The Archeology of Percussion by Elias Truitt

For thousands of years, percussion instruments have formed the basis of music and rhythm, revolutionizing how humans have been able to communicate, celebrate, and express themselves. Emerging from multiple different cultures around the world during the Neolithic era, percussion instruments were some of the first instruments to be crafted and used for ceremonies, celebrations and religious rituals. After decades of research and several technological advancements, archeologists and anthropologists now have an extensive knowledge on the history of percussion instruments and their importance to many of the earliest known societies.

Ancient Asian cultures began experimenting with rhythm and percussion by digging pits in the ground and covering them with planks, then jumping on the planks to create a loud percussive sound. Other cultures like New Guinea and India first experimented with percussion by digging two cone-shaped holes in the ground and using the ends of the holes to create resonance. However, the most concrete examples we have of early percussion instruments come from Mesopotamia and North Africa, mostly because of their visual depictions and written records. Scientists have obtained records depicting ancient drums and other instruments as old as 3000 B.C.E, in addition to instruments and artifacts that were buried in the tombs of ancient Mesopotamian and Egyptian citizens and royals. Often referred to as "membranophones," or frame drums, these early percussion instruments were made from stretching dried reptile or fish skin over wooden bowls or cooking pots, then tapping or beating the skin with one's hand to create a unique resonance and tone. Over time, the fish and reptile skins would be replaced by animal hides to create a louder sound, the wooden bowls would be replaced with clay pots, and we would also see the incorporation of sticks or beaters to create a louder and more powerful sound. African cultures like the Swazi tribe were some of the first to integrate the use of wooden

or bone sticks to beat the drum, however this was often reserved exclusively for men (Dean 2011).

Another important innovation from the Egyptian and Mesopotamian cultures was the creation of "idiophones." Often referred to as clappers, these simple instruments allowed for loud percussive sounds often by just shaking them or smacking them together. Mesopotamian clappers were shaped like boomerangs and were clapped against each other, while Egypt was one of the first cultures to a create a single-hand clapper, in which the two clappers are attached at the base of the handle and the clappers were shaken to create a clapping effect (Duchesne-Guillemin 1981). Evidence of shakers or rattles have also been found in Egypt and Mesopotamia, often made of clay and filled with small rocks or pebbles to create a rattling sound, which would eventually evolve into the popular Latin instrument: the maraca. As materials like metal became more available in places like Mesopotamia and Greece, this allowed artisans to mix different metals to create new types of percussion instruments for different uses. Cymbals were originally made by shaping and hammering bronze into circular shapes by hand. They were first shaped like bowls and would be smashed together to create a loud crashing sound, but over time they were flattened and stretched to create more distinct and varied sounds. Cymbals would go on to become one of the most influential aspects of Turkish culture, and Chinese and Indian cultures would later use this technology to create ceremonial gongs and bells (Pagliaro 2016). These instruments were initially used for religious purposes, as Egyptians would often shape their ritualistic bells into mythological animals, however they were also later incorporated into military bands.

As with cymbals and bells, many of the earliest percussion instruments were used for religious ceremonies and rituals. In Mesopotamia, some of the most commonly depicted drums

are the mezu, balag, and the much larger su-ala, all of which were used as both accompaniment for religious chants and liturgy as well as celebratory events. Drums have also been found buried with the bodies of high social class members of Mesopotamian society. Mesopotamians had ritualistic and symbolic techniques for killing and skinning animals to create the drums, treating the skin with beer, wine, and flour before stretching across the frame of the drum to dry (Dean 2011). Early African cultures also emphasized the symbolic nature of rhythm and dance, as they believed drums to be instruments of healing that allowed for the purging of evil spirits. African tribes also used ceremonial drums for royal gatherings. Each tribe would create their own distinct percussive rhythm as to be identified by other tribes or enemies. African countries like Uganda and Ethiopia still attach an intense spiritual significance to the drums, and are responsible for the creation of one of the most famous African drums: the talking drum. These drums were able to bend in pitch and allowed for easy communication between the king's guard. However, Africa's earliest known percussion instruments come from the country of Egypt, as many Egyptian depictions of drums date back to 2000 BCE. Several Egyptian murals and scribes have been found that depict the act of dancing along to musical performers, as well as using instruments like finger cymbals. Egyptians also appreciated rhythm and music for both celebratory and ceremonial occasions, however musicianship was not reserved for high-class members of society as with many other cultures (Pulver 1921).

Early Asian cultures also had a great appreciation for percussion instruments. India is a notable developer of early percussion, as they created a variety of frame drums often used for funeral processions or Buddhist rituals. There is also evidence of written music and music theory being practiced in India as early as 200 BCE, as well as 10th century CE depictions of the Hindu god Shiva dancing with a drum and using rhythm as a way of creating life (Dean 2011). One of

the most sacred drums of early India was the damaru, as it was made by tying two human skulls together back to back and was played by hand. The damaru is said to have spiritual powers and is often featured in Indian and Tibetan depictions of the God Shiva. Chinese culture also placed great spiritual value on music and percussion, and would go on to influence many other Asian countries with their unique drums and playing techniques. In ancient Chinese culture, frame drums were an important part of Shamanistic rituals. The drums were often seen as a symbol of travel between spirit worlds, and would appear to the shaman in their dreams. Later, in the 5th century BCE, the teachings of Confucious encouraged the performance of music as a cleansing ritual, making musical instruments like drums more accessible to common people. Drums were also an integral part of Chinese theater during the Han Dynasty, wherein musicians, dancers, acrobats, and wrestlers would perform for the royal court as well as the general public. Large barrel drums called tanguus were also used in Tang Dynasty era orchestras.

The reason we have this knowledge about the history and uses of ancient percussion is because of many of the relatively recent archeological technologies and methods that have been used to better understand humanity's history. In just the last two centuries, archaeologists have made several significant discoveries that have helped us gain a better understanding of how and why these instruments were built. Typology is the main method in which archeologists are able to comprehend the chronology of ancient artifacts, and it has been notably accurate with percussion instruments. Similarly to other disciplines of archaeology, recent scientists have used methods like radiocarbon dating, dendrochronology, and metrology to create an accurate timeline for the creation and use of percussion instruments (Anderson, etc. 2014). However, this is not a simple process, as it is rare that an ancient percussion artifact is intact enough to recreate the sound or noise that it was initially made for. Because of this, ancient instruments often need to be completely reconstructed or recreated in order to study them and understand their purpose. One of the most recent discoveries in reference to ancient drums was a Neolithic Era chalk drum found in a burial site in Yorkshire, England by Allen Archeology. Using radiocarbon dating, archeologists were able to find that the drum was over 4,500 years old.

Music archeologists often divide their research into four principal source groups: music depictions, sound artifacts, written sources on music, and living music traditions (Adje Both 2009). Visual and written depictions are an important aspect of the archeological study of music, as they can provide detailed explanations on how the instrument was used and what context it was used for. Archeologists will also study caves and ceremonial spaces in which the instruments were used in an attempt to understand how these percussion instruments would have sounded when they were originally created. Sound archaeologist Dr. Rupert Till explains that scientists are able to use computer modeling to reconstruct the acoustics of certain archeological sites in order to uncover the significance of the area (Till 2014). In his recent study of the Stonehenge monument, Dr. Till found that the stones actually amplified sound that was made within them, creating an echo and resonance that stayed confined within the circle of stones. These studies help to unveil crucial information about the importance of sound during rituals in the Neolithic Era, as well as the understanding that these ancient humans had of how sound could be manipulated.

These archeological discoveries not only allow us to gain a better understanding of our ancestors and their culture, but they also signify an integral aspect of humanity as a whole: our appreciation for rhythm and music. Because of the dedicated scientists and historians that have uncovered the archeological history of percussion, modern humans are able to trace our affinity for rhythm as an emotional and spiritual expression all the way back to the inception of complex societies. As for the Neolithic-era humans that initially created these percussive technologies, their advancements in resonance and sound technology have allowed for continued innovation in the realm of drumming and percussion. With the introduction of the drum kit and electronic drums, humans are still creating new ways to express themselves through rhythm and percussion. Word Count: 1,696

Works Cited

Adje Both, Arnd

2009 Music Archeology: Some Methodological and Theoretical Considerations.

Yearbook for Traditional Music 41: 1-11

Anderson, Robert, Arturo Chamorro, Ellen Hickmann, Anne Kilmer, Gerhard Kubik, Thomas Turino, Vincent Megaw, and Alan R. Thrasher

2014 Archaeology of instruments. Oxford University Press

Bellia, Angela

2021 Introduction. Percussion Instruments in the Ancient World: Towards an Archeology of Musical Performance. *Pallas* 115: 9-23

Dean, Matt

2011 The Drum: A History. Scarecrow Press

Duchesne-Guillemin, Marcelle

1981 Music in Ancient Mesopotamia and Egypt. World Archeology 12(3): 287-297

Pagliaro, Michael

2016 Basic Elements of Music: A Primer for Musicians, Music Teachers, and Students. Rowman & Littlefield

Pulver, Jeffrey

1921-1922 The Music of Ancient Egypt. *Proceedings of the Musical Association* 48: 29-55

Schlesinger, Kathleen

1912 A Bibliography of Musical Instruments And Archeology, Intended As a Guide To The Study Of The History Of Musical Instruments. W. Reeves

Schofield, John

2014 The Archeology of Sound and Music. World Archeology 46(3): 289-291

Till, Robert

2014 Sound Archeology: Terminology, Paleolithic Cave Art, and the Soundscape. *World Archeology* 46(3): 292-304