



INVENTED INSTRUMENTS

by Gregory Kozak



Canadian-born Gregory Kozak is a composer, musician and co-founder (with Justine Murdy) of Scrap Arts Music – one of Canada's leading percussion ensembles and the only invented instrument ensemble that tours globally.

Gregory Kozak is also the designer, fabricator and of Scrap Arts Music's invented sculptural instruments.

Each instrument designed by Gregory incorporates materials recycled from in and around Canada's west coast. Under his musical direction, Scrap Arts Music has developed innovative techniques to create rich arrays of sounds and textures. Choreographed performances give dynamic expression to original percussion-based music.

While in his teens, Gregory Kozak's desire to create his own orchestra of invented instruments took root. He was inspired by some of the most innovative composers of the 20th Century including Edgard Varèse, John Cage, Harry Partch and the Baschet Brothers – innovators renowned for their use and/or creation of unconventional instruments.

With Scrap Arts Music as his vehicle, Gregory Kozak gives full expression to the physicality of percussion and the passion of music while using unconventional instruments.

CLASSIFYING INSTRUMENTS

Over the centuries, musical

instruments have been categorized in a variety of ways.

One system used widely by ethnomusicologists is the Sachs Hornbostel Classification System. When it first appeared in 1914, four top level categories were identified: idiophones, membranophones, chordophones, and aerophones. A revision was made in 1940 when the new category of electrophones was introduced. Sachs Hornbostel Classification System is based on what first produces the initial sound in the instrument.

Performances by Scrap Arts Music incorporate up to 145 unique hand-made instruments in a 90-minute concert.

While most traditional percussion instruments fall into the two main categories of membranophones and idiophones, Gregory Kozak's ever-growing orchestra of invented instruments also includes chordophones and aerophones.

Idiophones

Idiophones are a class of musical instruments in which sound is primarily produced by the actual body of the instrument vibrating, rather than by a

string, membrane, or column of air. Idiophones can be sounded in a number of ways, including stamping, shaking, striking or plucking. Traditional idiophones include bells, chimes, xylophones and maracas.

Gregory has created 73 original idiophones including:

- 6 Art Shells
- 1 Plankophone
- 4 Resonating Boxes for Ribs
- 1 Nail Violin + Bow
- 1 Gong Array (with 3 gongs)
- 1 Bell Flower
- 13 Alumo-Plates
- 10 Steel Hose couplings
- 15 Stainless Steel Ribs
- 2 Brass Art Shells
- 1 Chime Array with Art Shells
- 5 Alumo-Bowls
- 2 Alumo-Springs
- 2 Thunder Sheets
- 1 Pipe Gong
- 8 Junk-on-a-sticks



Gong and Chime Arrays



Junk-on-a-stick



Bell flower



Alumo-Springs

Membranophones

Instruments that produce sound through the vibration of a stretched

membrane or skin are classified as **membranophones**. The most common membranophone is the drum. Gregory has created a variety of new drums for Scrap Arts Music based on his unique, spun aluminum shell designs as well as plastic and steel shelled drums.

Scrap Arts Music uses 15 original Kozak-designed membranophones:

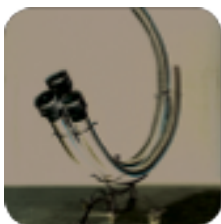
- 2 *Ziggurat Drums* (mobile)
- 2 *B-52 Drums* (mobile)
- 2 *Hourglass Drums* (mobile)
- 2 *Humunga Drums* (mobile)
- 6 *Scorpion Drums* (mobile)
- 1 *Mini Zig Drum Kit* – features *mini zig toms*, snare drum, and *semi-globe bass drum*



Ziggurat Drum



Humunga Drum



Scorpion Drums

Chordophones

Instruments that produce sound through the vibration of a string or strings are called **chordophones**. Plucking,

striking, bowing, or manipulating with rosin-encrusted gloves can vibrate the string of a chordophone, thus generating sound. Pianos, banjos and sitars are traditional examples of chordophones.

Gregory has created two types of chordophones:

The *Mojo*, at left, is a mobile 13-stringed instrument with balloon resonators. The *Chariot of Choir*, below, is a 22-string 28 foot long string instrument with tuning bridges and multiple resonating chambers.



Strikers

A striker is the beating device used to create sound. It can be a drum-stick, a clapper, a mallet or a bow. Gongs, bells

and Kozak's *Plankophone* are examples of instruments that require strikers. Scrap Arts Music uses more than 100 strikers in each performance, including:

- Mallets of varying types
- Sticks of varying sizes
- 1 bass drum pedal
- Gym-mat paddles

Aerophones

An **aerophone** is a class of musical instrument that produces sound through the vibration of air.

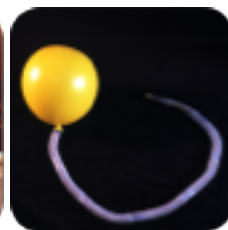
The instrument itself does not vibrate, nor do strings or membranes. A column of air can be set in vibration – as in wind instruments, or by interrupting the air-flow by an edge, as in free-reeds. Examples of conventionally known aerophones include sirens, Udu drums, flutes, oboes, clarinets, bagpipes and accordions.



Sigh-chordions



PVC Towers



Annoyophone

Scrap Arts Music uses 55 aerophones by Gregory Kozak:

- 5 Bilge Hose *Whorlies*
- 1 *Flying Can*
- 12 *Sighchordions*
- 7 *PVC Towers*
- 5 *Annoyophones*
- 18 *Marine Exhaust Hose*

Websites of Interest

www.scrapartsmusic.com Virtual home of innovative Scrap Arts Music. Has more info about the ensemble, including group photos, video, tour dates, etc. Contact info is also available there.

www.corporealmeadows.com Life and works of iconoclastic American composer, theorist, and instrument builder Harry Partch

www.baschet.org Official site of the Baschet Brothers, including information on their fantastic instruments and pedagogical foundation

www.oddmusic.com A source for unique, unusual, ethnic, or experimental music and instruments