

The Bullroarer

By Dr. James Whiting

The bullroarer is a pseudo-musical instrument that produces a howling or whirring sound, or “call,” when spun in a circular motion.¹ Bullroarers consist of a flat, perforated piece of bone, slate, flint, ceramics, or wood, measuring from 10 to 35 cm in length. This piece is fastened at one end to a string made of fiber, hair, gut, leather, or cord. By holding the string and spinning the bullroarer in circles over your head, it twirls through the air, creating a unique, eerie “whirring” sound, like a swarm of winged insects.

The quality and impact of a bullroarer’s call varies with factors such as the strength, endurance, and expertise of the swinger; component materials of both bullroarer and string; weight; shape and length (oval, rectangle, and tear-drop shapes); thickness and edge detailing; and environmental acoustics (proportions of open or enclosed space, resonance, damping, humidity).²

Nineteenth-century scholar Rev. Lorimer Fison conceived the term “bullroarer” when comparing the traditional Australian instrument with a wooden toy of the same name from his childhood.³ Modern-day rural communities maintain use of the instrument’s traditional names, such as the *tundun* and *hevehe* in Australian Aboriginal and New Guinean cultures respectively.⁴ Fison’s term “bullroarer” is the most commonly utilized name for modern-day musical applications.

ORIGINS

From the late nineteenth century, and spanning into the twentieth century, anthropologists worldwide recorded bullroarer mythologies, rituals, and initiation traditions. They argued their significance in theories of diffusion and independent invention. Archaeological and Paleolithic⁵ findings have determined that the bullroarer was used among many of the world’s cultures, including the Ancient Greek and Egyptians, Aborigines of Australia, Native Americans of North and South America, Sami of Scandinavia,⁶ and the Maori peoples of New Zealand.⁷

While each iteration of the bullroarer varies slightly throughout these cultures, its documented use is in spiritual and functional contexts. The Australian Aborigines and Ancient Greeks

used the bullroarer to imitate spirits during ritual ceremonies, including the initiation rituals of boys becoming men.⁸ In Australian and New Guinean ancient culture, women were forbidden (under pain of death) to see, touch, or use the bullroarer.⁹ Many researchers believed the bullroarer was interpreted as a phallic object¹⁰ and given to newly circumcised young men in order to promote healing and to “warn off females.”¹¹

The Maori people of New Zealand refer to the bullroarer as the *purerehua*, meaning “moth,” due to the instrument sounding similar to a moth’s wings during flight. The *purerehua* has been used extensively in both ancient and modern-day ceremonies and rituals, including those of healing and various rain dances. Additionally, the Maori people use the *purerehua* in popular music showcasing the New Zealand landscape.¹² The Native Americans used bullroarers similarly to the Maori culture, to summon wind and rain, promote fertility, and ward off evil spirits.¹³

MODERN APPLICATIONS

In parallel with various traditional uses, the bullroarer is used as a pseudo-musical instrument in several musical compositions. As the sound of a bullroarer is caused by sound waves in unen-



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closed air, it is classified as a free aerophone¹⁴ and is used mostly by percussionists.¹⁵ Composers throughout the twentieth and twenty-first centuries have utilized the bullroarer as a soundscape, depicting imagery of certain cultures or raw landscapes. Experimental composer Henry Cowell (1897–1965) was perhaps one of the first to incorporate the bullroarer in his 1925 work “Ensemble” for string quartet and “thunder sticks.” Peter Garland provides an anecdote referring to the bullroarer by both of these names: “One of the thunder sticks came loose while being swung and headed in a heroic, sacrificial trajectory straight at a music critic in the audience! That must have been one *powerful* bullroarer!”¹⁶

Cowell’s 1941 piece “Trickster Coyote” also called for a bullroarer among other percussion instruments. Michael Udow calls for six bullroarers in his “African Welcome Piece” (1973) for percussion ensemble and choir. Through the use of the “multilined mode of drumming,” which often accompanies dances in a tribe, Udow utilizes polyrhythmic structure and cross rhythms to create an African musical style.¹⁷

Other compositions with the use of the bullroarer include, but are not limited to, Peter Garland’s “Three Songs of a Mad Coyote” (2008), John Luther Adams’ “Inuksuit” (2009), Derek Bourgeois’ “Symphony No. 59” (2010), Sean O’Boyle’s “Concerto for Didgeridoo” (2010) and “Percussion Section Concerto” (2013), Brian Reitzell’s score for NBC’s *Hannibal* (2013–2015), Julie Giroux’s “Of Blood and Stone” (2015), and Timothy Jones’ arrangement (2002, revised 2015) of Dean Gronemeier’s “Tied by Red” (1995). Additionally, the bullroarer is featured in the movie *Crocodile Dundee II*, where actor Paul Hogan uses it to “make a phone call” to the local Aboriginal community.

CONCLUSION

It is challenging to determine the earliest ancient cultures to construct and utilize the bullroarer. While the bullroarer is most frequently associated with Australian culture, one could suppose that the Aborigines (as the oldest civilization, according to Klein)¹⁸ were the first to use the bullroarer in their rituals and ceremonies. While the bullroarer is still used today in traditions across a range of cultures, its uses have spread into the art of music—with credit to composer Henry Cowell for its initial use in “Ensemble.”

ENDNOTES

1. *Encyclopedia Britannica*, 6th ed., s.v. “Bullroarer,” accessed April 23, 2017, <https://www.britannica.com/art/bull-roarer>.
2. Beth Hagens, “Bullroarers,” accessed April 25, 2017, <http://www.duckdigital.net/FOD/FOD1049.html>.

3. Ancient Origins, “The Bullroarer: An instrument that whirls through cultures and time,” accessed April 20, 2017, <http://www.ancient-origins.net/artifacts-other-artifacts/bullroarer-instrument-whirls-through-cultures-and-time-004928?nopaging=1>.
4. John H. Beck, “Glossary,” in J.H. Beck (ed.), *Encyclopedia of Percussion Instruments*. Second ed. New York: Routledge, 2007: 36, 97.
5. Paleolithic is a prehistoric period of human history distinguished by the development of the most primitive stone tools, from 2.6 million years ago to 5,000 years ago.
6. Iain Morley, *The Evolutionary Origins and Archaeology of Music*, PhD dissertation, Cambridge University, 2003: 33
7. Ancient Origins.
8. Neville Fletcher and Joseph Lai, “Australian Aboriginal Musical Instruments – The Bullroarer,” Paper presented at the Innovation in Acoustics and Sound Conference for the Australian Acoustical Society, Adelaide, Australia, November 2002: 1.
9. Hagens, “Bullroarers.”
10. *The Columbia Encyclopedia*, 6th ed., s.v. “Bullroarer,” accessed April 23, 2017, <http://www.encyclopedia.com/reference/encyclopedias-almanacs-transcripts-and-maps/bull-roarer>.
11. Hagens, “Bullroarers.”
12. Ancient Origins.
13. Hagens, “Bullroarers.”
14. An aerophone is any musical instrument that produces sound primarily by causing a body of air to vibrate.
15. Tom Irvine, “Bullroarer acoustics,” *Vibrationdata*, May 2007, accessed April 20, 2017, http://www.vibrationdata.com/Newsletters/May2007_NL.pdf.
16. Peter Garland, “Henry Cowell: Giving us permission,” *Other Minds*, April 2006, accessed April 17, 2017, http://www.otherminds.org/pdf/Henry_Cowell.doc2.pdf : 20.
17. Michael Udow, “African Welcome Piece,” Alfred Music, accessed May 9, 2017, <http://www.alfred.com/Products/African-Welcome-Piece--82-32816.aspx>.
18. Christopher Klein, “DNA Study Finds Aboriginal Australians World’s Oldest Civilization,” *History*, September 23, 2016, accessed April 23, 2017, <http://www.history.com/news/dna-study-finds-aboriginal-australians-worlds-oldest-civilization>.

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