member at CMU. He is eager to know how the students at the School for Blind Children will respond to the textures of Botai artifacts.



His students pass around a variety of objects, including pottery, basketry and textiles. There are clay dolls, including a female body with notched-in designs. Cai's students, mostly from the art department, took Botai design patterns and put them on objects of their own making, such as a ball and a sand blasted bottle. They distribute woven braids and a woven hat. They also display a clay village, showing the layout of a Botai settlement.

One by one, students in the School's art room handle and respond to these artifacts. One or two of the young people begin working their own pieces of clay to replicate the designs. Art teacher Kreiser is pleased that her students have learned about the Botai culture from the tactile perspective. "Good work," she says, when she sees students moving their fingers over the clay and woven shapes and working with clay to make their own designs.

The CMU students have brought along

music to add zest to the morning's activity. Dr. Cai ends the class with great generosity by distributing a small FM radio to each student who participated.

What did these CMU students learn from their workshop? "Touch is a theme for me," Cai says. "In this class, we learned what is good for people to feel. Raised and



enlarged images on bone and clay were good, images on rubber not as good. This was a homework assignment for my class. It got the students involved. It was about the nature of human beings. My student, Amanda, planned it and organized it out of her interest in social awareness."

Yang Cai hopes for tangible results from the class, including the creation of a web site on Botai culture for Carnegie Museum. He would also like to see a Botai archaeological exhibit with perhaps one room designed specifically for blind children.

As for Dr. Olsen and her work on the Botai, she says, "We do a lot of outreach. We network and try to relate our work to the community." Olsen, too, is eager to continue with the collaborations initiated by Yang Cai. ❁

