

Harry Partch, At a Glance

American composer Harry Partch was a rebellious, radical, and pioneering artist who defied convention and forged his own path to create unconventional music. He not only invented his own unique musical notation system, but also an orchestra of original hand-built instruments, the only ones that can be used to perform his distinct, otherworldly soundscapes. Below, a brief overview of the composer's innovations.

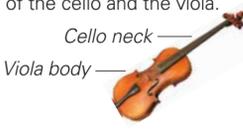
The Instruments

A timeline featuring some of Harry Partch's original creations, loosely divided by types.

STRINGS

Adapted Strings

'28 **Adapted Viola**
Originally called the monophone, Partch's first instrument was a hybrid of the cello and the viola.



'34 **Adapted Guitar I**
Partch's second instrument was designed to be played flat on the lap, like a slide guitar, and was amplified to emphasize tapping.

'38 **Kithara I**
Kithara I features 72 strings, sourced from guitars, banjos, and other instruments.



'38 **Kithara II**
Six-string Martin parlor guitar, retuned and modified with stainless steel frets.



'45 **Adapted Guitar II**

'53 **Surrogate Kithara**

'54 **Kithara II**

'53 **Harmonic Canon II**
Also known as Castor and Pollux, this unique instrument features two resonating redwood boxes, each of which has 44 strings on top of it.

'59 **Crychord**
To change pitch, a metal rod is used to adjust tension in this instrument's single string. Used primarily for improvisation.

'65 **Harmonic Canon III**

'66 **Koto**
A gift from composer Lou Harrison, this Japanese instrument was then modified by Partch.

ORGANS

Reed organs

'33 **The Ptolemy**
The composer's first reed organ uses a special label with color codes on the keys.

'41 **Chromelodeon I**
Additional keyboard known as "sub-bass"



'47 **Chromelodeon II**
This retuned reed organ has a standard keyboard and a collection of stops, like a traditional organ.



'58 **Bloboy**
According to Partch himself, this bellows-based instrument—made of organ pipes and a car horn—sounds like a passing freight train.

PERCUSSION

Brazilian rosewood and Pernambuco key blocks produce arpeggiated chords with a single sweep of the mallet.

'46 **Diamond Marimba**
36 blocks organized in diagonal rows

'49 **Bass Marimba**

'51 **Marimba Eroica**

'55 **Bamboo Marimbas**

'55 **Bamboo Marimba I (Boo I)**
64 bamboo resonators across six ranks

'63 **Zymo-Xyl**
Modified xylophone features found objects such as tuned wine and liquor bottles, Ford hubcaps, and a ketchup bottle made of aluminum.

'64 **Gourd Tree with Cone Gongs**
Twelve temple bells attached to gourd resonators

'64 **Mazda Marimba**

'65 **Quadrangularis Reversum**

'64 **Eucal Blossom**
Nose-shaped gongs come from airplane fuel tanks

'71 **Bamboo Marimba II (Boo II)**
Made from mottled Japanese bamboo; features similar tuning as Boo I

MISCELLANEOUS

'67 **Small Hand Instruments**
Partch also created additional, unique instruments that were difficult to classify. Most of these were unusual types of claves and other percussion instruments.

'62 **Sets up own studio in a former chick hatchery in Petaluma, CA**

'66 **Completes *And on the Seventh Day Petals Fell in Petaluma and Delusion of the Fury***

'69 **World premiere of *Delusion of the Fury* at University of California**

'74 **Partch passes away at his home in Encinitas, California**

'01 **Harry Partch was born June 24, 1901 in Oakland, CA**

'22 **Drops out of the University of Southern California**

'28 **Begins writing *Exposition of Monophony* to outline theories**

'35 **Obtains grant for *Federal Writers' Project***

'47 **Publishes *Genesis of a Music*, outlining theory and practice of his music**

A New Way to Notate Music

For centuries, composers have used "equal temperament" in their music, using a 12-note chromatic scale that is now standard in Western music. Harry Partch rejected this concept in order to create a wholly new style of music.

After studying the history of tuning, Partch embraced the "just intonation" pioneered by the theories of Pythagoras and other ancient Greeks. Whereas "equal temperament" features exact ratios between tones to create a standard scale (12 notes), "just intonation" includes gradations of pure, untampered intervals, or micro-tones (notes between the traditional 12 notes). As a result, Partch's scale consists of 43 different tones. Almost all of Partch's music is written using this specialized scale.

Partch outlined and summarized much of his musical philosophy in the 1947 book *Genesis of a Music*. The resulting sound is entirely unique and is described by *New Yorker* music critic Alex Ross as "staggeringly strange, but also achingly beautiful."

On the right is a graphical illustration of a traditional "equal temperament" octave (inner circle) compared to a "just intonation" octave by Harry Partch (outer circle), along with names for each of the intervals—Pythagorean major 6th, Septimal whole tone—as outlined in the composer's book. The "relative frequency" refers to matching pitches that are the same in both scales.

Partch's 43-tone scale (outer ring) vs. Chromatic 12-tone scale (inner ring)



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