

Introduction

The spirit of an ancient musician is captured in a prized instrument. Though thousands of years have passed, the mark of the maker's hands is preserved in the clay, and the breath of the instrument's first player still lingers in its chambers. Countless musicians have come and gone, but the instrument remains. Today the instrument still speaks the same tones that the ancients played, and perhaps will continue to for thousands of years. The masterful musical creations of our distant ancestors inspire us to build upon their inventiveness, pressing onward and outward while adding a bit of ourselves. We share our own creations with today's world and place them, as an offering, in the hands of the future.

This book is about ceramic musical instruments. It is about a truly remarkable transformation: how the simplest of materials—clay or mud—can be used to make tools for producing one of the most complex human expressions—music.

Musical instruments are the focus of this work, but these objects don't make music by themselves. Music is the result of a player's energy and artistry channeled through an instrument. The instrument is a tool that transforms energy—blowing, tapping or strumming—into sound, and the player's artistry is what organizes that sound into music that speaks to others.

Since making music is an art, it is sometimes difficult to quantify or describe. However, the technology of how musical instruments work is based on the rather inflexible laws of physics and acoustics. Instruments must be designed and built according to certain technical rules and limitations, or they just won't work. Despite these requirements, building



Fig. 1.1
Pre-Columbian Rattle
Ceramic rattle in the form of a head. 3 inches in height, from the Suchiman site, Santa Valley, Peru. Field Museum collection.

instruments is also very much an art, as you'll see from the remarkable creations and variations shown in the pages of this book. You'll also discover that the visual aspects of musical instruments have an impact on their sound and the way we perceive it.

Is all sound music? Are all sound-producing devices musical instruments? Attempting to answer those questions could fill a book—another book, not this one—so you'll have to decide for yourself. This book's definition of music is broad, as you'll



Fig. 1.2
Chimu Whistling Vessel
 8 inches in height, Chimu culture, Peru, 1000-1470 A.D.
 Field Museum collection.

discover when you listen to the wide variety of selections on the accompanying recording—from the refined melodic strains of Vivaldi and Tchaikovsky to the earthy, primal wailings of bizarre pre-Columbian wind instruments. Despite their stylistic diversity, all of the sounds on the CD are united by their common source in clay.

From Mud to Music is also about the art of combined forces. Clay instruments have been made in all parts of the world for thousands of years, and will likely continue to be made for countless years to come. This book will help you explore and experience clay instruments from all over the globe, from the past to the present. As you'll see, modern builders of ceramic musical instruments continue a tradition that reaches back to ancient times, and is still vibrant today.

The Early Days

The origins of musical instruments are enshrouded in the mists of prehistory. It is likely that instruments have been around since the dawn of humankind's existence, but little is known about the earliest people or what role music and instruments played in their lives. Most musicologists, anthropologists and archaeologists agree that the earliest musical instruments were probably fashioned from natural objects, such as bamboo, gourds, fruit skins, nut shells, hollow logs, stones, bones and animal horns. Many of these materials can be played as percussion or wind instruments in their naturally found state, or with simple modifications such as blow holes or finger holes. However, very few examples of these instruments survive from prehistoric times, because most of these materials easily decompose when exposed to the elements. Additionally, items that have survived in well-protected sites such as graves and tombs can be subject to a variety of interpretations as to their possible musical use. Was a bone or a gourd with holes in it played as a flute, or did it serve some other purpose?

To early people, the concept of a musical instrument may have been radically different from what it is to most of us today. The modern world considers an instrument to be an inanimate object, a tool for making music. Most, if not all, indigenous cultures hold animistic beliefs. Animists possess an understanding that everything in the universe has a spirit and life force. Believing in the interconnectedness of all things, these societies might think of an instrument's voice as the spiritual union of all the entities and forces—clay, fire, air, wood, animal hides, tools and humans—that communed to create it. If an instrument was formed in the image of a deity, these combined forces might make it a potent entity and a respected force in the domain of a shaman or spiritual leader.



Some ancient cultures used musical instruments symbolically. For example, in sacrificial rituals honoring the Aztec divinity Tezcatlepoça, a young man was prepared for sacrifice by being instructed in how to play a clay flute. For a brief time he lived a life of luxury, traveling among his people with a royal retinue. He would often be stopped in the streets to play a melody on his flute as the crowd bowed before him and treated him as a representative of their deity. When the time came for him to be sacrificed, he performed a symbolic ritual, breaking a clay flute on each of the steps of the temple as he ascended to his ultimate death.

For many people today, music is little more than a commodity that provides entertainment, but in earlier times it played a more significant role in daily life. Work was often wedded to song, in order to synchronize communal labors such as pounding grain, weaving fabric, towing ropes and pulling oars. Music's carrying power was used for signaling and communicating. Huge African slit drums transmitted coded messages over long distances from village to village. The powerful roar of drums, trumpets, cymbals and pipes played an important role in military battles. Immense ancient Indian kettledrums measuring five feet in diameter and weighing 450 pounds were transported into battle on the backs of elephants, their raucous din emboldening warriors and striking fear into the hearts of enemies.

Beyond its practical uses, music was also an element in sacred ceremonies such as marriages, funerals and adulthood initiations. A 17,000-year-old cave painting in France depicts a dancing shaman wearing an animal skin and playing what appears to be a musical instrument. For thousands upon thousands of generations, music has been used as a tool to heal the sick, appease the gods, communicate with ancestors and divine the future.

Even today music transcends the ordinary and

seems magical in its power. Though we are not always consciously aware of its effect, music is a powerful stimulant to the senses. Sounds merely vibrate our eardrums, but music penetrates much deeper, speaking to our minds and our hearts. A simple melody has the ability to transport us to another time or remind us of a special moment. Music is often the preferred method of communicating with the gods. Singing and chanting are spiritual practices used to focus on the divine in many religious traditions such as Buddhism, Hinduism and Native American spirituality. Music is one of the best aphrodisiacs, creating an atmosphere for intimacy and connection. Whether or not one believes in the inherent magical influence of an instrument or the sounds it produces, the raw power of music remains a tangible and undeniable truth. Music has changed people's lives and their perceptions of the world, and has altered the course of history countless times.

Clay seems magical in its transcendence as well. In firing, it changes from something extremely frag-



Fig. 1.3

Foot Whistle

5 inches in length, replica (Mexico, 20th century) of a whistle from the Tlatilco culture, Mexico, pre-classic period approx 1000-300 B.C. Collection of Barry Hall.

ile—dried mud—to a material strong enough to survive for millennia. Clay’s remarkable plasticity allows it to be shaped into an incredible variety of forms for musical instruments, yet when fired it is one of the most durable natural materials on our planet. Fired clay’s inherent permanence is one reason that so many ancient examples of ceramic musical instruments have endured for thousands of years, allowing us to explore and appreciate them today.

Unlike the earliest instruments, which were made from sticks, gourds, bones or shells, clay instruments are made “from scratch.” That is, they aren’t built by modifying an existing object, but created from a moldable substance: the material of the Earth itself. This infinite “shapability” provides ceramics artists with an unparalleled flexibility to express themselves—their ideas, beliefs, hopes, fears and fantasies. In a way, it enables ceramics artists to pour themselves into the vessels they create. Evidence of this very personal process abounds throughout the pages of this book.

In addition to clay’s durability, the preservation of so many early ceramic instruments results from their special treatment as objects of reverence and special significance. A number of ancient cultures, from Egyptians to Mayans to Vikings, buried musical instruments with their dead, perhaps intending them for use in the afterlife. As a result of the protection provided by tombs and graves, some ancient clay instruments are so well preserved they can still make music today.

We learn about early cultures from the objects they leave behind. We can “see” into the past through paintings, textiles, sculpture and ceramics that depict people performing both ordinary and special activities. Ancient musical instruments let us “hear” into the past through the sounds and music they produce. This avenue of communication with our ancestors is extremely powerful because it is so intensely direct. Music is truly a universal language. Its vocabulary is



Fig. 1.4

Peruvian Whistling Vessel

7 inches in height, from the Vicus culture, Peru, 400 B.C.-700 A.D. In this double-chambered vessel, the whistle assembly depicts a person playing a double flute. The instrument’s sound emanates from holes where the figure holds the flute to his mouth. Phoebe Apperson Hearst Museum collection.

primal and timeless, and speaks to all people regardless of their culture, geography, or the time in which they live. A musical instrument can be a thread of communication between people who have never met, never lived in the same time or place, and never even seen or experienced the same things. Alfonso Arrivillaga Cortés, a musicologist and researcher from Madrid, illustrates this connection to the past in the following description of his experience playing ancient Central American instruments in the dusty cellar of a Guatemalan museum:

It thrilled me to think that some of these pieces had not been played for centuries, that where my lips now rested, ages before had rested the lips of an ancient musician, priest or simple farmer in Central American Guatemala.