

# BEADS

*Jeanne Paradise*

Phylis Morrison Memorial Day, October 6, 2002  
Massachusetts Institute of Technology

I want to say something about Phylis as I knew her best - as a learner and teacher, about the range of her mind and activity as she went about learning and teaching. I hope I can say something about this in a way that is recognizable to many of you, who have also shared the amazing experience of teaching and learning with Phylis. I want to tell you some of the story of our work together with beads, for it became a way of working we repeated in developing other pieces of work we shared.

About 1969, late one afternoon as I was gathering up my things at the Children's Museum to start home, Phylis came in and handed me a book, saying, "Muff, I think you will like this book". It was The Universal Bead, by Joan Erikson. I was delighted, and said, "Well, I know that book, I had something to do with its making. It's Joan who *really* interested me in beads."

Phylis too had found Joan's book playful and provocative. We sat down and began what became a thirty-year conversation about beads.

Joan's book took us into the story beads have played in history, when beads accompanied travelers over trade routes webbing the ancient world, as exchange by explorers conquering new lands, as currency by entrepreneurs buying new world property.

We knew peoples the world over had fashioned and worn beads, they turn up everywhere in archeological excavations and anthropological studies. We guessed the crafter's skill in making beads is nearly as old as humans. We talked about what beads mean to people in their cultures – amulets of magic, indicators of wealth and status, objects of beauty, body decoration and clothing, prayer counters.

We talked about the materials from which beads have been made - seeds, shells, stones, bones, clay, glass, and that halfway-between-clay-and-glass-material faience.



*seeds*



*shells*



*pebbles*



*bones*



*clay*



*glass*



*faience*

We became curious about the first beads - undoubtedly seeds, though we have the least archeological evidence of this since they most easily decay.

Joan's book set us considering our first contact with a bead – with the round, shiny, moving beads of a welcoming mother's eyes.

What a large part in our human history small beads have made!



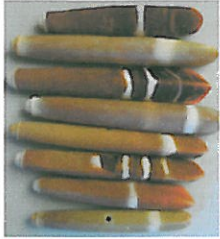
We covered so much ground and this was such rich material, I was utterly surprised when Phylis said, "But there is one thing Joan missed".

"Oh, can there possibly be more?"

"Well, Phylis asked, How did they drill the holes? What tool did they use? What peoples first made it? We can teach a course on this, about the design of beads and explore the technology of making beads."

"We would love it," I said, "but who would come?"

"Oh," said Phylis, "they'll come."



So we began. With Phylis, you start with a bead and end up with the world.

We gathered seeds from backyards, streets, woods, grocery stores, seed catalogues, nurserymen, the kitchen table.

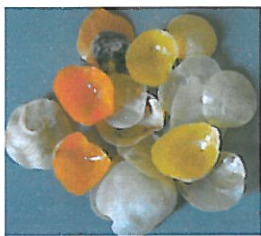
We gathered shells from beaches, museum shops, from friends making trips to far places around the world.



We bought bones from the butcher and boiled, then sawed them. We found a Native American who would sell us bird leg bones he prepared for use in beaded breast plates.



We gathered the flat beach pebbles and took to soapstone with saw, drills, sandstones and nose oil.



We dug clay and bought clay, formed clay beads, experimented with firing them in small kiln and once, on a camping trip, fired beads printed with leaves in the ashes under a fire while cooking our dinner on top.



Photos top to bottom of shells from around the world: cowrie shells, sea urchin spines, scallop shells, Kalahari Bushman ostrich egg shell beads, jingle shells, cone shells.



We studied the progression from clay to faience to glass. A few years later, Phylis pursued this connection, elaborating the story in her paper, Telling a String of Glass Beads.



We collected parts of computer boards from a high tech junkyard, bicycle chain parts, screws, nuts and bolts, round paper clips.



*Pump Drill*

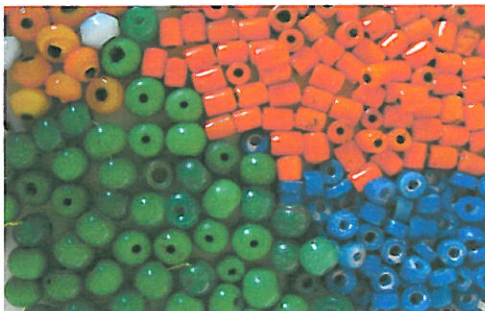
Phylis started drilling, as early people had in the old and new worlds, first with a stick rotated in the hands using sand as an abrasive, next in making awls, pump drills and bow drills, and finally, with a diamond point bit in a drill press.

She designed a simple pump drill everyone in our class could make and use. The drill point was a sewing machine needle, inserted into the dowel, broken off at the bottom of the "eye", to create a two pronged point.

We explored ways to drill virtually any hardness, including gray Atlantic coast beach pebbles and the Herkimer County's doubly-terminated quartz crystals we pounded and pried out of dolomite rock in upper New York state. Hard as any material comes, Phylis drilled through 15 of these quartz crystals by hand with her pump drill, slowly, slowly, slowly, then with the diamond bit drill press, a labor of love for the crystals and for the crafting.



*enlarged*



We went to museums: the Peabody Museum's seed bead collection, the Brooklyn Museum's ethnographic collections of beads, Brooklyn Botanical Gardens, Museum of the American Indian, to Canal Street in New York for glass beads by the pound.

We questioned experts in seeds used as beads by people around the world and collected until we had samples of most all those on their list. We made a study collection of these, recording all the information we'd discovered along with samples of all the seeds.



We photographed seeds that people have used as beads, like the very first one there is record of - *Coix Lachryma jobi*, Job's tears, referred to in the Vedic literature of India in 2000 B.C.E. and by Pliny in the year 70, who compared Job's tears to fresh water pearls.

This unique seed comes with it's own hole already made – the seed forms around a stem of the plant: remove the dried stem - VOILA - a bead ready to string.



We grew them in our garden, harvested a crop.



We searched out pieces of spinning, braiding, twining, and netting done by early peoples to learn what they knew and how they did it, so we could teach some of this macramé knotting and netting.

Everywhere we took slides - of beads in the world around us, of museum collections of necklaces for information on materials, design, drilling and threading.



*Twined tree bark braided with Ormosia seeds, Central America*



We were developing a course for the eye, the hand and the mind. We hoped to stimulate people to delight in seeing and touching things, in learning to combine things in new relationships.

We created a course in materials science, raising the technical problems of forming different materials, understanding them and gaining some power over them.

The history of the bead IS a history of technology as well as an investigation of the natural world.

We set out to make accessible the human and ethnographic connections- what peoples of different times and places have made and what for and what from, revealing the social meanings of beads.

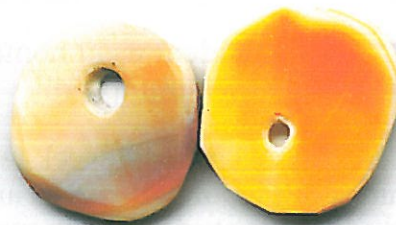
Finally, we were ready.

They did come. We taught it the first time at Project, Inc. a storefront art school in Cambridge. In that first class 26 students, ages 9 - 60 years old, many mothers and daughters, walked into a sunlit room. There were several large worktables, and tables with books about beads, materials, design and technology, and the study collections.

On one wall hung dozens and dozens of necklaces from around the world- made from materials we would use in our class to make and string beads - shells, stone, bone, seeds, clay, metals, glass, paper, feathers, buttons.



We looked at the holes early peoples had made in shell and stone, considered the tools they used, then tried out sticks and sand, awls, bow drills and pump drills ourselves. Several tables had samples of shells used in making beads by people's around the world, small baskets of collected shells and shell lumber, as Phylis called it, broken off pieces of big thick shells, which students used to roughly shape, then drill with pump drill from the flotilla of pump drills sailing across the middle of the table, and finally hand sanding – making a single bead, the first project.



Another table had small baskets of common glass beads, which could be used liberally in the second project, to design and make a simple single string of beads paying attention to the rhythm of color and shape.



*Simple strings*

We looked at a slide show of 'beads in the environment' – once you begin to see beads, you find they are everywhere! In a darkened part of the room all during the class, slides were projected of the ethnographic necklaces we'd photographed in museums, stimulating ideas in design.

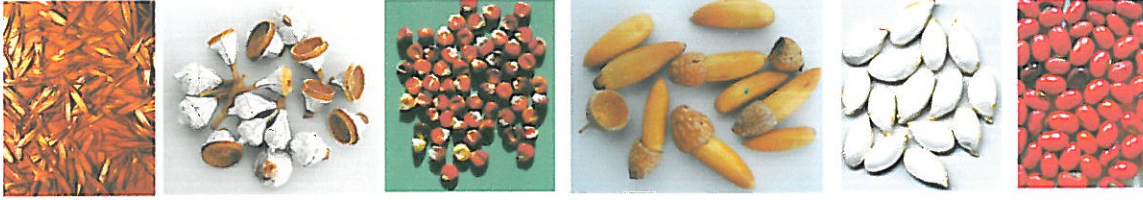
We passed around bowls of cheerios, life savers and popcorn, to string or to eat! At that, one student said- "Ach! Will you ladies stop at nothing!" Another said, "Oh, the materials are chosen with such loving care." At the end of class another said..." At first I was overwhelmed, but now I see that I am going to enjoy this even more than I expected to. I think I will see many things more closely, newly, not just beads."

Each student went home carrying a zip lock bag with materials and instructions to make her own pump drill.

So it went, each week featuring a new material, the surround of collected beads which each would take from and add to; the slides, the changing wall of necklaces, now including the students own work.



Seeds were the best - a feast for the eye, hundreds and hundreds of seeds of all colors and shapes - pure celebration!



Come along later to the bead and weaving room to see the slides, some necklaces, try your hand with a pump drill, string a few Job's tears, discover something new about a familiar or an exotic seed.

Phylis proved to be the very best imaginable of colleague and friend in this work and in all our work together. The reach and range of her mind and imagination took us deep and far. Her originality and invention constantly surprised and delighted. Her art and craft in photography, lettering, writing, twining and weaving, her knowledge and skill with tools of all sorts empowered us to believe we could learn in ways we'd not considered before. Her unlimited curiosity and passion for discovery energized and inspired us. Her generosity with time, with materials, with what she knew, and most of all, with herself... made learning with Phylis always feel like gift and blessing.

Photography by Jeanne Paradise